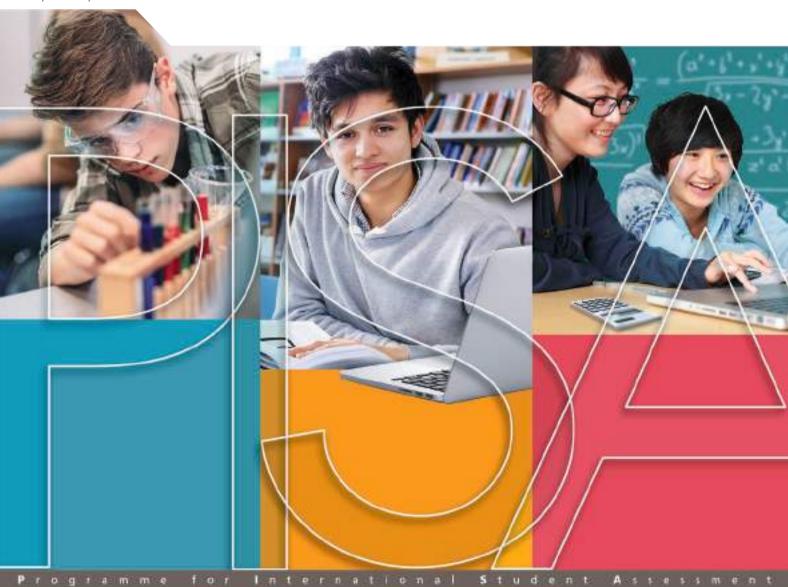


### **PISA 2018 Results**

ARE STUDENTS READY TO THRIVE IN AN INTERCONNECTED WORLD?

**VOLUME VI** 





# PISA 2018 Results (Volume VI)

ARE STUDENTS READY TO THRIVE IN AN INTERCONNECTED WORLD?



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#### Please cite this publication as:

OECD (2020), PISA 2018 Results (Volume VI): Are Students Ready to Thrive in an Interconnected World?, PISA, OECD Publishing, Paris, https://doi.org/10.1787/d5f68679-en.

ISBN 978-92-64-27174-6 (print) ISBN 978-92-64-89371-9 (pdf)

PISA ISSN 1990-8539 (print) ISSN 1996-3777 (online)

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### Preface

Among its many findings, our PISA 2018 assessment shows that 15-year-old students in the four provinces of China that participated in the study – Beijing, Shanghai, Jiangsu and Zhejiang – outperformed by a large margin their peers from all of the other 78 participating education systems, in mathematics and science. Moreover, the 10% most disadvantaged students in these four provinces also showed better reading skills than those of the average student in OECD countries, as well as skills similar to the 10% most advantaged students in some of these countries. True, these four provinces in eastern China are far from representing China as a whole, but the size of each of them compares to that of a typical OECD country, and their combined populations amount to over 180 million. What makes their achievement even more remarkable is that the level of income of these four Chinese regions is well below the OECD average. The quality of their schools today will feed into the strength of their economies tomorrow.

In this context, and given the fact that expenditure per primary and secondary student rose by more than 15% across OECD countries over the past decade, it is disappointing that most OECD countries saw virtually no improvement in the performance of their students since PISA was first conducted in 2000. In fact, only seven of the 79 education systems analysed saw significant improvements in the reading, mathematics and science performance of their students throughout their participation in PISA, and only one of these, Portugal, is a member of the OECD.

During the same period, the demands placed on the reading skills of 15-year-olds have fundamentally changed. The smartphone has transformed the ways in which people read and exchange information; and digitalisation has resulted in the emergence of new forms of text, ranging from the concise, to the lengthy and unwieldy. In the past, students could find clear and singular answers to their questions in carefully curated and government-approved textbooks, and they could trust those answers to be true. Today, they will find hundreds of thousands of answers to their questions on line, and it is up to them to figure out what is true and what is false, what is right and what is wrong. Reading is no longer mainly about extracting information; it is about constructing knowledge, thinking critically and making well-founded judgements. Against this backdrop, the findings from this latest PISA round show that fewer than 1 in 10 students in OECD countries was able to distinguish between fact and opinion, based on implicit cues pertaining to the content or source of the information. In fact, only in the four provinces of China, as well as in Canada, Estonia, Finland, Singapore and the United States, did more than one in seven students demonstrate this level of reading proficiency.

There is another side to this. The kinds of things that are easy to teach are nowadays also easy to digitise and automate. In the age of artificial intelligence (AI) we need to think harder about how to develop first-class humans, and how we can pair the AI of computers with the cognitive, social and emotional skills, and values of people. AI will amplify good ideas and good practice in the same way as it amplifies bad ideas and bad practice – it is ethically neutral. However, AI is always in the hands of people who are not neutral. That is why education in the future is not just about teaching people, but also about helping them develop a reliable compass to navigate an increasingly complex, ambiguous and volatile world. Whether AI will destroy or create more jobs will very much depend on whether our imagination, our awareness, and our sense of responsibility will help us harness technology to shape the world for the better. These are issues that the OECD is currently exploring with our Education 2030 project.

PISA is also broadening the range of outcomes that it measures, including global competency in 2018, creative thinking in 2022, and learning in the digital world in 2025. The 2018 assessment asked students to express how they relate to others, what they think of their lives and their future, and whether they believe they have the capacity to grow and improve.

Measuring the well-being of 15-year-old students, the target PISA population, is particularly important, as students at this age are in a key transition phase of physical and emotional development. When it comes to those social and emotional outcomes, the top-performing Chinese provinces are among the education systems with most room for improvement.

Even across OECD countries, just about two in three students reported that they are satisfied with their lives, and that percentage shrank by five percentage points between 2015 and 2018. Some 6% of students reported always feeling sad. In almost every education system, girls expressed greater fear of failure than boys, even when they outperformed boys in reading by a large margin. Almost a quarter of students reported being bullied at least a few times a month. Perhaps most disturbingly, in one-third of countries and economies that participated in PISA 2018, including OECD countries such as Greece, Mexico and Poland, more than one in two students said that intelligence was something about them that they couldn't change very much. Those students

#### **Preface**

are unlikely to make the investments in themselves that are necessary to succeed in school and in life. Importantly, having a growth mindset seems consistently associated with students' motivation to master tasks, general self-efficacy, setting learning goals and perceiving the value of school, and negatively associated with their fear of failure. Even if the well-being indicators examined by PISA do not refer specifically to the school context, students who sat the 2018 PISA test cited three main aspects of their lives that influence how they feel: life at school, their relationships with their parents, and how satisfied they are with the way they look.

It may be tempting to conclude that performing better in school will necessarily increase anxiety about schoolwork and undermine students' well-being. But countries such as Estonia, Finland and Germany show that high performance and a strong sense of well-being can be achieved simultaneously; they set important examples for others.

Other countries/economies show that equity and excellence can also be jointly achieved. In Australia, Canada, Denmark, Estonia, Finland, Hong Kong (China), Japan, Korea, Macao (China), Norway and the United Kingdom, for example, average performance was higher than the OECD average while the relationship between socio-economic status and reading performance was weaker than the OECD average. Moreover, one in ten disadvantaged students was able to score in the top quarter of reading performance in their country/economy, indicating that poverty is not destiny. The data also show that the world is no longer divided between rich and well-educated nations and poor and badly educated ones. The level of economic development explains just 28% of the variation in learning outcomes across countries/economies if a linear relationship is assumed between the two.

However, it remains necessary for many countries to promote equity with much greater urgency. While students from well-off families will often find a path to success in life, those from disadvantaged families have generally only one single chance in life, and that is a great teacher and a good school. If they miss that boat, subsequent education opportunities will tend to reinforce, rather than mitigate, initial differences in learning outcomes. Against this background, it is disappointing that in many countries a student's or school's post code remains the strongest predictor of their achievement. In Argentina, Bulgaria, the Czech Republic, Hungary, Peru, the Slovak Republic and the United Arab Emirates, a typical disadvantaged student has less than a one-in-eight chance of attending the same school as high achievers.

Furthermore, in over half of the PISA-participating countries and economies, principals of disadvantaged schools were significantly more likely than those of advantaged schools to report that their school's capacity to provide instruction is hindered by a lack or inadequacy of educational material; and in 31 countries and economies, principals of disadvantaged schools were more likely than those of advantaged ones to report that a lack of teaching staff hinders instruction. In these systems, students face a double disadvantage: one that comes from their home background and another that is created by the school system. There can be numerous reasons why some students perform better than others, but those performance differences should never be related to the social background of students and schools.

Clearly, all countries have excellent students, but too few countries have enabled all of their students to excel and fulfil their potential to do so. Achieving greater equity in education is not only a social justice imperative, it is also a way to use resources more effectively, increase the supply of skills that fuel economic growth, and promote social cohesion. For those with the right knowledge and skills, digitalisation and globalisation have been liberating and exciting; for those who are insufficiently prepared, these trends can mean vulnerable and insecure work, and a life with few prospects. Our economies are linked together by global chains of information and goods, but they are also increasingly concentrated in hubs where comparative advantage can be built and renewed. This makes the distribution of knowledge and wealth crucial, and it can only be possible through the distribution of education opportunities.

Equipping citizens with the knowledge and skills necessary to achieve their full potential, to contribute to an increasingly interconnected world, and to convert better skills into better lives needs to become a more central preoccupation of policy makers around the world. Fairness, integrity and inclusiveness in public policy thus all hinge on the skills of citizens. In working to achieve these goals, more and more countries are looking beyond their own borders for evidence of the most successful and efficient education policies and practices.

PISA is not only the world's most comprehensive and reliable indicator of students' capabilities, it is also a powerful tool that countries and economies can use to fine-tune their education policies. That is why the OECD produces this triennial report on the state of education around the globe: to share evidence of the best policies and practices, and to offer our timely and targeted support to help countries provide the best education possible for all of their students.



### Foreword

Young people today face unprecedented opportunities and unprecedented challenges. Globalisation brings innovation, new experiences and higher living standards, but it has also contributed to economic inequity and social division. While the affluent commute between continents, millions of migrants are struggling to adapt and settle in countries they do not know. In the face of declining social capital, civil society is under strain.

In coming to terms with globalisation, this generation requires new capacities. Whether in traditional or more entrepreneurial work environments, young people need to collaborate with people from different disciplines, cultures and value systems, in a way that solves complex problems and creates economic and social value. They need to bring judgment and action to difficult situations in which people's values and perspectives can be at odds.

Schools need to help students learn to be autonomous in their thinking and fully aware of the pluralism of modern living. At work, at home and in the community, people will need a broad comprehension of how others live, in different cultures and traditions, and how others think, be they scientists, mathematicians, social scientists or artists. The ability to read and understand diversity and to recognise core liberal values of our societies, such as tolerance and empathy, may also help respond to extremism and radicalisation.

For some years, educators have been discussing how best to build these capacities. Is there a distinctive competence that equips young people for the culturally diverse and digitally-connected communities in which they work and socialise? If so, how should it be developed? Can students learn to mobilise knowledge, cognitive and creative skills, and values and attitudes to act creatively, collaboratively and ethically? Open and flexible attitudes will be vital if young people are to co-exist and interact with people from other faiths and countries. So too will be the common human values that unite us.

The PISA concept of global competence seeks to provide some answers to such questions. It includes the acquisition of in-depth knowledge and understanding of global and intercultural issues, the ability to learn from and live with people from diverse backgrounds, and the attitudes and values necessary to interact respectfully with others. Globally competent individuals can examine local, global and intercultural issues. They can understand and appreciate different perspectives and worldviews and interact successfully and respectfully with others. And they can take responsible action toward sustainability and collective well-being. The driving ideas are that cross-cultural engagement should balance clear communication with sensitivity to multiple perspectives and that global competence should equip young people not just to understand but also to act.

The PISA 2018 assessment of global competence represents a first-of-a-kind, ambitious and still experimental approach to measure this concept of global competence. Its emphasis on attitudes and values is novel in comparative assessment. Respect and a belief in human dignity mark the importance of right and wrong and offer a counterweight to the risk that sensitivity to other viewpoints may descend into cultural relativism. The dilemma at the heart of a globalised world is how we strike the balance between strengthening common values that cannot be compromised and appreciating the diversity of "proprietary" values. Leaning too far in either direction is risky. Enforcing artificial uniformity of values can damage people's capacity to acknowledge different perspectives, and overemphasising diversity can undermine the legitimacy of holding any core values at all.

This volume summarises first results from the assessment. It covers the assessment of knowledge and skills in global competence, as well as self-reported data on students' attitudes, learning opportunities at school, the existence of a dedicated curriculum, and information from schools, teachers and parents on activities to promote global competence.

It seeks to answer a number of questions. How well are students prepared for life and employment in culturally diverse societies and in a globalised world? How much are students exposed to global news? How do they understand and critically analyse intercultural and global issues? What approaches to multicultural, intercultural and global education are used at school? What approaches are used to educate culturally diverse students? How are schools leveraging this diversity to develop students' global competence? What approaches are used to stimulate peer-to-peer learning between students from different cultures?

#### Foreword

The volume also highlights important interrelationships between the context in which students live and learn and their global competence. For example, the results show positive associations between students having contact with people from other countries and their attitudes and dispositions. Indices that were highly associated with contact with people from other countries at school are students' cognitive adaptability, awareness of and self-efficacy regarding global issues, and interest in learning about other cultures.

Schools can play an important role in developing global competence. They can provide opportunities for young people to learn about global developments of significance to the world and to their lives. They can equip learners with the means of accessing and analysing a broad range of cultural practices and meanings. They can let students engage in experiences that facilitate international and intercultural relations and encourage them to reflect upon the learning outcomes from such experiences. And schools can foster the value of the diversity of peoples, languages and cultures, encouraging intercultural sensitivity, respect and appreciation.

Some schools face more pressure than others, perhaps because they need to integrate a larger number of disadvantaged school-aged immigrants or because their communities are more fragmented and have a history of violence along ethnic or religious lines. But no school should fail to educate its students to understand and respect cultural diversity. All young people should be able to challenge cultural stereotypes, to reflect on the causes and solutions of racial, religious and hate-based violence and to help create tolerant, integrated societies.

Last but not least, in developing global competence, schools may also contribute to employability. Effective and appropriate communication and behaviour, within diverse teams, are already components of success in the majority of jobs, and are likely to become more important in the years ahead.

Policy makers, educators and employers clearly need an evidence-based approach to developing and assessing global competence. This is what PISA is about, providing an opportunity to work together across borders to create a better and more humane world.

Andreas Schleicher

Director for Education and Skills Special Advisor on Education Policy to the Secretary-General

Andrean Salleicler

# Acknowledgements

This report is the product of a collaborative effort between the countries and economies participating in PISA, the national and international experts and institutions working within the framework of the PISA Consortium, and the OECD Secretariat.

The development of this volume was guided by Andreas Schleicher and Yuri Belfali and managed by Miyako Ikeda. This volume was drafted by Tarek Mostafa and edited by Marilyn Achiron and Susan Copeland. Statistical and analytical support was provided by Filippo Besa, Rodrigo Castaneda Valle, and Giannina Rech. Mario Piacentini and Natalie Foster provided insights for analyses. Production was co-ordinated by Alison Burke. Fung Kwan Tam designed the publication and Della Shin oversaw the layout of the publication. Jason Fallow and Henri Pearson provided dissemination support. Administrative support was provided by Thomas Marwood, Hanna Varkki and Andrea Konstantinidi.

This volume also benefitted from the input and expertise of many more OECD staff members who worked on PISA 2018 at various stages of the project. Their names are listed in Annex D of this volume. Many reviewers provided feedback on earlier chapter drafts; their help in improving this volume is gratefully acknowledged.

To support the technical implementation of PISA, the OECD contracted an international consortium of institutions and experts, led by Irwin Kirsch at the Educational Testing Service (ETS). Overall co-ordination of the PISA 2018 assessment, the development of instruments, and scaling and analysis were managed by Claudia Tamassia at ETS. The development of the reading and questionnaire frameworks was facilitated by Pearson, led by John de Jong, Peter Foltz and Christine Rozunick. Sampling and weighting services were provided by Westat, led by Keith Rust. Linguistic quality control and the development of the French source version were under the responsibility of cApStAn, led by Steve Dept.

For the first phase of development, David Kerr chaired the global competence expert group. This group included Peter Franklin, Darla Deardorff, Sarah Howie, Wing On Lee, Jasmine B.Y. Sim and Sari Sulkunen. For the second phase of development, Martyn Barrett chaired the global competence expert group. This group included Veronica Boix Mansilla, Darla Deardorff and Hye-Won Lee. Mario Piacentini managed the preparation of the global competence framework and instruments. Fons J. R. van de Vijver chaired the expert group that guided the preparation of the questionnaire framework and instruments. This group included Dominique Lafontaine, David Kaplan, Sarah Howie, Andrew Elliot and Therese Hopfenbeck. Keith Rust chaired the Technical Advisory Group, whose members include Theo Eggen, John de Jong, Jean Dumais, Cees Glas, David Kaplan, Kit-Tai Hau, Irwin Kirsch, Oliver Lüdtke, Christian Monseur, Sophia Rabe-Hesketh, Thierry Rocher, Leslie A. Rutkowski, Matthias von Davier, Margaret Wu and Kentaro Yamamoto.

The development of the report was steered by the PISA Governing Board, chaired by Michele Bruniges (Australia), with Peggy Carr (United States), Sukit Limpijumnong (Thailand) and Carmen Tovar Sánchez (Spain) as vice chairs. Annex D of this volume lists the members of the various PISA bodies, including Governing Board members and National Project Managers in participating countries and economies, the PISA Consortium, and the individual experts and consultants who contributed to PISA 2018.



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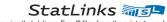
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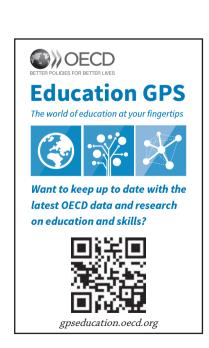


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# **Executive Summary**

Students today live in a complex, interconnected, diverse and rapidly changing world. Economic, social, cultural, digital, demographic, environmental and epidemiological forces are shaping young people's lives. This complex environment presents both opportunities and challenges. Students should not only be able to navigate this complex environment – they should benefit from it.

In its 2018 cycle of data collection among 15-year-old students, the Programme for International Student Assessment (PISA) assessed the global competences needed to live in our interconnected and changing world. Global competence is defined as a multidimensional capacity that encompasses the ability to: 1) examine issues of local, global and cultural significance; 2) understand and appreciate the perspectives and worldviews of others; 3) engage in open, appropriate and effective interactions across cultures; and 4) take action for collective well-being and sustainable development.

The PISA 2018 global competence assessment relied on two instruments: 1) a cognitive test focused on the cognitive aspects, including knowledge and cognitive skills; and 2) a set of questionnaire items collecting self-reported information from students, parents, teachers and school principals. The questionnaire covers students' attitudes, knowledge and skills, learning opportunities at school, the existence of a dedicated curriculum and information from schools, teachers and parents on activities to promote global competence.

#### **GLOBAL SKILLS AND KNOWLEDGE FOR THE 21ST CENTURY: MAIN FINDINGS**

#### Examine issues of local, global and cultural significance

- Students in Albania, Greece, Lithuania, Malta, Portugal and the United Arab Emirates reported the highest levels of awareness of global issues, which were substantially higher than the OECD average, while students in Argentina, Brunei Darussalam, Indonesia, Malaysia, Romania, Saudi Arabia and Viet Nam reported the lowest levels of awareness.
- When it comes to students' self-efficacy regarding global issues, students in Albania, the Dominican Republic, Germany, Peru and the United Arab Emirates reported the highest levels, scoring substantially higher than the OECD average. By contrast, students in Indonesia, Kosovo, Morocco, the Republic of North Macedonia (hereafter North Macedonia), Romania, Saudi Arabia, the Slovak Republic and Viet Nam scored lower than the OECD average.
- The largest proportions of correct answers on the cognitive test items focusing on examining local, global and intercultural issues were observed in Canada, Croatia, Hong Kong (China), Israel, Korea, Latvia, Scotland (United Kingdom), Singapore, the Slovak Republic, Spain and Chinese Taipei. In all of these countries and economies, the proportion of correct answers exceeded the overall average of 38%.

#### Understand and appreciate the perspectives and worldviews of others

- Students in Albania, Bosnia and Herzegovina, Korea, Kosovo, Lebanon, North Macedonia, Romania and Turkey reported the greatest capacity for perspective taking, while those in Colombia, France, Italy, Lithuania and the Slovak Republic showed the least
- Of the 64 countries and economies that had non-missing data on the index of students' interest in learning about other cultures, students in Albania, Bosnia and Herzegovina, Costa Rica, the Dominican Republic, Jordan, Kosovo, Montenegro, Panama, the Philippines and Turkey showed the greatest interest.
- Students in Albania, Australia, Canada, Ireland, Korea, New Zealand, Scotland (United Kingdom), Spain and Chinese Taipei reported the most positive attitudes towards immigrants, with values in the index that were significantly higher than the OECD average. The least positive attitudes, with values significantly lower than the OECD average, were observed in Bulgaria, Hungary, Latvia, Poland, Saudi Arabia, the Slovak Republic and Turkey.
- The largest proportion of correct answers on the cognitive test items related to students' ability to understand and appreciate the perspectives of others was found in Canada, Croatia, Hong Kong (China), Korea, Scotland (United Kingdom), Spain and Chinese Taipei. The smallest proportion of correct answers was observed in Albania, Brunei Darussalam, Indonesia, Kazakhstan, Morocco, Panama, the Philippines and Thailand.

#### Engage in open, appropriate and effective interactions across cultures

- The proportion of students who reported having contact with people from other countries at school ranged between 70% and 78% in Albania, Germany, Greece, Italy, New Zealand, Panama, Singapore, Switzerland, Chinese Taipei and the United Arab Emirates, while it ranged between 20% and 30% in Argentina, Brazil, Mexico, Turkey and Viet Nam.
- The largest proportion of students who speak several languages was observed in Croatia, Estonia, Hong Kong (China), Latvia, Macao (China), Malta and Singapore, where more than 90% of students reported that they speak two or more languages. The smallest proportion was observed in Australia, Brazil, Chile, Colombia, Korea, Mexico, Scotland (United Kingdom) and Viet Nam.
- Language-learning opportunities are widely available. On average across OECD countries, only 12% of students reported that they do not learn any foreign language at school, while 38% reported that they learn one foreign language and 50% reported that they learn two or more.

#### Take action for collective well-being and sustainable development

- Students in Albania, Baku (Azerbaijan), Costa Rica, Jordan, Korea, Kosovo, Malta, Portugal, Singapore, Spain, Chinese Taipei and Turkey reported the highest levels of agency regarding global issues. The lowest levels were observed in Austria, Germany, Hungary, Latvia, the Russian Federation and the Slovak Republic.
- Students who exhibited more positive intercultural attitudes were more likely to report that they take action than those who
  exhibited less positive attitudes. This positive association held in almost all countries/economies and for all indices. Large
  differences in the number of actions taken were observed between students in the top and bottom quarters of the indices of
  students' interest in learning about other cultures and of agency regarding global issues.
- The largest proportions of correct answers in the part of the assessment covering taking action for sustainability and collective well-being were observed in Canada, Hong Kong (China), Korea, Scotland (United Kingdom), Spain and Chinese Taipei. In all of those countries and economies, students answered more than 40% of the items correctly.

#### Performance on the global competence cognitive test

- The top-performing countries/economies were Canada, Hong Kong (China), Scotland (United Kingdom), Singapore and Chinese Taipei, with mean performance scores more than 50 points above the overall average.
- The range and variation of relative scores after accounting for performance in mathematics, science and reading were noticeably smaller than that of raw performance scores. Canada, Colombia, Greece, Israel, Panama, Scotland (United Kingdom), Singapore and Spain showed the highest relative performance in global competence, while Albania, Brunei Darussalam, Kazakhstan, Korea and the Russian Federation showed the lowest relative performance.

#### **Global competence learning opportunities**

• On average across OECD countries, students reported engaging in about five learning activities. Students in Albania, Baku (Azerbaijan), Colombia, the Dominican Republic, Indonesia, Jordan, Peru, the Philippines and Thailand reported engaging in more than seven activities, while students in France, Hungary, Israel, Latvia, Russia, Scotland (United Kingdom) and Slovenia reported engaging in fewer than five.

Table VI.1 [1/2] Students' attitudes and performance on the global competence cognitive test

					0. 1	6.1
		Students' awareness of global issues	Students' self-efficacy regarding global issues	Students' perspective-taking	Students' interest in learning about other cultures	Students' respect for people from other cultures
		Mean Index	Mean Index	Mean Index	Mean Index	Mean Index
OECD	OECD average	0.01	0.00	-0.01	0.00	0.00
9	Australia	0.10	0.05	0.05	-0.03	0.19
	Austria	-0.02	0.04	0.03	-0.15	-0.04
	Canada	0.14	0.14	0.14	0.04	0.30
	Chile	-0.10	0.01	0.01	0.08	0.08
	Colombia	-0.14	0.15	-0.21	0.11	-0.34
	Estonia	-0.01	-0.11	0.07	0.02	-0.06
	France	0.05	0.07	-0.25	0.06	0.14
	Germany	0.06	0.21	0.06	-0.18	0.16
	Greece	0.28	0.11	-0.10	-0.04	-0.21
	Hungary	-0.05	-0.03	-0.17	-0.21	-0.54
	Iceland	-0.13	-0.11	0.08	-0.05	0.00
	Ireland	0.12	-0.03	0.14	-0.10	0.21
	Israel <sup>1</sup>	-0.15	0.05	-0.08	-0.09	m
	Italy	-0.03	-0.16	-0.34	-0.25	-0.41
	Korea	-0.26	0.16	0.22	-0.14	0.20
	Latvia	-0.14	-0.04	-0.19	0.02	-0.25
	Lithuania	0.28	0.08	-0.23	0.09	-0.07
	Mexico	-0.04	0.09	0.17	0.29	0.20
	New Zealand	-0.06	-0.08	0.00	0.03	0.17
	Poland	0.10	0.10	0.05	0.05	-0.13
	Portugal	0.20	0.01	0.17	0.14	0.16
	Scotland (United Kingdom)	0.09	-0.19	-0.07	-0.16	0.25
	Slovak Republic	-0.16	-0.42	-0.24	-0.27	-0.46
	Slovenia	-0.01	-0.10	0.05	-0.07	-0.03
	Spain	0.03	-0.04	0.19	0.18	0.38
	Switzerland	-0.12	0.02	-0.05	-0.10	0.08
	Turkey	0.13	0.03	0.25	0.65	0.08

<sup>1.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Source: OECD PISA 2018 Database, Table VI.B1.6.6.

StatLink ms https://doi.org/10.1787/888934169120

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Table VI.1 [2/2] Students' attitudes and performance on the global competence cognitive test

	Students' awareness of global issues	Students' self-efficacy regarding global issues	Students' perspective-taking	Students' interest in learning about other cultures	Students' respect for people from other cultures
	Mean Index	Mean Index	Mean Index	Mean Index	Mean Index
Albania	0.46	0.51	0.47	0.51	0.23
Albania Argentina Raku (Azarbaijan)	-0.41	-0.24	0.00	0.08	-0.04
Baku (Azerbaijan)	0.08	0.00	-0.01	0.20	-0.38
Belarus	-0.08	-0.17	0.09	0.11	-0.16
Bosnia and Herzegovina	-0.05	-0.22	0.23	0.34	0.06
Brazil	-0.24	-0.15	0.12	0.22	0.10
Brunei Darussalam	-0.58	-0.26	-0.13	0.24	-0.23
Bulgaria	-0.07	-0.04	-0.08	-0.01	-0.51
Costa Rica	m	m	m	m	m
Croatia	0.17	0.08	-0.11	0.00	0.00
Dominican Republic	-0.07	0.21	0.02	0.39	-0.18
Hong Kong (China)	-0.10	0.04	-0.11	-0.11	-0.30
Indonesia	-0.51	-0.62	0.06	0.05	-0.34
Jordan	0.17	-0.20	-0.02	0.35	-0.05
Kazakhstan	0.09	-0.23	0.07	0.30	-0.22
Kosovo	0.18	-0.31	0.30	0.50	0.11
Lebanon	-0.27	-0.22	0.26	m	0.03
Macao (China)	-0.28	-0.27	-0.12	0.02	-0.22
Malaysia	-0.41	-0.21	-0.14	0.18	-0.33
Malta	0.23	0.03	0.18	0.05	0.01
Moldova	-0.04	-0.08	0.14	0.26	0.04
Montenegro	0.12	-0.02	0.18	0.34	0.11
Morocco	-0.30	-0.50	-0.12	0.16	-0.29
North Macedonia	0.10	-0.39	0.70	0.13	0.38
Panama	-0.08	0.06	-0.06	0.33	-0.07
Peru	0.07	0.23	-0.04	0.24	-0.13
Philippines	-0.12	-0.22	0.12	0.38	-0.10
Romania	-0.40	-0.30	0.22	0.09	-0.08
Russia	0.12	-0.13	0.17	-0.03	-0.16
Saudi Arabia	-0.50	-0.45	0.05	0.15	-0.05
Serbia	0.07	-0.11	0.06	0.07	-0.19
Singapore	-0.01	0.15	0.17	0.19	0.13
Chinese Taipei	m	m	m	m	m
Thailand	-0.25	-0.11	-0.08	-0.13	-0.55
Ukraine	-0.08	-0.14	0.06	-0.13	-0.22
United Arab Emirates	0.22	0.23	0.14	m	0.15
Uruguay	-0.20	-0.03	-0.05	0.16	-0.01
Viet Nam	-0.34	-0.30	0.01	-0.08	-0.36

<sup>1.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Source: OECD PISA 2018 Database, Table VI.B1.6.6.

Table VI.2 [1/2] Students' attitudes and performance on the global competence cognitive test

		-			_	
		Students' attitudes towards immigrants	Students' cognitive adaptability	Students' awareness of intercultural communication	Students' agency regarding global issues	Students' relative performance on the global competence test
		Mean Index	Mean Index	Mean Index	Mean Index	Mean
OECD	OECD average	0.02	-0.01	0.00	0.00	4.04
ö	Australia	0.31	0.13	0.08	0.09	m
	Austria	-0.11	-0.07	-0.04	-0.20	m
	Canada	0.46	0.20	0.11	0.16	18.13
	Chile	0.22	-0.06	0.01	-0.02	-4.36
	Colombia	0.04	-0.14	-0.09	0.17	19.74
	Estonia	-0.28	0.11	-0.09	-0.19	m
	France	m	-0.14	0.14	-0.05	m
	Germany	0.12	0.07	0.03	-0.27	m
	Greece	-0.06	-0.29	-0.05	0.06	9.59
-	Hungary	-0.90	-0.06	-0.12	-0.25	m
	Iceland	0.27	0.12	-0.05	-0.02	m
	Ireland	0.33	0.11	0.05	0.00	m
	Israel <sup>1</sup>	m	-0.01	0.05	m	11.16
	Italy	-0.22	-0.33	0.00	-0.10	m
	Korea	0.45	-0.10	0.37	0.51	-24.91
	Latvia	-0.44	-0.05	-0.29	-0.24	-6.37
	Lithuania	0.04	0.00	-0.01	0.09	-9.30
	Mexico	0.23	0.22	-0.05	0.11	m
	New Zealand	0.32	0.09	0.05	0.08	m
-	Poland	-0.47	0.06	-0.06	-0.17	m
	Portugal	0.47	-0.15	0.23	0.32	m
	Scotland (United Kingdom)	0.34	-0.06	0.00	-0.05	16.20
	Slovak Republic	-0.49	-0.26	-0.29	-0.30	1.83
	Slovenia	-0.05	0.00	-0.19	-0.10	m
	Spain	0.39	0.28	0.09	0.24	12.71
-	Switzerland	0.00	0.00	-0.06	-0.18	m
	Turkey	-0.36	0.20	0.07	0.28	m

<sup>1.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Source: OECD PISA 2018 Database, Table VI.B1.6.6.

Table VI.2 [2/2] Students' attitudes and performance on the global competence cognitive test

	Students' attitudes towards immigrants	Students' cognitive adaptability	Students' awareness of intercultural communication	Students' agency regarding global issues	Students' relative performance on the global competence test
	Mean Index	Mean Index	Mean Index	Mean Index	Mean
Albania	0.41	0.17	0.40	0.54	-11.64
Albania Argentina Raku (Azorbajian)	0.07	-0.13	-0.07	-0.05	m
Baku (Azerbaijan)	-0.11	-0.03	-0.15	0.24	m
Belarus	-0.22	0.17	-0.09	-0.10	m
Bosnia and Herzegovina	-0.10	0.31	-0.11	-0.11	m
Brazil	0.07	-0.12	-0.08	-0.04	m
Brunei Darussalam	0.00	-0.42	0.03	0.03	-13.74
Bulgaria	-0.43	-0.06	-0.16	-0.07	m
Costa Rica	m	m	m	m	m
Croatia	0.05	-0.03	-0.03	0.00	9.47
Dominican Republic	-0.21	0.01	-0.07	0.06	m
Hong Kong (China)	0.03	-0.29	0.10	0.13	0.78
Indonesia	-0.29	-0.14	-0.09	-0.02	-0.38
Jordan	-0.09	0.18	-0.04	0.24	m
Kazakhstan	-0.24	-0.04	-0.27	-0.02	-14.33
Kosovo	0.08	0.01	0.16	0.23	m
Lebanon	-0.26	-0.06	0.01	0.09	m
Macao (China)	-0.02	-0.45	-0.01	0.00	m
Malaysia	m	-0.30	-0.02	-0.01	m
Malta	-0.06	0.07	0.14	0.23	2.91
Moldova	0.00	0.19	0.07	-0.10	m
Montenegro	-0.04	0.17	-0.02	-0.03	m
Morocco	-0.17	-0.20	-0.29	-0.10	6.14
North Macedonia	0.03	0.31	m	0.16	m
Panama	-0.03	-0.06	-0.04	0.04	10.01
Peru	m	-0.06	0.01	0.12	m
Philippines	-0.14	-0.12	-0.01	0.13	-7.62
Romania	-0.20	0.16	0.04	-0.15	m
Russia	-0.29	0.10	-0.30	-0.24	-19.96
Saudi Arabia	-0.31	-0.06	-0.09	-0.02	m
Serbia	-0.28	0.03	-0.08	-0.15	-1.39
Singapore	m	-0.04	0.30	0.31	10.99
Chinese Taipei	m	m	m	m	m
Thailand	-0.16	-0.29	-0.25	0.08	-8.11
Ukraine	-0.12	0.13	-0.18	-0.16	m
United Arab Emirates	m	0.12	0.10	m	m
Uruguay	0.12	-0.06	-0.06	-0.07	m
Viet Nam	-0.26	-0.43	-0.12	-0.15	m

<sup>1.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Source: OECD PISA 2018 Database, Table VI.B1.6.6.

Table VI.3 [1/2] Language learning and contact with people from other countries

		Proportion of students who speak one language (including the one/ those spoken at home) <sup>1</sup>	Proportion of students who speak two or more languages (including the one/ those spoken at home)	Proportion of students who do not learn foreign languages at school <sup>2</sup>	Proportion of students who learn one foreign language at school	Proportion of students who learn two or more foreign languages at school	Percentage of students who reported having contact with people from other countries at school
_		%	%	%	%	%	%
OECD	OECD average	31.8	68.2	11.7	37.9	50.5	53.1
0	Australia	62.4	37.6	63.6	28.2	8.1	65.5
	Austria	12.2	87.8	2.2	44.4	53.4	69.1
	Canada	36.9	63.1	32.9	51.1	16.1	69.5
	Chile	61.0	39.0	12.7	75.1	12.2	54.6
	Colombia	66.9	33.1	9.3	73.3	17.4	37.8
	Estonia	9.7	90.3	0.6	3.8	95.6	45.7
	France	22.8	77.2	2.2	11.1	86.7	52.5
	Germany	13.7	86.3	1.7	37.2	61.1	72.2
	Greece	15.0	85.0	2.2	67.9	29.9	72.7
	Hungary	21.6	78.4	0.6	53.9	45.5	34.7
	Iceland	19.4	80.6	2.7	3.9	93.4	57.3
	Ireland	40.8	59.2	11.8	72.5	15.7	67.9
	Israel <sup>3</sup>	25.9	74.1	6.3	53.3	40.4	35.7
	Italy	28.6	71.4	0.5	44.7	54.8	70.8
	Korea	71.6	28.4	3.3	67.9	28.8	36.6
	Latvia	6.9	93.1	0.5	6.1	93.5	40.0
	Lithuania	10.4	89.6	0.2	2.1	97.7	32.6
	Mexico	71.3	28.7	14.8	70.6	14.5	29.9
	New Zealand	58.4	41.6	62.3	27.7	10.0	73.3
	Poland	19.7	80.3	0.4	1.3	98.3	31.4
	Portugal	20.8	79.2	1.7	63.0	35.3	54.7
	Scotland (United Kingdom)	61.0	39.0	64.5	30.6	4.9	57.6
	Slovak Republic	13.4	86.6	1.0	16.2	82.8	39.7
	Slovenia	11.6	88.4	0.8	33.9	65.3	57.9
	Spain	16.5	83.5	2.6	38.2	59.2	69.1
	Switzerland	12.8	87.2	6.4	11.7	81.8	77.7
	Turkey	46.3	53.7	6.9	32.8	60.4	28.1

<sup>1.</sup> Students were asked the following question: "How many languages, including the language(s) you speak at home, do you and your parents speak well enough to converse with others?"

**Source**: OECD PISA 2018 Database, Tables VI.B1.4.5 and VI.B1.4.11. **StatLink StatLink** https://doi.org/10.1787/888934169158

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<sup>2.</sup> Students reported on the number of foreign languages they learned at their school in the year they sat the PISA test (ST189).

<sup>3.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Table VI.3 [2/2] Language learning and contact with people from other countries

		Proportion of students who speak one language (including the one/ those spoken at home) <sup>1</sup>	Proportion of students who speak two or more languages (including the one/ those spoken at home)	Proportion of students who do not learn foreign languages at school <sup>2</sup>	Proportion of students who learn one foreign language at school	Proportion of students who learn two or more foreign languages at school	Percentage of students who reported having contact with people from other countries at school
		%	%	%	%	%	%
ers	Albania	28.1	71.9	2.8	29.9	67.3	71.5
<del>-</del>	Argentina	54.8	45.2	7.6	81.8	10.6	29.8
<u>~</u>	Baku (Azerbaijan)	28.7	71.3	6.3	17.9	75.8	42.3
_	Belarus	21.2	78.8	1.0	67.0	32.0	36.9
	Bosnia and Herzegovina	24.1	75.9	0.7	32.6	66.7	58.1
_	Brazil	65.1	34.9	12.8	57.8	29.5	22.0
	Brunei Darussalam	13.4	86.6	29.4	23.0	47.6	56.4
	Bulgaria	29.3	70.7	0.4	4.3	95.3	44.7
	Costa Rica	49.0	51.0	5.3	43.5	51.3	66.1
	Croatia	9.6	90.4	0.5	41.5	58.1	40.3
	Dominican Republic	59.4	40.6	6.3	23.7	70.1	57.6
	Hong Kong (China)	7.4	92.6	21.3	45.9	32.7	67.5
	Indonesia	35.8	64.2	10.2	45.0	44.8	33.4
	Jordan	52.6	47.4	18.4	65.2	16.5	44.7
	Kazakhstan	19.0	81.0	2.8	37.5	59.7	49.9
	Kosovo	33.2	66.8	3.4	33.2	63.4	68.1
	Lebanon	m	m	10.9	20.9	68.2	53.9
	Macao (China)	9.1	90.9	9.7	49.9	40.3	55.2
	Malaysia	37.4	62.6	31.8	26.1	42.1	41.7
	Malta	9.6	90.4	3.4	38.1	58.5	57.9
	Moldova	15.1	84.9	2.1	9.2	88.8	39.4
	Montenegro	18.1	81.9	0.9	32.1	67.1	59.3
_	Morocco	33.0	67.0	5.0	15.5	79.5	47.4
	North Macedonia	m	m	1.1	27.8	71.1	38.3
	Panama	57.6	42.4	9.4	51.6	38.9	73.5
	Peru	59.8	40.2	14.0	60.7	25.3	34.9
	Philippines	30.5	69.5	24.2	34.6	41.3	61.9
	Romania	34.1	65.9	0.7	2.3	97.0	44.5
	Russia	41.0	59.0	1.9	67.1	31.0	35.8
-	Saudi Arabia	58.3	41.7	29.5	61.3	9.1	49.1
	Serbia	24.7	75.3	1.0	44.9	54.1	48.2
	Singapore	7.8	92.2	5.7	78.9	15.3	73.0
	Chinese Taipei	15.9	84.1	8.0	57.9	34.0	77.6
_	Thailand	40.9	59.1	7.7	33.5	58.7	64.8
	Ukraine	18.5	81.5	1.0	49.5	49.5	38.2
	United Arab Emirates	17.3	82.7	16.2	50.9	32.9	70.2
-	Uruguay	44.0	56.0	9.0	71.3	19.7	33.2
-	Viet Nam	66.8	33.2	1.0	89.5	9.5	20.3

<sup>1.</sup> Students were asked the following question: "How many languages, including the language(s) you speak at home, do you and your parents speak well enough to converse with others?"

**Source**: OECD PISA 2018 Database, Tables VI.B1.4.5 and VI.B1.4.11. **StatLink INTER** https://doi.org/10.1787/888934169158

<sup>2.</sup> Students reported on the number of foreign languages they learned at their school in the year they sat the PISA test (ST189).

<sup>3.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Table VI.4 [1/2] Language learning and students' attitudes1

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		Associations between the index of awareness of intercultural communication and the number of foreign languages learned by the student at school	Associations between the index of self-efficacy regarding global issues and the number of foreign languages learned by the student at school	Associations between the index of student's awareness of global issues and the number of foreign languages learned by the student at school	Associations between the index of perspective taking and the number of foreign languages learned by the student at school
		Difference between one or more languages and no languages learned <sup>2</sup>	Difference between one or more languages and no languages learned	Difference between one or more languages and no languages learned	Difference between one or more languages and no languages learned
		Dif.	Dif.	Dif.	Dif.
OECD	OECD average	0.19	0.19	0.18	0.11
ō	Australia	0.00	0.08	0.06	0.04
	Austria	0.13	-0.05	0.07	0.01
	Canada	0.09	0.09	0.03	-0.04
	Chile	0.17	0.20	0.18	0.17
	Colombia	0.19	0.22	0.16	0.05
	Estonia	С	С	C	С
	France	0.17	0.20	0.07	0.05
	Germany	0.34	0.23	0.37	0.06
	Greece	0.25	0.21	0.35	0.25
	Hungary	С	С	C	C
	Iceland	0.25	0.10	0.16	0.00
	Ireland	0.18	0.16	0.04	0.11
	Israel <sup>3</sup>	0.18	0.30	0.23	0.05
	Italy	0.17	0.18	0.45	0.13
	Korea	0.16	0.31	0.27	0.24
	Latvia	С	С	С	C
	Lithuania	С	С	C	C
	Mexico	0.21	0.14	0.12	0.09
	New Zealand	0.04	0.06	0.05	0.08
	Poland	С	С	С	С
	Portugal	0.35	0.41	0.48	0.28
	Scotland (United Kingdom)	0.10	0.02	0.01	-0.01
	Slovak Republic	0.41	0.61	С	0.10
	Slovenia	0.12	0.15	0.15	0.54
	Spain	0.28	0.34	0.32	0.10
	Switzerland	0.06	-0.01	0.03	0.02
	Turkey	0.37	0.24	0.25	0.14
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<sup>1.</sup> Students were asked the following question: "How many foreign languages do you learn at your school this school year?"

Note: Values that are statistically significant are marked in bold.

Source: Source: OECD PISA 2018 Database, Table VI.B1.4.13.

StatLink MSP https://doi.org/10.1787/888934169177

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<sup>2.</sup> All associations are presented after accounting for students' gender and students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

<sup>3.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Table VI.4 [2/2] Language learning and students' attitudes<sup>1</sup>

		Associations between the index of awareness of intercultural communication and the number of foreign languages learned by the student at school	Associations between the index of self-efficacy regarding global issues and the number of foreign languages learned by the student at school	Associations between the index of student's awareness of global issues and the number of foreign languages learned by the student at school	Associations between the index of perspective taking and the number of foreign languages learned by the student at school
		Difference between one or more languages and no languages learned <sup>2</sup>	Difference between one or more languages and no languages learned	Difference between one or more languages and no languages learned	Difference between one or more languages and no languages learned
		Dif.	Dif.	Dif.	Dif.
ers	Albania	0.38	0.21	0.29	0.35
Partners	Argentina	0.17	0.38	0.29	0.04
۵	Baku (Azerbaijan)	0.24	0.28	0.45	0.08
	Belarus	0.32	0.20	0.52	0.09
	Bosnia and Herzegovina	0.53	0.23	0.94	-0.21
	Brazil	0.15	0.26	0.30	0.11
	Brunei Darussalam	0.00	0.01	0.00	0.04
	Bulgaria	С	С	С	С
	Costa Rica	0.30	0.19	0.24	0.19
	Croatia	C	C	C	С
	Dominican Republic	0.10	0.09	0.17	0.12
	Hong Kong (China)	0.07	0.15	0.10	0.06
	Indonesia	0.10	0.09	0.23	0.01
	Jordan	0.31	0.34	0.49	0.08
	Kazakhstan	0.22	0.25	0.36	0.19
	Kosovo	0.31	0.25	0.54	0.21
	Lebanon	0.18	0.10	0.25	0.15
	Macao (China)	0.12	0.13	0.21	0.13
	Malaysia	0.02	0.03	0.07	-0.04
	Malta	0.30	0.18	0.07	0.33
	Moldova	0.14	0.13	0.25	0.08
	Montenegro	0.18	0.24	0.61	-0.18
	Morocco	0.32	0.14	0.27	0.04
	North Macedonia	m	0.05	0.68	0.16
	Panama	0.12	0.15	0.06	0.11
	Peru	0.07	0.10	0.14	-0.03
	Philippines	0.09	0.10	0.21	0.06
	Romania	С	-0.10	0.50	C
	Russia	0.38	0.29	0.52	0.33
	Saudi Arabia	0.27	0.18	0.24	0.03
	Serbia	0.76	0.21	0.62	0.21
	Singapore	0.14	0.10	0.04	0.01
	Chinese Taipei	0.16	0.30	0.32	0.35
	Thailand	0.15	0.14	0.23	0.19
	Ukraine	0.33	0.48	0.70	0.09
	United Arab Emirates	-0.03	0.06	0.00	0.00
	Uruguay	0.20	0.20	0.21	0.02
	Viet Nam	0.31	0.34	0.32	0.16

<sup>1.</sup> Students were asked the following question: "How many foreign languages do you learn at your school this school year?"

 $\textbf{Note} \hbox{:}\ \ \ \ \, \text{Values that are statistically significant are marked in bold.}$ 

**Source**: Source: OECD PISA 2018 Database, Table VI.B1.4.13.

<sup>2.</sup> All associations are presented after accounting for students' gender and students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

<sup>3.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Table VI.5 [1/2] Language learning and students' attitudes1

		Associations between the index of student's interest in learning about other cultures and the number of foreign languages learned by the student at school	Associations between the index of respect for people from other cultures and the number of foreign languages learned by the student at school	Associations between the index of student's attitudes towards immigrants and the number of foreign languages learned by the student at school	Associations between the index of student's cognitive adaptability and the number of foreign languages learned by the student at school
		Difference between one or more languages and no languages learned <sup>2</sup>	Difference between one or more languages and no languages learned	Difference between one or more languages and no languages learned	Difference between one or more languages and no languages learned
		Dif.	Dif.	Dif.	Dif.
OECD	OECD average	0.14	0.21	0.18	0.08
0	Australia	0.17	0.02	0.05	0.04
	Austria	0.11	0.22	0.10	0.17
	Canada	0.17	0.08	0.05	0.05
	Chile	0.28	0.32	0.20	0.20
	Colombia	0.10	0.19	0.12	0.00
	Estonia	С	С	С	С
	France	0.35	0.35	m	-0.02
	Germany	0.12	0.49	0.26	-0.03
	Greece	-0.06	0.21	0.20	0.17
	Hungary	C	C	С	С
	Iceland	0.10	0.54	0.29	0.13
-	Ireland	0.16	0.19	0.16	0.13
	Israel <sup>3</sup>	0.26	m	m	-0.16
	Italy	-0.08	0.12	0.31	-0.01
	Korea	0.25	0.28	0.26	0.26
	Latvia	C	C	C	C
	Lithuania	C	C	C	C
	Mexico	0.07	0.14	0.10	0.14
	New Zealand	0.25	0.05	0.04	0.07
	Poland	C	C	C	C
	Portugal	0.13	0.39	0.45	0.29
	Scotland (United Kingdom)	0.12	-0.03	-0.03	0.05
	Slovak Republic	0.15	0.14	0.28	0.01
	Slovenia	0.00	0.22	0.00	0.02
	Spain	0.09	0.13	0.32	0.07
	Switzerland	0.16	0.18	0.35	0.08
	Turkey	0.20	0.21	0.08	0.14

<sup>1.</sup> Students were asked the following question: "How many foreign languages do you learn at your school this school year?"

Source: OECD PISA 2018 Database, Table VI.B1.4.13.

StatLink https://doi.org/10.1787/888934169196

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<sup>2.</sup> All associations are presented after accounting for students' gender and students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

<sup>3.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Table VI.5 [2/2] Language learning and students' attitudes<sup>1</sup>

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		Associations between the index of student's interest in learning about other cultures and the number of foreign languages learned by the student at school	Associations between the index of respect for people from other cultures and the number of foreign languages learned by the student at school	Associations between the index of student's attitudes towards immigrants and the number of foreign languages learned by the student at school	Associations between the index of student's cognitive adaptability and the number of foreign languages learned by the student at school
		Difference between one or more languages and no languages learned <sup>2</sup>	Difference between one or more languages and no languages learned	Difference between one or more languages and no languages learned	Difference between one or more languages and no languages learned
_		Dif.	Dif.	Dif.	Dif.
ers	Albania	0.29	0.25	0.30	0.24
Partners	Argentina	0.03	0.26	0.22	-0.01
_	Baku (Azerbaijan)	0.22	0.29	0.13	0.28
	Belarus	0.19	0.25	0.43	0.07
	Bosnia and Herzegovina	0.03	0.25	0.38	0.00
	Brazil	0.17	0.26	0.21	0.08
	Brunei Darussalam	-0.01	0.01	-0.09	0.06
	Bulgaria	C	C	С	С
	Costa Rica	0.11	0.18	0.26	0.15
	Croatia	C	C	С	C
	Dominican Republic	0.22	0.25	-0.02	0.48
	Hong Kong (China)	0.07	0.08	0.06	0.07
	Indonesia	0.07	0.10	0.02	-0.02
	Jordan	0.14	0.19	0.23	0.13
	Kazakhstan	0.22	0.19	0.22	0.19
	Kosovo	0.27	0.44	0.24	-0.04
	Lebanon	m	0.19	0.08	0.18
	Macao (China)	0.13	0.15	0.10	0.04
	Malaysia	0.03	-0.03	m	0.03
	Malta	0.34	0.18	0.12	0.18
	Moldova	0.07	0.16	0.11	0.12
	Montenegro	0.31	0.50	0.12	-0.03
	Morocco	0.13	0.19	0.24	0.01
	North Macedonia	-0.06	0.15	0.16	0.45
	Panama	0.21	0.03	0.05	0.09
	Peru	0.04	0.08	m	0.02
	Philippines	0.07	0.07	0.07	0.10
	Romania	С	С	С	-0.02
	Russia	0.30	0.67	0.32	0.44
	Saudi Arabia	0.09	0.07	0.15	0.00
	Serbia	0.37	0.71	0.28	0.48
	Singapore	0.05	-0.03	m	0.02
	Chinese Taipei	0.29	0.39	0.30	0.25
	Thailand	0.13	0.29	0.12	0.14
	Ukraine	-0.15	0.27	0.45	-0.04
	United Arab Emirates	m	-0.05	m	0.01
	Uruguay	0.07	0.15	0.16	-0.07
	Viet Nam	0.27	0.24	0.20	0.15

<sup>1.</sup> Students were asked the following question: "How many foreign languages do you learn at your school this school year?"

Source: OECD PISA 2018 Database, Table VI.B1.4.13.

<sup>2.</sup> All associations are presented after accounting for students' gender and students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

<sup>3.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Table VI.6 [1/2] Contact with people from other countries at school and students' attitudes<sup>1</sup>

		Associations between the index of awareness of intercultural communication and contact with people from other countries at school	Associations between the index of self-efficacy regarding global issues and contact with people from other countries at school	Associations between the index of students' awareness of global issues and contact with people from other countries at school	Associations between the index of perspective taking and contact with people from other countries at school
		Difference between those who have contact and those who do not <sup>2</sup>	Difference between those who have contact and those who do not	Difference between those who have contact and those who do not	Difference between those who have contact and those who do not
_	OECD average	Dif. 0.08	Dif. 0.13	Dif. 0.13	Dif. 0.08
OECD	Australia	0.16	0.13	0.19	0.08
Ŭ	Austria	0.10	0.15	0.19	0.17
	Canada	0.18	0.13	0.17	0.14
	Chile	-0.04	0.10	0.14	0.05
	Colombia	0.02	-0.01	0.06	0.03
	Estonia	-0.02	0.02	0.03	0.07
	France	0.14	0.17	0.15	0.11
	Germany	0.14	0.12	0.15	0.08
	Greece	0.12	0.12	0.17	0.07
	Hungary	0.08	0.12	0.10	0.04
	Iceland	0.17	0.20	0.25	0.15
	Ireland	0.12	0.19	0.19	0.08
	Israel <sup>3</sup>	0.01	0.11	0.17	0.06
	Italy	0.08	0.03	0.06	0.07
	Korea	0.08	0.13	0.10	0.09
	Latvia	-0.04	0.09	0.09	0.11
	Lithuania	-0.03	0.09	0.01	0.03
	Mexico	-0.06	0.14	0.16	0.04
	New Zealand	0.20	0.18	0.21	0.16
	Poland	-0.08	0.05	0.04	0.01
	Portugal	0.04	0.09	0.14	0.11
	Scotland (United Kingdom)	0.19	0.23	0.18	0.09
	Slovak Republic	0.05	0.10	0.11	0.08
	Slovenia	0.06	0.11	0.11	0.09
	Spain	0.12	0.13	0.14	0.09
	Switzerland	0.26	0.22	0.27	0.09
	Turkey	-0.01	0.02	0.05	0.06

<sup>1.</sup> Students were asked the following question: "Do you have contact with people from other countries at school?"

Source: OECD PISA 2018 Database, Table VI.B1.4.8.

StatLink https://doi.org/10.1787/888934169215

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<sup>2.</sup> All associations are presented after accounting for students' gender and students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

<sup>3.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Table VI.6 [2/2] Contact with people from other countries at school and students' attitudes<sup>1</sup>

	Associations between the index of awareness of intercultural communication and contact with people from other countries at school	Associations between the index of self-efficacy regarding global issues and contact with people from other countries at school	Associations between the index of students' awareness of global issues and contact with people from other countries at school	Associations between the index of perspective taking and contact with people from other countries at school
	Difference between those who have contact and those who do not <sup>2</sup>	Difference between those who have contact and those who do not	Difference between those who have contact and those who do not	Difference between those who have contact and those who do not
) All!-	Dif.	Dif.	Dif.	Dif.
Albania	0.01	0.09	0.10	0.07
Albania Argentina  Paku (Azerbaijan)	-0.01	0.07	0.08	0.14
Baku (Azerbaijaii)	0.00	0.19	0.15	-0.01
Belarus	0.07	0.04	0.10	0.02
Bosnia and Herzegovina	-0.01	0.05	0.04	0.09
Brazil	-0.10	-0.03	-0.16	-0.10
Brunei Darussalam	0.04	0.05	0.09	0.04
Bulgaria	-0.09	0.07	0.01	0.07
Costa Rica	0.03	0.12	0.13	0.12
Croatia	0.05	0.06	0.11	0.02
Dominican Republic	-0.01	0.11	0.09	0.03
Hong Kong (China)	-0.01	0.06	0.09	0.04
Indonesia	-0.08	0.09	0.00	0.00
Jordan	-0.09	0.00	-0.12	0.01
Kazakhstan	0.06	0.10	0.05	0.03
Kosovo	-0.09	0.07	0.05	0.05
Lebanon	-0.24	0.03	-0.03	0.00
Macao (China)	-0.01	0.04	0.07	0.05
Malaysia	-0.02	0.00	-0.05	-0.01
Malta	0.10	0.19	0.15	0.08
Moldova	0.02	0.08	0.10	0.10
Montenegro	0.04	0.07	0.01	0.05
Morocco	-0.04	0.10	0.03	-0.07
North Macedonia	m	0.09	0.04	0.00
Panama	0.22	0.12	0.15	0.12
Peru	-0.03	0.06	0.09	0.05
Philippines	-0.10	-0.04	-0.13	-0.06
Romania	-0.04	0.06	0.04	0.01
Russia	0.02	0.12	0.06	-0.02
Saudi Arabia	-0.01	0.14	0.04	0.11
Serbia	-0.01	0.07	0.05	0.06
Singapore	0.13	0.17	0.19	0.13
Chinese Taipei	0.14	0.15	0.11	0.21
Thailand	0.05	0.10	0.09	0.05
Ukraine	0.03	0.02	0.01	-0.03
United Arab Emirates	0.06	0.14	0.15	0.13
Uruguay	0.05	0.09	0.17	0.10
Viet Nam	0.03	0.09	0.06	0.00

<sup>1.</sup> Students were asked the following question: "Do you have contact with people from other countries at school?"

 $\textbf{Note} \hbox{:}\ \ \textbf{Values that are statistically significant are marked in bold}.$ 

Source: OECD PISA 2018 Database, Table VI.B1.4.8.

<sup>2.</sup> All associations are presented after accounting for students' gender and students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

<sup>3.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Table VI.7 [1/2] Contact with people from other countries at school and students' attitudes<sup>1</sup>

		Associations between the index of students' interest in learning about other cultures and contact with people from other countries at school	Associations between the index of respect for people from other cultures and contact with people from other countries at school	Associations between the index of students' attitudes towards immigrants and contact with people from other countries at school	Associations between the index of students' cognitive adaptability and contact with people from other countries at school
		Difference between those who have contact and those who do not <sup>2</sup>	Difference between those who have contact and those who do not	Difference between those who have contact and those who do not	Difference between those who have contact and those who do not
_	OFCD	Dif.	Dif.	Dif.	Dif.
OECD	OECD average	0.17	0.12	0.07	0.15
0	Australia	0.28	0.21	0.15	0.21
	Austria	0.18	0.28	0.16	0.14
	Canada	0.27	0.17	0.16	0.18
	Chile	0.13	0.01	-0.06	0.17
	Colombia	0.03	0.00	-0.03	0.10
	Estonia	0.08	0.04	0.02	0.08
	France	0.19	0.20	m	0.17
	Germany	0.29	0.24	0.20	0.12
	Greece	0.14	0.20	0.12	0.18
	Hungary	0.16	0.14	0.06	0.13
	Iceland	0.33	0.25	0.14	0.23
	Ireland	0.24	0.19	0.18	0.16
	Israel <sup>3</sup>	0.13	m	m	0.12
	Italy	0.10	0.15	0.07	0.11
	Korea	0.18	0.05	0.04	0.22
	Latvia	0.15	-0.03	0.00	0.13
	Lithuania	0.06	-0.07	-0.08	0.03
	Mexico	0.12	-0.04	-0.12	0.10
	New Zealand	0.26	0.22	0.13	0.22
	Poland	0.06	-0.04	0.03	0.09
	Portugal	0.13	0.10	0.03	0.20
	Scotland (United Kingdom)	0.26	0.18	0.12	0.18
	Slovak Republic	0.19	0.09	0.03	0.16
	Slovenia	0.19	0.15	0.09	0.17
	Spain	0.18	0.14	0.08	0.14
	Switzerland	0.23	0.34	0.22	0.18
	Turkey	0.02	0.00	0.06	0.13

<sup>1.</sup> Students were asked the following question: "Do you have contact with people from other countries at school?"

Source: OECD PISA 2018 Database, Table VI.B1.4.8.

StatLink https://doi.org/10.1787/888934169234

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<sup>2.</sup> All associations are presented after accounting for students' gender and students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

<sup>3.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Table VI.7 [2/2] Contact with people from other countries at school and students' attitudes<sup>1</sup>

		Associations between the index of students' interest in learning about other cultures and contact with people from other countries at school	Associations between the index of respect for people from other cultures and contact with people from other countries at school	Associations between the index of students' attitudes towards immigrants and contact with people from other countries at school	Associations between the index of students' cognitive adaptability and contact with people from other countries at school
		Difference between those who have contact and those who do not <sup>2</sup>	Difference between those who have contact and those who do not	Difference between those who have contact and those who do not	Difference between those who have contact and those who do not
	All	Dif.	Dif.	Dif.	Dif.
<u>و</u> .	Albania	0.10	0.03	0.01	0.15
art	Argentina	0.15	0.03	-0.04	0.20
٠.	Baku (Azerbaijan)	0.04	0.05	-0.02	0.10
-	Belarus	0.23	0.08	0.08	0.15
-	Bosnia and Herzegovina	0.10	0.08	0.02	0.12
-	Brazil	0.05	-0.23	-0.16	0.15
-	Brunei Darussalam	0.06	0.03	0.01	0.13
	Bulgaria	0.19	0.13	-0.03	0.16
-	Costa Rica	0.09	0.05	0.04	0.15
-	Croatia	0.12	-0.01	0.05	0.13
	Dominican Republic	-0.01	-0.01	-0.05	0.12
	Hong Kong (China)	0.08	0.07	0.00	0.07
	Indonesia	0.10	-0.10	-0.04	0.10
	Jordan	0.07	0.05	-0.03	0.09
	Kazakhstan	0.11	0.09	0.01	0.12
_	Kosovo	0.13	0.01	-0.09	0.14
	Lebanon	m	-0.04	-0.03	0.12
	Macao (China)	0.07	0.01	0.04	0.15
	Malaysia	0.02	-0.01	m	0.12
_	Malta	0.20	0.17	0.08	0.20
	Moldova	0.15	0.06	0.00	0.16
	Montenegro	0.14	0.00	0.04	0.15
	Morocco	0.01	-0.09	-0.11	0.04
	North Macedonia	0.13	0.01	-0.07	0.12
	Panama	0.13	0.16	0.10	0.12
	Peru	0.08	0.04	m	0.11
	Philippines	-0.01	-0.07	-0.14	0.04
	Romania	0.16	0.02	0.00	0.11
-	Russia	0.17	0.08	0.05	0.14
-	Saudi Arabia	0.15	0.07	0.06	0.19
-	Serbia	0.12	0.01	0.00	0.14
-	Singapore	0.13	0.19	m	0.21
-	Chinese Taipei	0.21	0.21	0.08	0.25
-	Thailand	0.11	0.12	0.04	0.13
-	Ukraine	0.07	-0.08	-0.02	0.08
-	United Arab Emirates	m	0.12	m	0.14
-	Uruguay	0.14	0.09	0.01	0.16
-	Viet Nam	0.08	0.01	0.04	0.16

<sup>1.</sup> Students were asked the following question: "Do you have contact with people from other countries at school?"

 $\textbf{Note} \hbox{:}\ \ \ \ \, \text{Values that are statistically significant are marked in bold.}$ 

Source: OECD PISA 2018 Database, Table VI.B1.4.8.

<sup>2.</sup> All associations are presented after accounting for students' gender and students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

<sup>3.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Table VI.8 [1/2] Global competence learning activities and students' attitudes<sup>1</sup>

Number of learning activities   Number of learning activitie	earning ultures ith an activity er of
OECD average         5.5         0.06         0.06         0.04         0.07           Australia         5.9         0.07         0.08         0.05         0.08           Austria         5.5         0.06         0.06         0.03         0.07           Canada         6.0         0.06         0.08         0.05         0.07           Chile         5.7         0.06         0.08         0.04         0.07           Colombia         7.3         0.08         0.08         0.02         0.05           Estonia         5.0         0.05         0.05         0.05         0.07           France         4.8         0.06         0.06         0.04         0.06           Germany         5.4         0.05         0.08         0.05         0.07           Greece         5.7         0.05         0.06         0.04         0.06           Hungary         3.9         0.06         0.05         0.03         0.06           Iceland         5.8         0.05         0.06         0.05         0.05         0.07	
Australia         5.9         0.07         0.08         0.05         0.08           Austria         5.5         0.06         0.06         0.03         0.07           Canada         6.0         0.06         0.08         0.05         0.07           Chile         5.7         0.06         0.08         0.04         0.07           Colombia         7.3         0.08         0.08         0.02         0.05           Estonia         5.0         0.05         0.05         0.05         0.07           France         4.8         0.06         0.06         0.04         0.06           Germany         5.4         0.05         0.08         0.05         0.07           Greece         5.7         0.05         0.06         0.04         0.06           Hungary         3.9         0.06         0.05         0.03         0.06           Iceland         5.8         0.05         0.06         0.05         0.05         0.07	
Austria         5.5         0.06         0.08         0.05         0.07           Canada         6.0         0.06         0.08         0.05         0.07           Chile         5.7         0.06         0.08         0.04         0.07           Colombia         7.3         0.08         0.08         0.02         0.05           Estonia         5.0         0.05         0.05         0.05         0.07           France         4.8         0.06         0.06         0.04         0.06           Germany         5.4         0.05         0.08         0.05         0.07           Greece         5.7         0.05         0.06         0.04         0.06           Hungary         3.9         0.06         0.05         0.03         0.06           Iceland         5.8         0.05         0.06         0.05         0.05         0.07	
Canada         6.0         0.06         0.08         0.05         0.07           Chile         5.7         0.06         0.08         0.04         0.07           Colombia         7.3         0.08         0.08         0.02         0.05           Estonia         5.0         0.05         0.05         0.05         0.07           France         4.8         0.06         0.06         0.04         0.06           Germany         5.4         0.05         0.08         0.05         0.07           Greece         5.7         0.05         0.06         0.04         0.06           Hungary         3.9         0.06         0.05         0.03         0.06           Iceland         5.8         0.05         0.06         0.05         0.07	
Chile         5.7         0.06         0.08         0.04         0.07           Colombia         7.3         0.08         0.08         0.02         0.05           Estonia         5.0         0.05         0.05         0.05         0.07           France         4.8         0.06         0.06         0.04         0.06           Germany         5.4         0.05         0.08         0.05         0.07           Greece         5.7         0.05         0.06         0.04         0.06           Hungary         3.9         0.06         0.05         0.03         0.06           Iceland         5.8         0.05         0.06         0.05         0.07	
Colombia         7.3         0.08         0.08         0.02         0.05           Estonia         5.0         0.05         0.05         0.05         0.07           France         4.8         0.06         0.06         0.04         0.06           Germany         5.4         0.05         0.08         0.05         0.07           Greece         5.7         0.05         0.06         0.04         0.06           Hungary         3.9         0.06         0.05         0.03         0.06           Iceland         5.8         0.05         0.06         0.05         0.07	
Estonia         5.0         0.05         0.05         0.05         0.07           France         4.8         0.06         0.06         0.04         0.06           Germany         5.4         0.05         0.08         0.05         0.07           Greece         5.7         0.05         0.06         0.04         0.06           Hungary         3.9         0.06         0.05         0.03         0.06           Iceland         5.8         0.05         0.06         0.05         0.07	
France         4.8         0.06         0.06         0.04         0.06           Germany         5.4         0.05         0.08         0.05         0.07           Greece         5.7         0.05         0.06         0.04         0.06           Hungary         3.9         0.06         0.05         0.03         0.06           Iceland         5.8         0.05         0.06         0.05         0.07	
Germany         5.4         0.05         0.08         0.05         0.07           Greece         5.7         0.05         0.06         0.04         0.06           Hungary         3.9         0.06         0.05         0.03         0.06           Iceland         5.8         0.05         0.06         0.05         0.07	
Greece         5.7         0.05         0.06         0.04         0.06           Hungary         3.9         0.06         0.05         0.03         0.06           Iceland         5.8         0.05         0.06         0.05         0.07	
Hungary         3.9         0.06         0.05         0.03         0.06           Iceland         5.8         0.05         0.06         0.05         0.07	
Iceland         5.8         0.05         0.06         0.05         0.07	
Ireland 5.3 0.06 0.07 0.04 0.06	
Israel <sup>2</sup> 5.0 <b>0.06 0.08 0.03 0.05</b>	
Italy         5.6         0.07         0.07         0.04         0.08	
Korea 5.7 0.04 0.05 0.04 0.06	
Latvia 4.9 0.06 0.06 0.05 0.08	
Lithuania 5.8 <b>0.06 0.07 0.04 0.08</b>	
Mexico         6.6         0.06         0.07         0.03         0.07	
New Zealand         5.3         0.07         0.08         0.05         0.09	
Poland 5.7 0.03 0.04 0.04 0.06	
Portugal 5.9 0.05 0.07 0.03 0.06	
Scotland (United Kingdom)         4.9         0.07         0.08         0.05         0.07	
Slovak Republic         5.0         0.05         0.06         0.03         0.09	
Slovenia 4.0 0.04 0.03 0.02 0.07	
Spain         5.6         0.05         0.05         0.04         0.06	
Switzerland 5.2 0.04 0.06 0.04 0.06	
Turkey 5.8 <b>0.04 0.05 0.06 0.04</b>	

<sup>1.</sup> All associations are presented after accounting for students' gender and students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

**Source**: OECD PISA 2018 Database, Table VI.B1.7.11.

StatLink https://doi.org/10.1787/888934169253

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<sup>2.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Table VI.8 [2/2] Global competence learning activities and students' attitudes<sup>1</sup>

			Change in the index of	Change in the index of	Change in the index	Change in the index of interest in learning
			self-efficacy regarding global issues associated with an increase of one	awareness of global issues associated with an increase of one	of perspective taking associated with an increase of one activity	about other cultures associated with an increase of one activity
		Number of learning	activity in the number	activity in the number	in the number of	in the number of
		activities Mean	of learning activities1  Dif.	of learning activities  Dif.	learning activities Dif.	learning activities Dif.
-S	Albania	7.4	0.09	0.10	0.08	0.09
Partners	Argentina	6.3	0.08	0.09	0.07	0.09
Par	Baku (Azerbaijan)	7.3	0.08	0.09	0.05	0.07
	Belarus	5.4	0.04	0.06	0.05	0.09
	Bosnia and Herzegovina	5.7	0.05	0.05	0.03	0.06
	Brazil	6.2	0.06	0.06	0.03	0.06
	Brunei Darussalam	5.6	0.05	0.06	0.03	0.06
	Bulgaria	6.0	0.05	0.05	0.03	0.07
	Costa Rica	6.2	0.06	0.08	0.06	0.08
	Croatia	5.4	0.04	0.06	0.01	0.05
	Dominican Republic	7.9	0.07	0.07	0.05	0.05
	Hong Kong (China)	6.7	0.06	0.06	0.04	0.06
	Indonesia	7.6	0.06	0.08	0.04	0.06
	Jordan	7.1	0.08	0.08	0.04	0.06
	Kazakhstan	6.3	0.07	0.08	0.04	0.07
	Kosovo	6.9	0.06	0.05	0.04	0.06
	Lebanon	6.4	0.04	0.06	0.06	m
	Macao (China)	5.7	0.05	0.06	0.05	0.06
	Malaysia	6.1	0.08	0.08	0.06	0.07
	Malta	5.6	0.07	0.07	0.03	0.08
	Moldova	5.7	0.07	0.08	0.05	0.09
	Montenegro	6.3	0.05	0.04	0.03	0.07
	Morocco	5.9	0.07	0.06	0.03	0.03
	North Macedonia	5.8	0.05	0.04	0.04	0.07
	Panama	6.7	0.06	0.07	0.04	0.04
	Peru	7.1	0.05	0.07	0.05	0.07
	Philippines	8.0	0.07	0.12	0.05	0.09
	Romania	5.3	0.04	0.03	0.01	0.06
	Russia	5.0	0.07	0.06	0.03	0.09
	Saudi Arabia	6.2	0.08	0.05	0.06	0.08
	Serbia	5.2	0.05	0.05	0.03	0.07
	Singapore	7.8	0.07	0.08	0.05	0.08
	Chinese Taipei	6.3	0.08	0.08	0.05	0.08
	Thailand	7.5	0.05	0.05	0.03	0.05
	Ukraine	5.1	0.07	0.08	0.04	0.08
	United Arab Emirates	m	m	m	m	m
	Uruguay	5.9	0.05	0.06	0.03	0.06
	Viet Nam	6.3	0.09	0.09	0.08	0.10

<sup>1.</sup> All associations are presented after accounting for students' gender and students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

**Source**: OECD PISA 2018 Database, Table VI.B1.7.11.

<sup>2.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Table VI.9 [1/2] Global competence learning activities and students' attitudes

		Change in the index of respect for people from other cultures associated with an increase of one activity in the number of learning activities <sup>1</sup>	Change in the index of attitudes towards immigrants associated with an increase of one activity in the number of learning activities	Change in the index of awareness of intercultural communication associated with an increase of one activity in the number of learning activities	Change in the index of cognitive adaptability associated with an increase of one activity in the number of learning activities	Change in the index of agency regarding global issues associated with an increase of one activity in the number of learning activities
OECD	OECD average	0.03	0.02	0.03	0.05	0.06
OE	Australia	0.04	0.03	0.04	0.06	0.08
	Austria	0.04	0.02	0.05	0.05	0.06
	Canada	0.02	0.01	0.03	0.06	0.06
	Chile	0.03	0.01	0.03	0.07	0.05
	Colombia	0.04	0.02	0.05	0.06	0.07
	Estonia	0.03	0.02	0.04	0.05	0.07
	France	0.01	m	0.03	0.04	0.07
	Germany	0.03	0.03	0.03	0.06	0.06
	Greece	0.04	0.02	0.04	0.06	0.06
	Hungary	0.02	0.03	0.02	0.04	0.05
	Iceland	0.03	0.00	0.04	0.05	0.05
	Ireland	0.04	0.02	0.03	0.06	0.06
	Israel <sup>2</sup>	m	m	0.03	0.05	m
	Italy	0.05	0.04	0.03	0.06	0.06
	Korea	0.02	0.02	0.03	0.06	0.07
	Latvia	0.04	0.02	0.04	0.06	0.04
	Lithuania	0.03	0.02	0.05	0.04	0.08
	Mexico	0.02	0.00	0.03	0.06	0.05
	New Zealand	0.04	0.03	0.04	0.07	0.08
	Poland	0.03	0.01	0.02	0.06	0.05
	Portugal	0.02	0.01	0.02	0.05	0.05
	Scotland (United Kingdom)	0.03	0.03	0.03	0.05	0.06
	Slovak Republic	0.05	0.02	0.03	0.05	0.06
	Slovenia	0.01	0.01	0.01	0.03	0.03
	Spain	0.01	0.01	0.02	0.05	0.05
	Switzerland	0.02	0.01	0.03	0.03	0.04
	Turkey	0.04	0.04	0.03	0.07	0.05

<sup>1.</sup> All associations are presented after accounting for students' gender and students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

**Source**: OECD PISA 2018 Database, Table VI.B1.7.11.

StatLink https://doi.org/10.1787/888934169272

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<sup>2.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Table VI.9 [2/2] Global competence learning activities and students' attitudes

				Change in the		
		Change in the index		index of awareness		
		of respect for people	Change in the index	of intercultural	Change in the index of	Change in the index
		from other cultures associated with an	of attitudes towards immigrants associated	communication associated with an	cognitive adaptability associated with an	of agency regarding global issues associated
		increase of one activity	with an increase of one	increase of one activity	increase of one activity	with an increase of one
		in the number of	activity in the number	in the number of	in the number of	activity in the number
		learning activities <sup>1</sup>	of learning activities	learning activities	learning activities	of learning activities
		Dif.	Dif.	Dif.	Dif.	Dif.
ers	Albania	0.07	0.05	0.07	0.10	0.12
Partners	Argentina	0.04	0.02	0.04	0.09	0.07
å.	Baku (Azerbaijan)	0.06	0.04	0.03	0.07	0.06
	Belarus	0.06	0.04	0.04	0.07	0.07
	Bosnia and Herzegovina	0.02	0.02	0.02	0.04	0.05
_	Brazil	0.01	0.01	0.03	0.06	0.05
_	Brunei Darussalam	0.04	0.00	0.03	0.06	0.05
	Bulgaria	0.06	0.02	0.02	0.06	0.04
_	Costa Rica	0.03	0.02	0.03	0.09	0.07
_	Croatia	0.00	0.01	0.03	0.03	0.06
	Dominican Republic	0.06	0.02	0.06	0.09	0.06
	Hong Kong (China)	0.03	0.01	0.03	0.06	0.07
_	Indonesia	0.05	0.03	0.04	0.07	0.06
	Jordan	0.07	0.05	0.05	0.08	0.08
	Kazakhstan	0.05	0.04	0.05	0.07	0.07
	Kosovo	0.04	0.01	0.02	0.06	0.05
	Lebanon	0.04	0.03	0.01	0.05	0.05
	Macao (China)	0.04	0.03	0.04	0.07	0.07
_	Malaysia	0.07	m	0.06	0.09	0.07
_	Malta	0.04	0.03	0.03	0.05	0.07
	Moldova	0.05	0.04	0.05	0.07	0.08
	Montenegro	0.02	0.01	0.03	0.04	0.05
	Morocco	0.01	0.01	0.04	0.04	0.05
-	North Macedonia	0.03	0.01	m	0.06	0.02
	Panama	0.02	0.04	0.03	0.06	0.05
	Peru	0.04	m	0.03	0.06	0.04
	Philippines	0.08	0.05	0.07	0.07	0.08
	Romania	0.01	0.01	0.01	0.04	0.06
	Russia	0.05	0.03	0.03	0.07	0.07
_	Saudi Arabia	0.05	0.02	0.02	0.09	0.08
	Serbia	0.03	0.02	0.02	0.04	0.05
	Singapore	0.03	m	0.04	0.07	0.08
	Chinese Taipei	0.04	0.01	0.03	0.09	0.08
	Thailand	0.04	0.03	0.04	0.05	0.06
	Ukraine	0.04	0.03	0.04	0.06	0.07
	United Arab Emirates	m	m	m	m	m
_	Uruguay	0.03	0.00	0.03	0.06	0.05
	Viet Nam	0.09	0.04	0.06	0.11	0.09

<sup>1.</sup> All associations are presented after accounting for students' gender and students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

**Source**: OECD PISA 2018 Database, Table VI.B1.7.11.

StatLink https://doi.org/10.1787/888934169272

<sup>2.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Table VI.10 [1/2] School climate and students' attitudes

		Perception of discrimination at school Mean Index	Change in the index of students' perspective taking associated with a one-unit increase in the index of perception of discrimination at school <sup>1</sup>	Change in the index of students' respect for people from other cultures associated with a one-unit increase in the index of perception of discrimination at school Dif.	Change in the index of students' attitudes towards immigrants associated with a one-unit increase in the index of perception of discrimination at school	School principal's view on teachers' multicultural and egalitarian beliefs Mean Index
OECD	OECD average	-0.01	-0.09	-0.18	-0.08	-0.05
OE	Australia	-0.11	-0.12	-0.19	-0.13	0.02
	Austria	m	m	m	m	m
	Canada	m	m	m	m	0.07
	Chile	-0.10	-0.16	-0.20	-0.12	-0.05
	Colombia	0.10	-0.10	-0.17	-0.08	-0.08
	Estonia	0.02	-0.08	-0.20	-0.06	-0.24
	France	m	m	m	m	m
	Germany	-0.04	-0.01	-0.19	-0.10	0.03
	Greece	0.34	-0.06	-0.11	-0.03	0.19
	Hungary	0.13	-0.04	-0.12	0.05	-0.43
	Iceland	-0.26	-0.11	-0.26	-0.12	0.21
	Ireland	-0.30	-0.05	-0.16	-0.15	0.47
	Israel <sup>2</sup>	m	m	m	m	-0.19
	Italy	-0.12	-0.07	-0.20	-0.09	0.11
	Korea	-0.54	-0.12	-0.18	-0.09	-0.67
	Latvia	0.04	-0.10	-0.18	-0.05	-0.32
	Lithuania	0.15	-0.11	-0.19	-0.11	-0.18
	Mexico	0.09	-0.14	-0.19	-0.09	-0.19
	New Zealand	-0.01	-0.05	-0.15	-0.12	0.06
	Poland	0.09	-0.12	-0.18	-0.03	0.25
	Portugal	-0.19	-0.10	-0.20	-0.14	-0.10
	Scotland (United Kingdom)	-0.29	-0.05	-0.21	-0.14	0.31
	Slovak Republic	0.31	-0.10	-0.22	-0.02	-0.19
	Slovenia	0.25	-0.07	-0.18	-0.07	-0.31
	Spain	-0.11	-0.10	-0.20	-0.12	0.27
	Switzerland	0.01	-0.08	-0.21	-0.15	-0.09
	Turkey	0.36	-0.05	-0.07	0.04	-0.18

<sup>1.</sup> All associations are presented after accounting for students' gender and students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Source: OECD PISA 2018 Database, Tables VI.B1.8.11, VI.B1.8.13 and VI.B1.8.14.

StatLink https://doi.org/10.1787/888934169291

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<sup>2.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Table VI.10 [2/2] School climate and students' attitudes

	Perception of discrimination at school Mean Index	Change in the index of students' perspective taking associated with a one-unit increase in the index of perception of discrimination at school <sup>1</sup>	Change in the index of students' respect for people from other cultures associated with a one-unit increase in the index of perception of discrimination at school	Change in the index of students' attitudes towards immigrants associated with a one-unit increase in the index of perception of discrimination at school Dif.	School principal's view on teachers' multicultural and egalitarian beliefs Mean Index
⊻ Albania	-0.10	-0.16	-0.17	-0.12	-0.22
Albania Argentina  Raku (Azorbaijan)	0.09	-0.06	-0.17	-0.10	-0.01
Baku (Azerbaijan)	0.72	-0.21	-0.19	0.07	-0.69
Belarus	-0.13	-0.14	-0.17	-0.06	0.42
Bosnia and Herzegovina	0.21	-0.16	-0.21	-0.03	0.16
Brazil	0.11	-0.17	-0.25	-0.09	0.16
Brunei Darussalam	0.26	-0.04	-0.10	-0.07	-0.43
Bulgaria	0.36	-0.20	-0.22	0.03	-0.16
Costa Rica	-0.27	-0.13	-0.18	-0.11	-0.18
Croatia	0.02	-0.12	-0.24	-0.11	0.05
Dominican Republic	0.45	-0.17	-0.20	0.07	0.06
Hong Kong (China)	-0.03	-0.10	-0.14	-0.04	-0.83
Indonesia	0.24	-0.07	-0.09	-0.01	-0.14
Jordan	0.39	-0.10	-0.19	-0.03	-0.63
Kazakhstan	0.12	-0.12	-0.18	-0.05	-0.42
Kosovo	0.22	-0.22	-0.18	-0.12	-0.19
Lebanon	m	m	m	m	-0.55
Macao (China)	-0.14	-0.02	-0.13	-0.07	-0.15
Malaysia	0.25	-0.06	-0.12	m	0.11
Malta	0.29	-0.11	-0.18	-0.05	-0.42
Moldova	0.04	-0.09	-0.14	-0.06	-0.21
Montenegro	0.15	-0.20	-0.24	-0.09	0.05
Morocco	0.59	-0.11	-0.19	-0.02	-0.69
North Macedonia	0.14	-0.10	-0.10	-0.05	m
Panama	0.29	-0.08	-0.18	0.00	0.01
Peru	0.04	-0.15	-0.20	m	-0.59
Philippines	0.59	-0.08	-0.09	-0.04	0.19
Romania	0.08	-0.12	-0.19	-0.07	0.00
Russia	0.08	-0.22	-0.23	-0.06	0.25
Saudi Arabia	0.60	-0.02	-0.02	0.14	-0.73
Serbia	0.13	-0.18	-0.23	-0.02	0.12
Singapore	m	m	m	m	0.48
Chinese Taipei	0.17	-0.07	-0.11	-0.04	-0.45
Thailand	0.46	-0.09	-0.09	0.00	-0.12
Ukraine	-0.02	-0.13	-0.20	-0.10	0.36
United Arab Emirates	m	m	m	m	0.33
Uruguay	0.05	-0.12	-0.19	-0.09	-0.04
Viet Nam	-0.31	-0.10	-0.13	-0.06	-0.91

<sup>1.</sup> All associations are presented after accounting for students' gender and students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Source: OECD PISA 2018 Database, Tables VI.B1.8.11, VI.B1.8.13 and VI.B1.8.14.

StatLink https://doi.org/10.1787/888934169291

<sup>2.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

# Thriving in an interconnected world

In our interconnected world the ability to live and work together with other people, who may think differently or have a different background to us, is vital for success.

Many students want to learn about other cultures and people who are different to them

In response to the statement "I respect people from other cultures as equal human beings"

■ 82%
 agreed
 ■ 18%
 disagreed
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Girls reported greater respect for people from other cultures

han bovs

as did advantaged students compared to their disadvantaged peers



4 in 5 or more students

were in schools

whose curriculum covered global issues, such as climate change and epidemics



Students who had positive attitudes and dispositions reported more global

and intercultural learning at school

Schools, teachers and parents can help students develop the skills and attitudes needed to thrive in our interconnected world Many students reported supporting sustainability and intercultural understanding

However, this is mostly done through simple actions requiring neither time nor money



reduced their energy consumption





64% followed world events on social media



# Reader's Guide

### Data underlying the figures

The data referred to in this volume are presented in Annex B and, in greater detail, including additional tables, on the PISA website (www.oecd.org/pisa).

Five symbols are used to denote missing data:

- a The category does not apply in the country or economy concerned; data are therefore missing.
- c There were too few observations to provide reliable estimates (i.e. there were fewer than 30 students or fewer than 5 schools with valid data).
- m Data are not available. There was no observation in the sample; these data were not collected by the country or economy; or these data were collected but subsequently removed from the publication for technical reasons.
- w Results were withdrawn at the request of the country or economy concerned.
- x Data included in another category or column of the table (e.g. x(2) means that data are included in Column 2 of the table).

### Coverage

This publication features data from 66 countries and economies. Students in 27 countries and economies both sat the global competence test and completed the global competence module in the student questionnaire. Students in a further 39 countries and economies completed the global competence module in the guestionnaire only.

The countries/economies that took the global competence cognitive test and the corresponding student's questionnaire are: Albania, Brunei Darussalam, Canada, Chile, Colombia, Costa Rica, Croatia, Greece, Hong Kong (China), Indonesia, Israel, Kazakhstan, Korea, Latvia, Lithuania, Malta, Morocco, Panama, Philippines, The Russian Federation, Scotland (United Kingdom), Serbia, Singapore, The Slovak Republic, Spain, Chinese Taipei and Thailand.

The countries/economies that took the student's global competence questionnaire only are: Albania, Argentina, Australia, Australia, Baku (Azerbaijan), Belarus, Bosnia and Herzegovina, Brazil, Brunei Darussalam, Bulgaria, Canada, Chile, Colombia, Costa Rica, Croatia, Cyprus, Dominican Republic, Estonia, France, Germany, Greece, Hong Kong (China), Hungary, Iceland, Indonesia, Ireland, Israel, Italy, Jordan, Kazakhstan, Korea, Kosovo, Latvia, Lebanon, Lithuania, Macao (China), Malaysia, Malta, Mexico, Montenegro, Morocco, New Zealand, North Macedonia, Panama, Peru, Philippines, Poland, Portugal, The Republic of Moldova, Romania, The Russian Federation, Saudi Arabia, Scotland (United Kingdom), Serbia, Singapore, The Slovak Republic, Slovenia, Spain, Switzerland, Chinese Taipei, Thailand, Turkey, Ukraine, The United Arab Emirates, Uruguay and Viet Nam.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming<sub>(11)</sub>) for details.

Notes on Cyprus:

- **Note by Turkey:** The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".
- Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

B-S-J-Z (China) refers to the four PISA-participating provinces/municipalities of the People's Republic of China (hereafter "China"): Beijing, Shanghai, Jiangsu and Zhejiang.

Data for Viet Nam are included in most tables in Annex B, but not included in tables, figures and texts that report comparisons of performance with other countries and economies or over time, because full international comparability of results could not be assured at the time this report was published (see Annexes A4 and A6 from Volume I).

### **International averages**

The OECD average corresponds to the arithmetic mean of the respective country estimates. It was calculated for most questionnaire indicators presented in this report.

On 28 April 2020, Colombia became a Member. Colombia is included in the OECD averages in this publication.

The overall average corresponds to the arithmetic mean of the respective country/economy estimates. It was calculated for some indicators presented in this report.

In this publication, the OECD average and the overall average are generally used when the focus is on comparing performance across education systems. In the case of some countries/economies, data may not be available for specific indicators, or specific categories may not apply. Readers should, therefore, keep in mind that the terms "OECD average" and "overall average" refer to countries and economies included in the respective comparisons. In cases where data are not available or do not apply for all sub-categories of a given population or indicator, the "OECD average" and the "overall average" are not necessarily computed on a consistent set of countries/economies across all columns of a table.

### **Rounding figures**

Because of rounding, some figures in tables may not add up exactly to the totals. Totals, differences and averages are always calculated on the basis of exact numbers and are rounded only after calculation.

All standard errors in this publication have been rounded to one or two decimal places. Where the value 0.0 or 0.00 is shown, this does not imply that the standard error is zero, but that it is smaller than 0.05 or 0.005, respectively.

### **Reporting student data**

The report uses "15-year-olds" as shorthand for the PISA target population. PISA covers students who are aged between 15 years 3 months and 16 years 2 months at the time of assessment and who are enrolled in school and have completed at least 6 years of formal schooling, regardless of the type of institution in which they are enrolled, and whether they are in full-time or part-time education, whether they attend academic or vocational programmes, and whether they attend public or private schools or foreign schools within the country.

#### Reporting school data

The principals of the schools in which students were assessed provided information on their schools' characteristics by completing a school questionnaire. Where responses from school principals are presented in this publication, they are weighted so that they are proportionate to the number of 15-year-olds enrolled in the school.

# Focusing on statistically significant differences

This volume discusses only statistically significant differences or changes. These are denoted in darker colours in figures and in bold font in tables. Unless otherwise specified, the significance level is set to 5%. See Annex A3 for further information.

# Abbreviations used in this report

ESCS	PISA index of economic, social and cultural status
GDP	Gross domestic product
ICT	Information and communications technology
ISCED	International Standard Classification of Education
ISCO	International Standard Classification of Occupations
PPP	Purchasing power parity
Score dif.	Score-point difference
S.D.	Standard deviation
S.E.	Standard error
STEM	Science, technology, engineering and mathematics
% dif.	Percentage-point difference

# **Further documentation**

For further information on the PISA assessment instruments and the methods used in PISA, see the PISA 2018 Technical Report (OECD, forthcoming<sub>[11]</sub>).

# StatLink Is

This report has StatLinks at the bottom of tables and graphs. To download the matching Excel® spreadsheet, just type the link into your Internet browser, starting with the <a href="https://doi.org/prefix">https://doi.org/prefix</a>, or click on the link from the e-book version.

# Reference

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What is PISA?

PISA is a triennial survey of 15-year-old students around the world that assesses the extent to which they have acquired key knowledge and skills essential for full participation in social and economic life. PISA assessments do not just ascertain whether students near the end of their compulsory education can reproduce what they have learned; they also examine how well students can extrapolate from what they have learned and apply their knowledge in unfamiliar settings, both in and outside of school.

# WHAT IS UNIQUE ABOUT PISA?

PISA is unique because of its:

- policy orientation, which links data on student learning outcomes with data on students' backgrounds and attitudes towards learning, and with key factors that shape their learning, in and outside of school; by doing so, PISA can highlight differences in performance and identify the characteristics of students, schools and education systems that perform well
- innovative concept of "literacy", which refers to students' capacity to apply their knowledge and skills in key areas, and to analyse, reason and communicate effectively as they identify, interpret and solve problems in a variety of situations
- relevance to lifelong learning, as PISA asks students to report on their motivation to learn, their beliefs about themselves, and their learning strategies
- regularity, which enables countries to monitor their progress in meeting key learning objectives
- breadth of coverage, which, in PISA 2018, encompassed all 37 OECD countries and 42 partner countries and economies.

# Map of PISA countries and economies



OECD member	countrie
-------------	----------

Australia Lithuania Austria Luxembourg Belgium Mexico Netherlands Canada Chile New Zealand Colombia Norway Czech Republic Poland Denmark Portugal Slovak Republic Estonia Finland Slovenia France Spain Germany Sweden Switzerland Greece Hungary Turkey Iceland United Kingdom United States\* Ireland Israel Italy

Japan

Korea

#### Partner countries and economies in PISA 2018

Alhania Malaysia Argentina Malta Baku (Azerbaijan) Republic of Moldova Belarus Montenegro Bosnia and Herzegovina Morocco Brazil Republic of North Macedonia Brunei Darussalam Panama B-S-J-Z (China)\*\* Peru **Philippines** Bulgaria Costa Rica Oatar Croatia Romania Russian Federation Cyprus Dominican Republic Saudi Arabia Georgia Serbia Hong Kong (China) Singapore Indonesia Chinese Taipei Jordan Thailand Kazakhstan Ukraine United Arab Emirates Kosovo Lebanon Uruguay

#### Partner countries and economies in previous cycles

Algeria Azerbaijan Guangdong (China) Himachal Pradesh (India) Kyrgyzstan Liechtenstein Miranda (Venezuela) Tamil Nadu (India) Trinidad and Tobago Tunisia

Viet Nam

<sup>:</sup> Macao (China) \* Puerto Rico participated in the PISA 2015 assessment (as an unincorporated territory of the United States).

<sup>\*\*</sup> B-S-J-Z (China) refers to four PISA 2018 participating Chinese provinces/municipalities: Beijing, Shanghai, Jiangsu and Zhejiang. In PISA 2015, the four PISA participating Chinese provinces/municipalities were: Beijing, Shanghai, Jiangsu and Guangdong.

#### WHICH COUNTRIES AND ECONOMIES PARTICIPATE IN PISA?

PISA is used as an assessment tool in many regions around the world. It was implemented in 43 countries and economies in the first assessment (32 in 2000 and 11 in 2002), 41 in the second assessment (2003), 57 in the third assessment (2006), 75 in the fourth assessment (65 in 2009 and 10 in 2010), 65 in the fifth assessment (2012) and 72 in the sixth assessment (2015). In 2018, 79 countries and economies participated in PISA.

#### WHAT DOES THE TEST MEASURE?

In each round of PISA, one subject is tested in detail, taking up nearly half of the total testing time. The main subject in 2018 was reading, as it was in 2000 and 2009. Mathematics was the main subject in 2003 and 2012, while science was the main subject in 2006 and 2015. With this alternating schedule, a thorough analysis of achievement in each of the three core subjects is presented every nine years; an analysis of trends is offered every three years. In 2018, global competence was assessed as an innovative domain.

The PISA 2018 Assessment and Analytical Framework (OECD, 2019<sub>[1]</sub>) presents definitions and more detailed descriptions of the subjects assessed in PISA 2018:

- Reading literacy is defined as students' capacity to understand, use, evaluate, reflect on and engage with texts in order to achieve one's goals, develop one's knowledge and potential, and participate in society.
- Mathematics literacy is defined as students' capacity to formulate, employ and interpret mathematics in a variety of contexts. It includes reasoning mathematically and using mathematical concepts, procedures, facts and tools to describe, explain and predict phenomena.
- Science literacy is defined as the ability to engage with science-related issues, and with the ideas of science, as a reflective
  citizen. A scientifically literate person is willing to engage in reasoned discourse about science and technology, which requires
  the competencies to explain phenomena scientifically, evaluate and design scientific enquiry, and interpret data and evidence
  scientifically.
- Global competence is defined as a multidimensional capacity that encompasses the ability to: examine issues of local, global and cultural significance; understand and appreciate the perspectives and worldviews of others; engage in open, appropriate and effective interactions across cultures; and take action for collective well-being and sustainable development.

# **Box A Key features of PISA 2018**

#### The content

• The PISA 2018 survey focused on reading, with mathematics, science and global competence as minor areas of assessment. PISA 2018 also included an assessment of young people's financial literacy, which was optional for countries and economies.

#### The students

• Some 600 000 students completed the assessment in 2018, representing about 32 million 15-year-olds in the schools of the 79 participating countries and economies.

#### The assessment

- Computer-based tests were used in most countries, with assessments lasting a total of two hours. In reading, a multi-stage adaptive approach was applied in computer-based tests whereby students were assigned a block of test items based on their performance in preceding blocks.
- Test items were a mixture of multiple-choice questions and questions requiring students to construct their own responses. The items were organised into groups based on a passage of text describing a real-life situation. More than 15 hours of test items for reading, mathematics, science and global competence were covered, with different students taking different combinations of test items.
- Students also answered a background questionnaire, which took about 35 minutes to complete. The questionnaire sought information about the students themselves, their attitudes, dispositions and beliefs, their homes, and their school and learning experiences. School principals completed a questionnaire that covered school management and organisation, and the learning environment.

- Some countries/economies also distributed additional questionnaires to elicit more information. These included: in 19 countries/economies, a questionnaire for teachers asking about themselves and their teaching practices; and in 17 countries/economies, a questionnaire for parents asking them to provide information about their perceptions of and involvement in their child's school and learning.
- Countries/economies could also choose to distribute three other optional questionnaires for students: 52 countries and economies distributed a questionnaire about students' familiarity with computers; 32 countries/economies distributed a questionnaire about students' expectations for further education; and 9 countries/economies distributed a questionnaire, developed for PISA 2018, about students' well-being.

#### **HOW IS THE ASSESSMENT CONDUCTED?**

As was done in 2015, PISA 2018 delivered the assessment of all subjects via computer. Paper-based assessments were provided for countries that were not able to test their students by computer, but the paper-based assessment was limited to reading, mathematics and science trend items, which were originally developed for previous PISA assessments. Since 2015, new items were developed for the computer-based assessment only.

The 2018 computer-based assessment was designed as a two-hour test. Each test form allocated to students comprised four 30-minute clusters of test material. For the main subject of reading, material equivalent to 15 30-minute clusters was developed. This material was organised into blocks instead of clusters, as the PISA 2018 reading assessment took a multi-stage adaptive approach. The reading assessment was composed of a core stage followed by stage 1 and stage 2. In stages 1 and 2, students were assigned blocks of items of either greater or lesser difficulty, depending on their performance in earlier stages (see Chapter 1 in this volume, for more detailed information on the multi-stage adaptive approach). To measure trends in the subjects of mathematics and science, six clusters were included in each subject. In addition, four clusters of global competence items were developed. There were 72 different test forms. Students spent one hour on the reading assessment plus one hour on one or two other subjects – mathematics, science or global competence.

Countries that used paper-based delivery for the main survey measured student performance with 30 pencil-and-paper forms containing trend items in the three core PISA subjects. The reading items in these paper-based forms were based on the 2009 reading literacy framework and did not include any items based on the new 2018 reading literacy framework.

The assessment of financial literacy was offered as an option in PISA 2018. It was based on the same framework as that developed for PISA 2012, which was also used in PISA 2015. The financial literacy assessment lasted one hour (in addition to the regular PISA assessment) and comprised two clusters distributed to a subsample of students in combination with the reading and mathematics assessments.

To gather contextual information, PISA 2018 asked students and the principal of their school to respond to questionnaires. The student questionnaire took about 35 minutes to complete; the questionnaire for principals took about 45 minutes to complete. The responses to the questionnaires were analysed with the assessment results to provide both a broader and more nuanced picture of student, school and system performance. The PISA 2018 Assessment and Analytical Framework (OECD, 2019<sub>[1]</sub>) describes the genesis of the questionnaires in detail. The questionnaires from all assessments since PISA's inception are available on the PISA website: www.oecd.org/pisa.

The questionnaires seek information about:

- students and their family backgrounds, including their economic, social and cultural capital
- aspects of students' lives, such as their attitudes towards learning, their habits and life in and outside of school, and their family environment
- aspects of schools, such as the quality of the schools' human and material resources, public and private management and funding, decision-making processes, staffing practices, the school's curricular emphasis and the extracurricular activities it offers
- the context of instruction, including institutional structures and types, class size, classroom and school climate, and reading activities in class
- aspects of learning, including students' interest, motivation and engagement.

In PISA 2018, five additional questionnaires were offered as options:

- **computer familiarity questionnaire**, focusing on the availability and use of information and communications technologies (ICT), and on students' ability to carry out tasks on computers and their attitudes towards using computers
- well-being questionnaire, (new to PISA 2018) on students' perceptions of their health, life satisfaction, social connections and activities in and outside of school
- educational career questionnaire, which collects additional information on interruptions in schooling, preparation for students' future career, and support with language learning
- parent questionnaire, focusing on parents' perceptions of and involvement in their child's school, their support for learning at home, school choice, their child's career expectations, and their background (immigrant/non-immigrant)
- **teacher questionnaire**, which asks about teachers' initial training and professional development, their beliefs and attitudes, and their teaching practices. Separate questionnaires were developed for teachers of the test language and for other teachers in the school.

The contextual information collected through the student, school and optional questionnaires is complemented by system-level data. Indicators describing the general structure of each education system, such as expenditure on education, stratification, assessments and examinations, appraisals of teachers and school leaders, instruction time, teachers' salaries, actual teaching time and teacher training are routinely developed and analysed by the OECD. These data are extracted from the annual OECD publication, *Education at a Glance: OECD Indicators*, for the countries that participate in the annual OECD data collection administered through the OECD Indicators of Education Systems (INES) Network. For other countries and economies, a special system-level data collection was conducted in collaboration with PISA Governing Board members and National Project Managers.

#### WHO ARE THE PISA STUDENTS?

Differences between countries in the nature and extent of pre-primary education and care, the age at entry into formal schooling, the structure of the education system, and the prevalence of grade repetition mean that school grade levels are often not good indicators of where students are in their cognitive development. To better compare student performance internationally, PISA targets students of a specific age. PISA students are aged between 15 years 3 months and 16 years 2 months at the time of the assessment, and they have completed at least 6 years of formal schooling. They can be enrolled in any type of institution, participate in full-time or part-time education, in academic or vocational programmes, and attend public or private schools or foreign schools within the country. (For an operational definition of this target population, see Annex A2.) Using this age across countries and over time allows PISA to consistently compare the knowledge and skills of individuals born in the same year who are still in school at age 15, despite the diversity of their education histories in and outside of school.

The population of PISA-participating students is defined by strict technical standards, as are the students who are excluded from participating (see Annex A2). The overall exclusion rate within a country is required to be below 5% to ensure that, under reasonable assumptions, any distortions in national mean scores would remain within plus or minus 5 score points, i.e. typically within the order of magnitude of 2 standard errors of sampling. Exclusion could take place either through the schools that participated or the students who participated within schools (see Annex A2).

There are several reasons why a school or a student could be excluded from PISA. Schools might be excluded because they are situated in remote regions and are inaccessible, because they are very small, or because of organisational or operational factors that precluded participation. Students might be excluded because of intellectual disability or limited proficiency in the language of the assessment. In 31 of the 79 countries and economies that participated in PISA 2018, the percentage of school-level exclusions amounted to less than 1%; it was 4% or less in all except five countries. When the exclusion of students who met the internationally established exclusion criteria is also taken into account, the exclusion rates increase slightly. However, in 2018, the overall exclusion rate remained below 2% in 28 participating countries and economies, below 5% in 63 participating countries and economies, and below 7% in all countries except Sweden (11.1%), Israel (10.2%)<sup>5</sup>, Luxembourg and Norway (both 7.9%). For more detailed information about school and student exclusion from PISA 2018, see Annex A2.

#### WHERE CAN YOU FIND THE RESULTS?

The initial PISA 2018 results are released in six volumes:

- *Volume I: What Students Know and Can Do* (OECD, 2019<sub>[2]</sub>) provides a detailed examination of student performance in reading, mathematics and science, and describes how performance has changed over time.
- *Volume II: Where All Students Can Succeed* (OECD, 2019<sub>[3]</sub>) examines gender differences in student performance, the link between students' socio-economic status and immigrant background, on the one hand, and their performance and other outcomes, on the other, and the relationship between all of these variables and students' well-being. Trends in these indicators over time are examined when comparable data are available.

- *Volume III: What School Life Means for Students' Lives* (OECD, 2019<sub>[4]</sub>) focuses on the physical and emotional health of students, the role of teachers and parents in shaping the school climate, and the social life at school. The volume also examines indicators of student well-being, and how these are related to school climate.
- *Volume IV: Are Students Smart about Money?* (OECD, 2020<sub>[5]</sub>) examines 15-year-old students' understanding about money matters in the 21 countries and economies that participated in this optional assessment. The volume explores how the financial literacy of 15-year-old students is associated with their competencies in reading and mathematics, with their socio-economic status, and with their previous experiences with money. It also offers an overview of financial education in schools in the participating countries and economies, and provides case studies.
- *Volume V: Effective Policies, Successful Schools* (OECD, 2020<sub>[6]</sub>) analyses schools and school systems and their relationship with education outcomes more generally. The volume covers school governance, selecting and grouping students, and the human, financial, educational and time resources allocated to teaching and learning. Trends in these indicators are examined when comparable data are available.
- Volume VI: Are Students Ready to Thrive in Global Societies? (OECD, forthcoming<sub>[7]</sub>) examines students' ability to consider local, global and intercultural issues, understand and appreciate different perspectives and world views, interact respectfully with others, and take responsible action towards sustainability and collective well-being. It does so through both an assessment completed by students and questionnaires completed by students and school principals.<sup>6</sup>

Volumes I, II and III were published in December 2019; Volume IV was published in May 2020; Volume V was published in September 2020 and Volume VI is published in October 2020.

The frameworks for assessing reading, mathematics, science, financial literacy and global competence in 2018 are described in the PISA 2018 Assessment and Analytical Framework (OECD, 2019 $_{11}$ ).

Technical annexes at the end of this volume describe how questionnaire indices were constructed and discuss sampling issues, quality-assurance procedures and the process followed for developing the assessment instruments. Many of the issues covered in the technical annexes are elaborated in greater detail in the PISA 2018 Technical Report (OECD, forthcoming<sub>181</sub>).

A selection of key tables referred to in the analyses are included at the end of the respective volume in Annex B1, and a set of additional data tables is available on line (www.oecd.org/pisa). A Reader's Guide is also provided in each volume to aid in interpreting the tables and figures that accompany the report. Data from regions within the participating countries are included in Annex B2.

#### Notes

- 1. The paper-based form was used in nine countries: Argentina, Jordan, Lebanon, the Republic of Moldova, the Republic of North Macedonia, Romania, Saudi Arabia, Ukraine and Viet Nam.
- 2. The global competence assessment was not available in the countries/economies that conducted the PISA 2018 assessment on paper. It was conducted in Albania, Brunei Darussalam, Canada, Chile, Colombia, Costa Rica, Croatia, Greece, Hong Kong (China), Indonesia, Israel, Kazakhstan, Korea, Latvia, Lithuania, Malta, Morocco, Panama, the Philippines, the Russian Federation, Serbia, Singapore, the Slovak Republic, Spain, Chinese Taipei, Thailand and Scotland (United Kingdom). However, the global competence module was included in the student questionnaire, which was distributed in 66 of the countries/economies that took part in PISA 2018.
- 3. Thirty-six test forms were prepared for countries that did not participate in the global competence assessment. The number of distinct test forms is much higher when the many possible combinations of reading questions are also considered.
- 4. The financial literacy assessment was conducted in Australia, Brazil, Bulgaria, Canada, Chile, Estonia, Finland, Georgia, Indonesia, Italy, Latvia, Lithuania, the Netherlands, Peru, Poland, Portugal, the Russian Federation, Serbia, the Slovak Republic, Spain and the United States.
- 5. The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcominq<sub>[R]</sub>) for details.
- 6. The global competence assessment was conducted in 27 countries and economies, while the global competence module was included in questionnaires distributed in 66 countries/economies and economies.

#### References

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# Learning to live together

This chapter defines the knowledge, skills and attitudes that constitute the four dimensions of global competence that are needed to thrive in an interconnected world. It explores the methods used to measure them and highlights topics of policy relevance explored in detail in subsequent chapters.

#### Learning to live together

Twenty-first century students live in an interconnected, diverse and rapidly changing world. Economic, social, cultural, digital, demographic, environmental and epidemiological forces are shaping young people's lives. This complex environment presents both opportunities and challenges.

As we moved from 2019 into 2020, the world was swept with a global pandemic the like of which had not been seen for more than a century. The disruption created by the pandemic was unprecedented, as were reactions to it. Global efforts to counter the spread of the virus ensued, as well as creative solutions to respond to its consequences.

It was a time of contradictions. The virus moved along the routes of international trade and travel, challenging the essence of the interconnected world we live in. Travel stopped, trade was disrupted, and schools were closed as students, parents and teachers were on lockdown. As countries grappled with the consequences of the pandemic, questions arose on what the future would hold. Would there be more global collaboration to tackle the aftermath of the crisis, or would it lead to increased isolation and the decline of global connections?

The two scenarios are not mutually exclusive. As we build highly integrated global networks, we become vulnerable to risks such as global pandemics and economic crises. Since the financial crisis of 2008, the world has witnessed growing scepticism about interconnectedness, with protectionism back on the agenda in some countries. The current pandemic only added to this phenomenon, with countries closing their borders to avoid further spread of the virus and the world economy slowing down as a result. However, the decline of global links in one sphere could give rise to new connections in another.

In 2008 and the years that followed, countries mobilised their resources to counter the consequences of the financial crisis, with the largest concerted monetary policy action in world history. Currently, in response to the COVID-19 pandemic, co-ordinated efforts are being made to establish new norms and standards of response. Teams of scientists around the world are working on finding a vaccine for the virus. If their efforts are successful, it would be the most rapidly developed vaccine in human history.

Public health is not the only pressing issue on the global stage. In the last two decades, the world faced a different challenge: extremism and radicalisation with concerted worldwide efforts being mobilised to counter this threat. More recently, in May 2020 and the months that followed, the world was swept with protests challenging racial discrimination and the misuse of power. Two years earlier, the #MeToo movement put sexual harassment and abuse in the spotlight. One issue focused on racial equality, the other on gender equality, but both had justice, empowerment and breaking the silence at their heart, and both relied on the willingness of people to show solidarity and to take action for collective well-being.

In education, although the process of global collaboration is still in its infancy, global events highlighted the potential for countries to learn from each other's experience. So far, if there is one thing that the different crises have shown, it is that international collaboration is needed more than ever.

In 2018, the OECD Programme for International Student Assessment (PISA) conducted its first evaluation of students' capacity to live in an interconnected world. The assessment focused on students' knowledge of issues of local and global significance, including public health, economic and environmental issues, and on their intercultural knowledge, skills and attitudes. It explored how schools foster those skills through learning. The survey also covered the inclusion of global and intercultural learning in the curriculum and teacher preparedness to integrate those topics in their lessons.

Even though the PISA 2018 global competence assessment did not specifically cover the COVID-19 crisis or the other recent global events, it focused on many themes of global relevance such as: gender equality, environmental sustainability, poverty, hunger and malnutrition, economic crises, migration and cultural diversity. More importantly, the cognitive assessment covered skills that are valuable beyond the scope of topics included in the assessment such as critical thinking, ability to examine issues of global and local significance, ability to understand the perspectives of others and to evaluate actions and consequences.

Education systems that embrace the need for such competences are likely to be the ones that equip students to live in an interconnected and diverse world and to benefit from it. In the spirit of the United Nations Sustainable Development Goals, the ultimate objective is to allow learners to acquire the knowledge and skills needed to promote human rights, gender equality, sustainable lifestyles, a culture of peace and non-violence, global citizenship, and an appreciation of cultural diversity and of culture's contribution to sustainable development.

The rest of this chapter presents the concept of global competence, its dimensions and how it was assessed in PISA 2018.

#### WHAT IS GLOBAL COMPETENCE?

In its 2018 cycle of data collection among 15-year-old students, PISA assessed the global competences needed to live in an interconnected and changing world. Global competence is defined as a multidimensional capacity that encompasses the ability to: 1) examine issues of local, global and cultural significance; 2) understand and appreciate the perspectives and worldviews of others; 3) engage in open, appropriate and effective interactions across cultures; and 4) take action for collective well-being and sustainable development (OECD, 2019<sub>[1]</sub>). Students in 27 countries and economies both sat the global competence test and completed the global competence module in the student questionnaire. Students in a further 39 countries and economies completed the global competence module in the questionnaire only. The list of participating countries and economies is provided in Table VI.A2.16 in annex A2.

#### WHY DO STUDENTS NEED SPECIFIC INTERCULTURAL AND GLOBAL SKILLS?

### To live harmoniously in multicultural societies

Multicultural societies are a reality almost everywhere. In recent decades, the cost of human mobility has declined, and the number of people moving in search of education and employment has dramatically increased. Moreover, the end of the cold war ushered in a significant rise in ethno-cultural conflicts that are challenging governments' ability to maintain peace and harmony between diverse communities living side by side (Brubaker and Laitin,  $1998_{[2]}$ ; Kymlicka,  $1995_{[3]}$ ). Such conflicts highlight the interconnectedness of our world. A conflict in one region can result in an influx of refugees in countries thousands of miles away. In 2015 alone, an estimated 4.8 million migrants arrived in OECD countries, a wave that reinforced a long and steady upward trend in migration (OECD,  $2019_{[4]}$ ).

With the movement of people between countries, communities have redefined their identity and local culture. Complex forms of citizenship have emerged at multiple levels (national, regional, municipal and local), as have new forms of belonging. Against this backdrop, individuals must interact with distant regions, people and ideas while also deepening their understanding of their local environment and the diversity within their own communities. By appreciating the cultural diversity of the communities to which they belong, young people can learn to live together as global citizens (UNESCO, 2014<sub>[5]</sub>; UNESCO, 2015<sub>[6]</sub>). While education cannot bear the sole responsibility for ending racism and discrimination, it can teach young people the importance of challenging cultural biases and stereotypes in multicultural societies.

# To thrive in a changing labour market

Workplaces around the world are becoming more diverse and interconnected. Professional success in the 21st century requires skills that go beyond disciplinary knowledge. In today's world, it is essential to operationalise knowledge across disciplines, to understand different perspectives and to communicate with others who may not share the same worldview or speak the same language. Effective communication and appropriate behaviour within multicultural teams are the key to success and will remain so, even as some skills are partially or completely automated. Employers increasingly seek to attract learners who adapt easily and are able to apply and transfer their skills and knowledge to new contexts. They value employees who are capable of navigating the complex dynamics of globalisation, who are open to people from different cultural backgrounds, who can build trust in diverse teams and who demonstrate respect for others (British Council, 2013<sub>[71</sub>).

# To use media platforms effectively and responsibly

In the past two decades, radical transformations of information and communication technologies have changed our lives and shaped young people's outlook on the world, their interactions with others and their perceptions of their surrounding environment. Social media, online networks and interactive technologies connect young people to their friends, family members and people well beyond these circles. They also deliver an unprecedented amount of information and online content to young people. Such networks are giving rise to new forms of learning, where the source of knowledge is decentralised and learners have ever-increasing autonomy in how they learn.

However, these new media and technologies also pose some risks to young people, including exposure to harmful or inappropriate content, lack of awareness about how online behaviour can affect others and a dependence on the Internet or social networking that could lead to disconnection from the real world. Moreover, while technology helps people connect easily with others, online behaviour suggests that young people tend to "flock together", favouring interactions with a small set of people with whom they have much in common (Graf and Aday, 2008<sub>[8]</sub>; Tewksbury and Riles, 2015<sub>[9]</sub>). Likewise, access to an unlimited amount of information is often paired with insufficient media literacy, to the extent that young people are easily influenced by partisan, biased or "fake" news. In this context, cultivating students' skills in intercultural communication can help them to capitalise on digital spaces, better understand the world they live in and responsibly express their opinions on line.

# To support the UN Sustainable Development Goals

Education for living in an interconnected world should ultimately contribute to forming new generations of citizens who care about global issues and who are able to take action for sustainability and collective well-being. As stated in the Sustainable Development Goal for education, by 2030, all learners should acquire the knowledge and skills needed to promote sustainable development, including through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of culture's contribution to sustainable development (Education 2030, Incheon Declaration and Framework for Action).

### **ASSESSING GLOBAL COMPETENCE**

Many education systems have introduced learning activities related to global citizenship as schools try to prepare their students to live in an increasingly diverse and interconnected environment. As these programmes become more widespread, new learning objectives and different types of assessments need to be developed. In this context, PISA aims to provide a comprehensive overview of the efforts of education systems to create learning environments that invite young people to understand the world beyond their immediate surroundings, interact with others while respecting their rights and dignity and take action towards building sustainable and thriving communities. A fundamental goal of this work is to support evidence-based decisions on how to improve curricula, teaching, assessments and schools' responses to cultural diversity and global challenges in order to prepare young people to become active citizens in an interconnected world.

# THE CONCEPT OF GLOBAL COMPETENCE AND ITS FOUR DIMENSIONS

Education for living in an interconnected world builds on the ideas of different models of education, such as intercultural education, global citizenship education and education for democratic citizenship (UNESCO,  $2014_{[5]}$ ; Council of Europe,  $2016_{[10]}$ ). Despite differences in their focus and scope, these models share a common goal: to promote students' understanding of the world and empower them to express their views and participate in society.

PISA contributes by proposing a new perspective on the definition and assessment of the knowledge, skills, attitudes and values needed to achieve the goals encompassed by these models. These conceptual foundations and assessment guidelines will help policy makers and school leaders create learning resources and curricula that regard global competence as a multifaceted cognitive, socio-emotional and civic learning goal (Boix Mansilla, 2016<sub>[11]</sub>). They will also facilitate governments' ability to monitor progress and ensure systematic long-term support.

Global competence is not a specific skill, but rather a combination of knowledge, skills, attitudes and values successfully applied both in face-to-face, virtual or mediated encounters with people who are perceived to be from a different cultural background and in individuals' engagement with global issues (i.e. situations that require an individual to reflect upon problems that know no national borders and that have deep implications for current and future generations). Acquiring the necessary knowledge, skills, attitudes and values is a life-long process; there is no single point at which an individual becomes completely competent in this domain. PISA assesses where 15-year-old students are situated in this process and whether their schools are effective in helping them to develop the necessary knowledge, skills and dispositions.

As defined in PISA 2018, global competence is composed of four highly interdependent dimensions:

- the capacity to examine issues and situations of local, global and cultural significance (e.g. poverty, economic interdependence, migration, inequality, environmental risks, conflicts, cultural differences and stereotypes)
- the capacity to understand and appreciate different perspectives and worldviews
- the ability to establish positive interactions with people of different national, ethnic, religious, social or cultural backgrounds or gender
- the capacity and disposition to take constructive action towards sustainable development and collective well-being.

### Box VI.1.1. **Defining culture**

Culture is difficult to define because cultural groups are always internally heterogeneous and contain individuals who adhere to a range of diverse beliefs and practices. Furthermore, the core cultural beliefs and practices that are most typically associated with any given group are also constantly changing and evolving over time. However, distinctions may be drawn between the material, social and subjective aspects of culture, that is, between the material artefacts that are commonly used by the members of a cultural group (e.g. tools, foods, clothing), the social institutions of the group (e.g. language, communicative conventions, folklore, religion), and the beliefs, values, discourses and practices that group members commonly use as a frame of reference for thinking about and relating to the world. Culture is a composite of all three of these aspects, consisting of a network of material, social and subjective resources. The full set of cultural resources is distributed across the entire group, but each individual member of the group only uses a subset of all of the cultural resources that are potentially available to them (Barrett et al.,  $2014_{1121}$ ; Council of Europe,  $2016_{1101}$ ).

Defining culture in this way means that any kind of social group can have its own distinctive culture: national groups, ethnic groups, faith groups, linguistic groups, occupational groups, generational groups, family groups, etc. . The definition also implies that all individuals belong to multiple groups and therefore have multiple cultural affiliations and identities (e.g. national, religious, linguistic, generational, familial). Although all people belong to multiple cultures, each person participates in a different constellation of cultures, and the way in which a person relates to any one culture depends, at least in part, on perspectives that are shaped by the other cultures to which he or she also belongs. In other words, cultural affiliations intersect, and each individual has a unique cultural positioning.

A person's cultural affiliations are dynamic and fluid. What individuals think defines them culturally fluctuates as they move from one situation to another. These fluctuations depend on the extent to which a social context focuses on a particular identity and on an individual's needs, motivations, interests and expectations within that situation (Council of Europe, 2016<sub>r101</sub>).

Figure VI.1.1 shows how global competence is defined as the combination of the four dimensions and how each dimension builds on specific knowledge, skills, attitudes and values.

Figure VI.1.1 The dimensions of global competence



### Dimension 1: Examine issues of local, global and cultural significance

People with the skills and attitudes needed to live in an interconnected world are able to combine knowledge about the world and critical reasoning whenever they form their own opinion about a global issue. They use higher-order thinking skills, such as selecting and weighing appropriate evidence, to reason about global developments. Such students can draw on and combine the disciplinary knowledge and modes of thinking acquired in school to ask questions, analyse data and arguments, explain phenomena and develop a position concerning a local, global or cultural issue (Boix Mansilla and Jackson, 2011<sub>[13]</sub>). Development in this dimension also requires media literacy, defined as the ability to access, analyse and critically evaluate media messages (Buckingham, 2007<sub>[14]</sub>; Kellner and Share, 2005<sub>[15]</sub>).

### Dimension 2: Understand and appreciate the perspectives and worldviews of others

People with the skills and attitudes needed to thrive in an interconnected world are capable of considering global problems and other people's perspectives and behaviours from multiple viewpoints. As individuals acquire knowledge about the history, values, communication styles, beliefs and practices of other cultures, they acquire the means to recognise that their own perspectives and behaviours are shaped by multiple influences, that they are not always fully aware of these influences and that others have views of the world that are profoundly different from their own (Hanvey, 1982<sub>[16]</sub>).

Engaging with different perspectives and worldviews requires individuals to examine the origins and implications of others and their own assumptions. This in turn implies a profound respect for and interest in others, their concept of reality and their emotions. Individuals with this competence also account for and appreciate the connections (e.g. basic human rights and needs and common experiences) that enable them to bridge differences and find common ground. They retain their cultural identity but are simultaneously aware of the cultural values and beliefs of the people around them. Recognising another's position or belief does not necessarily mean accepting that position or belief. However, the ability to see through another cultural filter provides opportunities to question and deepen one's own perspectives and thus make more mature decisions when dealing with others (Fennes and Hapgood, 1997<sub>[17]</sub>).

### Dimension 3: Engage in open, appropriate and effective interactions across cultures

People who have the skills and attitudes needed to thrive in an interconnected world are able to understand the cultural norms, interactive styles and degrees of formality of intercultural contexts, and they can adapt their behaviour and communication accordingly. This dimension encompasses appreciation for respectful dialogue, the desire to understand others and efforts to include marginalised groups. It emphasises individuals' capacity to interact with others across differences in ways that are open, appropriate and effective. Open interactions are those in which all participants demonstrate sensitivity towards, curiosity about and willingness to engage with others and their perspectives. "Appropriate" refers to interactions that respect the expected cultural norms of both parties. In effective communication, all participants are able to make themselves understood and to understand the others (Barrett et al., 2014<sub>[12]</sub>).

#### Dimension 4: Take action for collective well-being and sustainable development

This dimension focuses on young people's role as active and responsible members of society. It refers to individuals' readiness to respond to a given local, global or intercultural issue or situation. People who can thrive in interconnected and multicultural societies are able to create opportunities to take informed, reflective action and have their voices heard. Taking action may imply standing up for a schoolmate whose dignity is being threatened, initiating a global media campaign at school or disseminating a personal viewpoint on the refugee crisis via social media. These people are engaged to improve living conditions in their own communities and to build a more just, peaceful, inclusive and environmentally sustainable world.

# Box VI.1.2. The universal roots of global competence

Which concepts are universal, and which are the product of particular times and places with no resonance outside of those contexts?

The modern literature on global competence emerges predominantly in the Western, Euro-American context. However, global competence has older, more universal roots. Many philosophical traditions and cultures have an equivalent concept for global competence that falls under the broader categories of humanism and humanness. They all share certain ethical principles, such as connectedness, respect, openness, tolerance, empathy, compassion, knowledge of the other, self-awareness and an ideal of universal kinship.

In Confucianism, Ren (Chinese: 仁), the good feeling a person experiences by being altruistic, is considered to be the outward expression of Confucian ideals. Confucius's social philosophy depended on the cultivation of Ren by every person

in a community. In the Analects, or the collected sayings of Confucius, Ren is mentioned about 60 times with no clear definition. Throughout the Analects, Confucius's students request a definition of Ren. Confucius instead responds by giving examples of behaviours that embody the concept and illustrate how it can be achieved. According to Confucius, a person with a developed sense of Ren is kind, respectful, tolerant, diligent and trustworthy (Analects 17.6). He or she speaks carefully and with modesty (Analects 12.3), and shows empathy towards and understanding of others (Analects 12.22).

#### 樊遲問仁。子曰。愛人。

Fan Chi asked about the meaning of Ren. The Master said, «It is to love all Men.» He asked about knowledge. The Master said, «It is to know all Men.»

The Analects of Confucius (12.22)

In the Indian subcontinent, the term Ahimsa (Sanskrit: अहसिंग) refers to a key virtue of doing no harm. This concept is a major tenet of Hinduism, Jainism and Buddhism and underpins respect for all living beings and avoidance of violence towards others. An ancient concept, Ahimsa gained political and practical significance in the first half of the 20th century as it formed the cornerstone of the nonviolent philosophy of Mahatma Gandhi known as Satyagraha (Sanskrit: सत्याग्रह). In Mahatma Gandhi's words: "Truth implies love, and firmness engenders force. I thus began to call the Indian movement Satyagraha; that is to say, the force that is born of truth and love."

# मित्रस्याहं चक्षुषा सर्वाणि भूतानि समीक्षे। मित्रस्य चक्षुषा समीक्षामहे।

May all beings look at me with a friendly eye, may I do likewise, and may we look at each other with the eyes of a friend.

Yajurveda यजुर्वेद (36.18)

In Japan, one word, Kokoro (Japanese: 心) has come to signify Heart, Mind and Spirit. The word is difficult to translate. Using three distinct words implies division, while in Japanese the concept means the unity of the three aspects forming the substance of a human being. The word Kokoro originates in Shinto understanding that "kami no kokoro" (Japanese: 神の心), or heart of the deity forms a bond between humans and the spiritual world. With Buddhist influence, the concept of Kokoro evolved to become an ideal for a way of life. Cultivating one's Kokoro requires one to act with sincerity (Makoto; Japanese: 誠) towards others and the world and in harmony (Chowa; Japanese: 調和) with nature. This communion between all human beings and nature is the manifestation of the will of the deity and the tie that binds all together.

#### 花の陰

赤の他人は

なかりけり

In the city fields

Contemplating cherry trees

Strangers are like friends

#### Japanese Haiku, Kobayashi Issa 小林 一茶 (1763 –1828)

Philanthropy (*philanthrôpía*; Greek: Φιλανθρωπία) is the love of humanity, a word that made its first appearance in the classical age of Greece. Although the word as used by Aristophanes, Plato, Xenophon and others had theological and philosophical meanings, over time the meaning of philanthropy evolved to include an innate affection towards human beings and the possession of certain social graces, such as courtesy, kindness, friendliness and gregariousness, combined with good deeds. The concept of philanthropy came to be associated with the Christian virtue of charity. In modern times, philanthropy denotes private initiatives for the public good as distinct from business (private initiative for the private good) and government (public initiative for the public good).

The affection of parents for offspring and of offspring for parents seems to be a natural instinct, not only in man but also in birds and in most animals, as also is friendship between members of the same species. This is especially strong in the human race, for which reason we praise those who love their fellow men (philanthrô/pous [ $\phi \iota \lambda \dot{\alpha} \nu \theta \rho \omega \pi \sigma \zeta$ ] is used in the ancient Greek text). And in our travels we can observe that a natural affinity and friendship exists between humans universally.

(Aristotle, Nicomachean Ethics, Book 8, 1155a)

In South Africa, the tradition of Ubuntu emphasises the importance of connectedness, compassion, empathy, common humanity and humility, as the Zulu proverb, *Umuntu Ngumuntu Ngabantu* ("a person is a person because of others"),

#### Learning to live together

implies. Ubuntu is a social philosophy that stresses the place of the human being within the community. It consists of a code of ethics embedded in African cultures that seeks to honour the dignity of each person while having the communal good at its heart. In Archbishop Desmond Tutu's words: "One of the sayings in our country is Ubuntu – the essence of being human. Ubuntu speaks particularly about the fact that you cannot exist as a human being in isolation. It speaks about our interconnectedness. We think of ourselves far too frequently as just individuals, separated from one another, whereas you are connected and what you do affects the whole world. When you do well, it spreads out; it is for the whole of humanity."

Your pain is my pain,
My wealth is your wealth,
Your salvation is my salvation.

Ubuntu saying

In Judaism and Islam, compassion is amongst the highest virtues. The word compassion shares the same root in both Arabic and Hebrew. *Rachamim* in Hebrew (בימוֹם) and *Rahmah* in Arabic (حمة) originate from the same word, meaning womb (*Rehem*; מרש, בחר). The word implies sibling love or the bond between those born from the same womb. In both religious traditions, compassion is one of the divine attributes of God that should be reflected in the norms of human behaviour.

Echoing Aristotle, Moses Maimonides (ןומיימ ן ב השמ יבר), 1135-1204), the great Jewish scholar, discussed the existence of an emotion – compassion – most prominent in the relationship between parents and their offspring. In his words: "There is no difference between the pain of man and the pain of other living beings, since the love and tenderness of the mother for her young is not produced by reasoning, but by imagination, and this faculty exists not only in man but in most living things. As such, if the law provides that grief should not be caused to cattle or birds, how much more careful must we be that we should not cause grief to our fellowmen (The Guide for the Perplexed, מוכובנ הרומ 3:48)".

In Arabic, the term denotes the tenderness that stimulates an urge to show empathy towards others. It covers qualities such as love, benevolence, kindness and generosity. As such, "Rahmah", a divine attribute of the creator, is reflected in the ethical conduct of his creation. Ibn Arabi, a medieval Muslim scholar and poet, describes the relationship between God and human beings as an object reflected in a countless number of mirrors. God is the object and human beings are the mirrors. In this sense, the divine attributes are reflected and magnified infinitely by humanity.

لَقَد صارَ قَلَبِي قَابِلاً كُلَّ صورَةٍ فَمَرعَ لِغِزلانٍ وَدَيرٌ لِرُهبانِ وَبَيتٌ لِأَوثانٍ وَكَعبَةُ طائِفٍ وَأَلواحُ تَوراةٍ وَمُصحَفُ قُرآنِ وَلواحُ تَوراةٍ وَمُصحَفُ قُرآنِ وَلَيْهُ فَالحُبُّ ذَيْنِ الحُبُّ أَنِي تَوَجَّهَت رَكائِبُهُ فَالحُبُّ دَيْنِ وَإِيمانِ

My heart can take on many forms: A meadow for gazelles,

A cloister for monks,
For the idols, sacred ground,
Ka'ba for the circling pilgrim,
The tables of the Torah,

The scrolls of the Quran.

My creed is Love;

Wherever its caravan turns along the way,

That is my belief and my faith.

Arabic poetry, Ibn Arabi محى الدين بن عربي (1165 – 1240)

# THE CORE COMPONENTS OF GLOBAL COMPETENCE: KNOWLEDGE, SKILLS, ATTITUDES AND VALUES

The four dimensions are underpinned by four inseparable components: knowledge, skills, attitudes and values. For example, examining a global issue such as climate change requires a good knowledge of that particular topic, the skill to transform this awareness into deeper understanding, the ability to reflect on this issue from multiple cultural perspectives and the willingness to take action for sustainability and collective well-being.

Effective education for living in an interconnected world helps students mobilise their knowledge, skills, attitudes and values while reflecting on and exchanging ideas on topics of global or local significance both in and outside of school, or while interacting with people from other cultures. This section provides a conceptual description of the knowledge areas, skills, attitudes and values students need to thrive in an interconnected world. This description is not exhaustive, as other perspectives on this area of education might emphasise certain elements more than others.

# Knowledge about the world and other cultures

Knowledge about issues of global and local significance and about similarities, differences and relations between cultures helps young people to engage critically in everyday situations, challenge disinformation and stereotypes about other cultures and counter oversimplified views of the world.

Global issues are those that affect all individuals, regardless of their nation or social group. They include trade, poverty, human rights, geopolitics and the environment. Global issues reveal how different regions around the world are interconnected, as they shed light on the diversity and commonality of their experiences (Boix Mansilla and Jackson, 2011<sub>[13]</sub>). For example, pollution in one place affects the ozone layer somewhere else, and floods in agricultural areas not only ruin the local environment and economy, but also affect markets worldwide and drive waves of migration. Global issues are, therefore, also local issues. They are global in their reach, but local communities experience them in different ways.

As global issues emerge when ecological and socio-economic interests cross borders, intercultural issues arise from the interaction of people from different cultural backgrounds. In this interaction, each party's ways of thinking, believing, feeling and acting are interpreted by the other. These interactions can be enjoyable and rewarding if differences between cultures are not too large, and/or if individuals are open to learning about and accepting those differences. But intercultural interactions can also be marked by miscommunication and misunderstanding. In the worst cases, misunderstandings can degenerate into negative stereotypes, discrimination and even violent conflict.

The ability to thrive in an interconnected world requires engaging with controversial issues. Schools can provide a space in which students can explore complex and controversial global or intercultural issues that they encounter through the media and in their own experiences.

The list of relevant global or intercultural issues that can be introduced to children and adolescents in school is long. There have been recent attempts to systematise these issues and their components into a coherent sequence of lessons and learning materials at all curriculum levels (OXFAM, 2015<sub>[18]</sub>; Fernando M. Reimers, 2017<sub>[19]</sub>). An effective curriculum addresses four knowledge domains: culture and intercultural relations; socio-economic development and interdependence; environmental sustainability; and global institutions, conflicts and human rights. When teaching these four domains, differences in opinions and perspectives should be highlighted, and facts and evidence should be scrutinised.

**Culture and intercultural relations** are related to the manifold expressions of languages, arts, knowledge, traditions and norms. Acquiring knowledge in this domain can help young people become more aware of their own cultural identity, help them understand differences and similarities among and within cultures and encourage them to value the importance of protecting cultural differences and diversity. As they learn about other cultures and individual differences, students start to recognise multiple, complex identities and avoid categorising people through single markers of identity (e.g. black, white, woman, poor). Students can acquire knowledge in this domain by reflecting on their own cultural identity and that of their peers, by analysing common stereotypes towards people in their community or by studying illustrative cases of conflict or successful integration between cultural groups.

The domain of **socio-economic development and interdependence** refers to the study of development patterns in different regions of the world, with a focus on the links between societies and economies. Students can analyse, at different levels of complexity, the many forms of globalisation, such as international migration, transnational production, global brands and technologies. By doing so, they can start to make sense of how local, national and global processes jointly shape the development of countries and the inequalities in opportunities available to individuals.

#### Learning to live together

Students need a solid foundation in environmental issues to promote and support sustainability. For example, learning activities in the domain of **environmental sustainability** help them understand the complex systems and policies surrounding the demand for and use of natural resources.

The fourth knowledge domain focuses on **formal and informal institutions that support peaceful relationships** between people and the respect of fundamental human rights. Students can learn how international institutions, such as the United Nations, were established. They can reflect on the contested nature of global governance in a world with highly unbalanced power relationships and review the causes of and solutions for current and historical conflicts between countries, or ethnic or social groups. Acquiring deep knowledge in this domain is instrumental in helping young people to develop attitudes of tolerance and respect and values such as peace, non-discrimination, equality, justice and non-violence.

#### Skills to understand the world, communicate with others and take action

Skills are defined as the capacity to carry out a complex and well-organised pattern of thinking (in the case of a cognitive skill) or behaviour (in the case of a socio-emotional skill) in order to achieve a particular goal. Living in interconnected and multicultural societies requires numerous skills, including reasoning, communication in intercultural contexts, perspective taking, conflict resolution and adaptability.

Students who can **reason with information** from different sources (textbooks, peers, influential people, and traditional and digital media) can autonomously identify their information needs and select sources purposefully on the basis of their relevance and reliability. These students use a logical, systematic and sequential approach to examine information in a text or any other form of media, analysing connections and discrepancies. They can evaluate the worth, validity and reliability of any material on the basis of its internal consistency and its consistency with evidence and with their own knowledge and experience. Competent students question and reflect on an author's motives, purposes and points of view, the techniques used to attract attention, the use of image, sound and language to convey meaning and the range of different interpretations.

Students who are skilled in intercultural communication are able to **communicate effectively and respectfully** with people who are perceived to be from different cultural backgrounds. Effective communication requires being able to express oneself clearly, confidently and politely, even when expressing a fundamental disagreement. Respectful communication requires understanding the expectations and perspectives of diverse interlocutors and applying that understanding to meet the interlocutors' needs. Respectful communicators also check and clarify the meanings of words and phrases when they engage in an intercultural dialogue. Speaking more than one language is a clear asset for effective intercultural communication. Effective communication in intercultural contexts is also facilitated by active listening. This means not only listening to what is being said, but also how it is being said, through the use of voice and accompanying body language. Competent students are capable speakers who can use their body language and voice effectively when they discuss and debate global issues, express and justify a personal opinion or seek to persuade others to pursue a particular course of action.

**Perspective taking** refers to the cognitive and social skills individuals need to understand how other people think and feel. It is the capacity to identify and temporarily adopt a different point of view, "stepping into someone else's shoes". Perspective taking does not only involve imagining another person's point of view, it also entails understanding how various perspectives are related to one another. Understanding others' perspectives facilitates more mature and tolerant interpretations of differences among groups.

Students who can thrive in an interconnected world approach conflicts in a constructive manner, recognising that conflict is a process to be managed, not something to be denied or ignored. Taking an active part in **conflict management and resolution** requires listening and seeking common solutions. Possible ways to address conflict include: 1) analysing key issues, needs and interests (e.g. power, recognition of merit, division of work, equity); 2) identifying the origins of the conflict and the perspectives of those involved, recognising that the parties might differ in status or power; 3) identifying areas of agreement and disagreement; 4) reframing the conflict; 5) managing and regulating emotions (interpreting changes in one's own and others' underlying emotions and motivation and dealing with stress, anxiety and insecurity, both in oneself and in others); and 6) prioritising needs and goals, deciding on possible compromises and the circumstances under which to reach them (Rychen and Salganik, 2003<sub>[20]</sub>). However, approaches to managing and resolving conflict may vary, depending on the societies involved.

**Adaptability** refers to the ability to adapt one's thinking and behaviours to the prevailing cultural environment or to novel situations and contexts that might present new demands or challenges. Individuals who acquire this skill are able to handle feelings of culture shock, such as frustration, stress and alienation in ambiguous situations in different environments. Adaptable learners can more easily develop long-term interpersonal relationships with people from other cultures and remain resilient in changing circumstances.

# Attitudes of openness, respect for people from different cultural backgrounds and agency regarding global issues

The ability to thrive in multicultural settings is both composed of and propelled by key dispositions or attitudes. Attitudes refer to the mindset that an individual adopts towards a person, a group, an institution, an issue, a behaviour or a symbol. This mindset integrates beliefs, evaluations, feelings and tendencies to behave in a particular way. Living with others requires an attitude of **openness** towards people from other cultural backgrounds, an attitude of **respect** for cultural differences and **agency regarding global issues** (i.e. that one is a citizen of the world with commitments and obligations towards the planet and others, irrespective of their particular cultural or national background). Such attitudes can be fostered explicitly, through participatory and learner-centred teaching, and implicitly, through a curriculum characterised by fair practices and a welcoming school climate for all students.

**Openness** towards people from other cultural backgrounds involves sensitivity towards, curiosity about and willingness to engage with other people and other perspectives (Byram, 2008<sub>[21]</sub>; Council of Europe, 2016<sub>[10]</sub>). It requires a willingness to seek out and embrace opportunities to engage with people from other cultural backgrounds, to discover and learn about their perspectives and how they interpret familiar and unfamiliar phenomena, and to learn about their linguistic and behavioural conventions. Another important characteristic of open learners is their willingness to suspend their own cultural values, beliefs and judgement when interacting with others and not assume that their own values, beliefs and behaviours are the only correct ones. The attitude of openness towards cultural otherness needs to be distinguished from only being interested in collecting exotic experiences merely for one's own personal enjoyment or benefit. Rather, intercultural openness is demonstrated through a willingness to engage, co-operate and interact with those who are perceived to have cultural affiliations that differ from one's own, on an equal footing.

**Respect** consists of positive regard and esteem for someone or something based on the judgement that they have intrinsic worth. In this framework, respect assumes the dignity of all human beings and their inalienable right to choose their own affiliations, beliefs, opinions or practices. Being respectful of cultural differences does not require minimising or ignoring significant and profound differences that might exist between oneself and others, nor does it require agreeing with, adopting or converting to others' beliefs. Respect for others also has certain limits that are set by the principle of human dignity. For example, respect should not be accorded to the contents of beliefs and opinions or to lifestyles and practices that undermine or violate the dignity of others (Council of Europe, 2016<sub>(100)</sub>).

The concept of respect should be distinguished from the concept of tolerance. Tolerance may, in some contexts, simply mean enduring difference. Respect is a less ambiguous and more positive concept. It is based on recognition of the dignity, rights and freedoms of the other in a relationship of equality.

**Agency regarding global issues** is defined as a worldview in which one sees oneself as connected to the world community and feels a sense of responsibility for its members. A person who exhibits agency regarding global issues has concerns for other people in other parts of the world, as well as feelings of moral responsibility to try to improve others' living conditions irrespective of distance and cultural differences (Boix Mansilla, 2016<sub>[11]</sub>). People who exhibit agency regarding global issues care about future generations and so act to preserve the environmental integrity of the planet. They exercise agency and voice with a critical awareness of the fact that other people may have a different vision of what humanity needs and are open to reflecting on and changing their vision as they learn about these different perspectives. Rather than believing that all differences can be eliminated, they strive to create space for different ways of living with dignity.

#### Valuing human dignity and diversity

Values go beyond attitudes and transcend specific objects or situations. They are more general beliefs about the desirable goals that individuals strive for in life, reflecting modes of conduct or states of being that an individual finds preferable to all other alternatives. In this way, values serve as standards and criteria that people use both consciously and unconsciously in their judgements. They have a normative prescriptive quality about what ought to be done or thought in different situations. Values therefore motivate certain behaviours and attitudes. For example, people for whom independence is an important value are alarmed if their independence is threatened, feel despair when they are helpless to protect it and are happy when they can enjoy it (Schwartz, 2012<sub>[221</sub>).

Valuing human dignity and cultural diversity helps people live together because both are critical filters through which individuals process information about other cultures and decide how to engage with others and the world. Individuals who cultivate these values become more aware of themselves and their surroundings and are strongly motivated to fight against exclusion, ignorance, violence, oppression and war.

#### Learning to live together

Education has a deep influence on the values of individuals. During their time at school, young people form habits of mind, beliefs and principles that will stay with them throughout their lives. This is why it is crucial to reflect on the type of education that best "cultivates humanity" (Nussbaum, 1997<sub>[23]</sub>). An education that encourages valuing dignity, human rights and diversity emphasises the commonalities that unite people around the world, rather than the issues that divide them.

Respecting human beings' core rights and dignity is, in most cases, compatible with respecting and valuing cultural diversity. Students should not only have a positive attitude towards cultural diversity, they should also value cultural diversity as an asset for societies and a desirable goal for the future. However, valuing cultural diversity has certain limits that are determined by the inviolability of human dignity (UNESCO,  $2001_{[24]}$ ; UNESCO,  $2006_{[25]}$ ). The possible tension between valuing cultural diversity and valuing human rights can be resolved by establishing a normative hierarchy between the two: in cases where the two values are in conflict with each other, valuing core human rights is more important than valuing cultural diversity.

Evaluating how much students care about the values of human dignity and cultural diversity is complex and calls for a broad repertoire of assessment strategies, ranging from interviews or conversations to observation of students in more and less structured situations. While assessing such values was beyond the scope of the PISA 2018 assessment of global competence, the discussion about values is intended to stimulate a productive debate on how education can shape the development of adolescents' ethical decision making.

# THE PISA ASSESSMENT OF GLOBAL COMPETENCE

### The PISA assessment strategy

Assessing global competence in all of its complexity requires a multi-method, multi-perspective approach. The PISA 2018 assessment of global competence went some way in this direction, although clear challenges and limitations remain. The biggest challenge for the PISA assessment is accounting for the large variety of geographic and cultural contexts represented in participating countries/economies in a single instrument. For example, students who perform well on a question assessing their reasoning about a global issue are likely to have some prior knowledge of the issue, and the types of knowledge about global issues that students have already acquired may be influenced by their experiences within their unique social context. On the one hand, cultural diversity in the tested population requires that the test material cannot be too biased towards a particular perspective (e.g. the perspective of a student in a developed country who thinks about a problem in a developing country). On the other hand, leaning too much towards cultural neutrality in the design of scenarios and questions reduces the authenticity and relevance of the tasks. Finally, the test units should focus on issues that are relevant for 15-year-old students in all countries/economies. The test design is further limited by the time constraints of the PISA assessment and the challenges in measuring the behavioural elements of global competence.

Accounting for these limitations and challenges, the PISA 2018 global competence assessment developed two instruments:

- a cognitive test focused on the cognitive aspects, including knowledge and cognitive skills of three dimensions of global competence: examining issues of local, global and cultural significance; understanding and appreciating the perspectives and worldviews of others; and taking action for collective well-being and sustainable development.
- a set of questionnaire items collecting self-reported information on students' awareness of global issues and cultures, skills (both cognitive and social) and attitudes, plus information from schools, teachers and parents on activities to promote global competence. The student questionnaire covered all four dimensions of global competence.

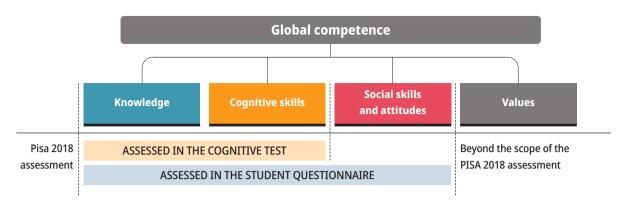
It is important to note that the cognitive test only covers the cognitive aspects of global competence. Those include knowledge and cognitive skills. Answers to the test items were used to create a unidimensional scale of those cognitive aspects (i.e. plausible values). However, the concept of global competence itself is multidimensional and includes cognitive aspects in addition to non-cognitive skills, attitudes and values.

Figure VI.1.2 (next page) shows the PISA assessment strategy and what the cognitive test and questionnaires covered.

# The PISA global competence cognitive test

The global competence test was taken by 27 countries and economies and was fully integrated into the assessment design, together with the core domains of reading, mathematical and scientific literacy. The global competence assessment consisted of 69 test items organised in 18 units and in 4 clusters. Under the fully integrated design, all sampled students responded to 60 minutes of reading items, 41% responded to mathematics items, 41% responded to science items and 30% responded to global competence items. As such, all students did the reading test in addition to one or more other tests. Further information on the development of the global competence test is provided in Chapter 2 of the PISA 2018 Technical Report (OECD, forthcoming<sub>[261</sub>).

Figure VI.1.2 The PISA strategy for assessing global competence



As discussed earlier, the global competence framework identifies four cognitive processes covering knowledge and skills associated with the four dimensions of global competence. They form the foundation of a student's ability to understand global and intercultural issues and situations. Only three of the four cognitive processes were assessed in the 2018 main survey. The cognitive process covering the third dimension of "engage in open, appropriate and effective communication across cultures" was not assessed, because assessing communication skills is difficult, if not impossible, using a written test.

The cognitive aspects of the first dimension of examining local, global and intercultural issues was tested using 37 test items covering cognitive sub-processes such as selecting sources, weighing sources' reliability and relevance, employing sources as a form of reasoning with evidence, and describing and explaining complex situations or problems. The cognitive aspects of the second dimension of understanding and appreciating the perspectives and worldviews of others was assessed using 18 test items covering cognitive sub-processes such as recognising perspectives and world views and identifying connections. The cognitive aspects of the fourth dimension of taking action for collective well-being and sustainable development was assessed using 14 test items covering cognitive sub-processes such as considering actions and assessing consequences and implications.

Each test unit in the assessment had a primary focus on a particular global or intercultural issue. Some units had a secondary focus. The framework specified four major knowledge domains that were deemed relevant to students regardless of their specific socio-cultural background. The scenarios were developed to cover one of those domains with the objective of achieving the widest coverage across the test units. The major knowledge domains were 1) culture and intercultural relations; 2) socio-economic development and interdependence; 3) environmental sustainability; and 4) institutions, conflicts and human rights.

The five released test units (i.e. published online on the PISA website) are labelled single story, refugee Olympians, ethical clothing, language policy and rising sea levels. They cover the cognitive processes associated with the three dimensions of global competence and five levels of proficiency. Single story deals with culture and intercultural relations, with a focus on cognitive skills such as perspective taking and the ability to identify stereotypes, discrimination and intolerance. Refugee Olympians focuses on institutions, conflicts, human rights and local traditions and on recognising perspectives. Ethical clothing covers policies, practices and behaviours for environmental sustainability, in addition to socio-economic development, economic interactions and interdependence, and considering actions and implications. Language policy focuses on culture and intercultural relations, recognising perspectives, stereotypes, discrimination and intolerance. Rising sea levels covers socio-economic development and economic interactions and interdependence, in addition to environmental sustainability, natural resources, environmental risks, reasoning with evidence and considering actions and implications. Table VI.1.1 presents the number of released test items for each of the five units by global competence dimension (relevant cognitive processes) and proficiency levels. The test units and items are presented in detail and discussed in Annex C.

# Table VI.1.2 Number of test items per released unit

		Test units				
		Single story	Refugee Olympians	Language policy	Ethical clothing	Rising sea levels
	Dimension 1	4	2	0	0	2
Dimensions (relevant cognitive process)	Dimension 2	1	3	0	1	1
	Dimension 4	0	0	4	3	2
	Level 1	1	0	0	0	1
	Level 2	2	1	1	1	0
Proficiency levels	Level 3	0	2	1	1	1
	Level 4	0	1	2	2	1
	Level 5	2	1	0	0	2
Total		5	5	4	4	5

# Note

- 1. Table 16 in Annex A2 provides a list of countries/economies that participated in the global competence test and in the different questionnaires (Table VI.A2.16).
- 2. The global competence item pool included 18 units with 86 test items in the field trial, from which 21 items were scored by people.
- 3. Under the fully integrated design, students could do multiple tests. In other words, a student might do the reading test in addition to mathematics and global competence, depending on how the tests were assigned.

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# **Examining local, global and intercultural issues**

This chapter explores students' ability to examine issues of local, global and cultural significance. In particular, it examines students' self-efficacy regarding and awareness of global issues, as well as their performance on the global competence test related to this first dimension, while highlighting differences among students related to their socio-economic background and circumstances.

# What the data tell us

- When it comes to students' awareness of global issues, students in Albania, Greece, Lithuania, Malta, Portugal and the United Arab Emirates scored substantially higher than the OECD average, while students in Argentina, Brunei Darussalam, Indonesia, Malaysia, Romania, Saudi Arabia and Viet Nam scored substantially lower than the OECD average.
- Students in Albania, the Dominican Republic, Germany, Peru and the United Arab Emirates reported the highest level of self-efficacy regarding global issues, scoring substantially higher than the OECD average. By contrast, students in Indonesia, Kosovo, Morocco, the Republic of North Macedonia, Romania, Saudi Arabia, the Slovak Republic and Viet Nam scored lower than the OECD average.
- The largest proportions of correct answers in the cognitive test examining local, global and intercultural issues were observed in Canada, Croatia, Hong Kong (China), Israel<sup>1</sup>, Korea, Latvia, Scotland (United Kingdom), Singapore, the Slovak Republic, Spain and Chinese Taipei. In all of these countries and economies, the proportion of correct answers exceeded the overall average of 38%.

The first dimension of global competence focuses on students' ability to combine knowledge about the world and critical understanding whenever they form opinions about a local or global issue. In the European Reference Framework of Competencies for Democratic Culture, knowledge is defined as "the body of information that is possessed by a person, while understanding is the comprehension and appreciation of meanings. The term "critical understanding" is used to emphasise the need for the comprehension and appreciation of meanings in the context of democratic processes and intercultural dialogue to involve active reflection on and critical evaluation of that which is being understood and interpreted (as opposed to automatic, habitual and unreflective interpretation)" (Council of Europe, 2018<sub>[11]</sub>). Similarly, in the OECD global competence framework (OECD, 2018<sub>[21]</sub>), students who are proficient in this dimension are able to combine their knowledge of global and intercultural issues with critical reasoning to form an informed opinion about a particular issue. People who acquire a mature level of development in this dimension use higher-order thinking skills, such as selecting and weighing appropriate evidence to reason about global developments. They can also draw on the disciplinary knowledge and modes of thinking they have acquired in school and beyond to ask questions, select and analyse evidence, explain phenomena and develop a position on local and global issues. Proficiency in this dimension also requires media literacy, as students should be able to identify, access, analyse and critically evaluate the validity of media content from different sources (Buckingham, 2007<sub>[3]</sub>; Kellner and Share, 2005<sub>[41</sub>).

Knowledge and critical understanding cover a number of issues.

Knowledge and critical understanding of economics, the environment and long-term sustainability include understanding poverty, economic development and how it affects the natural environment, and the relationship between employment, production, working conditions, profits, migration and how they are related to globalisation (Imoto, 2015<sub>[5]</sub>).

Knowledge and critical understanding of culture cover understanding how people's cultural affiliation shapes their worldviews, identity, perceptions, beliefs, practices and behaviours. It also encompasses the understanding that, within a cultural group, people come from diverse backgrounds and are constantly evolving and changing. Such knowledge allows students to understand how cultural stereotypes, power structures, discriminatory practices and institutional barriers between and within groups have the potential to disempower individuals (Huber et al., 2014<sub>[6]</sub>; UNESCO, 2006<sub>[7]</sub>; Boix Mansilla, V & Jackson, A.,2011<sub>[8]</sub>).

Knowledge and critical understanding of history include understanding the history of different groups, countries and regions and how interpretations of the past vary across groups and over time. They also involve understanding the process of historical investigation and how facts are selected and used, as well as the need to access alternative sources of information because the narrative of marginalised groups is often overlooked (Nordgren, 2017<sub>[9]</sub>).

Knowledge and critical understanding of the media focus on knowing and understanding the process through which the mass media select, edit and interpret information, in addition to knowledge of the mass media as commodities that involve producers and consumers and how relations between them are shaped by various motives, intentions and purposes. They also cover understanding the accuracy of information and how inaccurate information, propaganda and hate speech are produced and can be identified (Kellner and Share,  $2005_{[4]}$ ; Buckingham,  $2007_{[3]}$ ).

As mentioned in Chapter 1, in PISA 2018 the first dimension of global competence was assessed using the cognitive test and questions in the student questionnaire that focused on awareness of and self-efficacy regarding global issues. This chapter examines results from 37 test items focusing on this dimension and 2 questions from the student questionnaire.

# STUDENTS' AWARENESS OF GLOBAL ISSUES

Students' awareness of global issues<sup>2</sup> was assessed using one question in the PISA 2018 student questionnaire. Students were asked to report the extent to which they are aware of global issues. Answers were given on a four-point scale: "I have never heard of this"; "I have heard about this but I would not be able to explain what it is really about"; "I know something about this and could explain the general issue"; and "I am familiar with this and I would be able to explain this well". They responded to statements about seven issues: climate change and global warning; global health; migration; international conflicts; hunger or malnutrition in different parts of the world; causes of poverty; and equality between men and women in different parts of the world. Answers were used to construct the index of awareness of global issues. Positive values in this index mean that the student expressed a greater awareness about global issues than the average student across OECD countries.

Figure VI.2.1 presents the average of the index of student awareness of global issues. The findings show wide variations between countries/economies in terms of their students' awareness of global issues. Students in Albania, Greece, Lithuania, Malta, Portugal and the United Arab Emirates scored substantially higher than the OECD average, while those in Argentina, Brunei Darussalam, Indonesia, Malaysia, Romania, Saudi Arabia and Viet Nam scored substantially lower than the OECD average. Large variations in awareness of global issues were also observed within countries/economies (Table VI.B1.2.1), with Albania, Baku (Azerbaijan), Bulgaria, the Dominican Republic, Jordan, Kazakhstan, Kosovo, Montenegro, the Philippines and the United Arab Emirates showing the greatest dispersion in the index among their students. Such variations could be related to the socio-economic profile of students, but also to their exposure to activities aimed to help them develop the knowledge and skills needed to thrive in an interconnected world. Those associations will be explored in more detail throughout this volume.

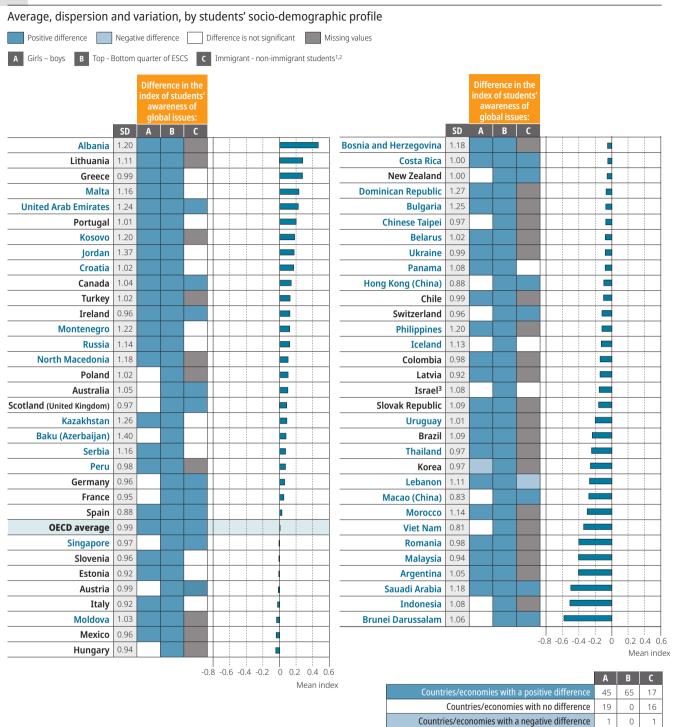
Most of the variation in the index of awareness of global issues was observed within schools (Table VI.B1.2.1). In most countries and economies, less than 10% of the variation in the index was observed between schools. However, in Austria, Brunei Darussalam, Kosovo, Lebanon, the Republic of North Macedonia (hereafter "North Macedonia"), Saudi Arabia and the United Arab Emirates, between 10% and 18% of the variation in the index was observed between schools. In Baku (Azerbaijan), Ireland, New Zealand and Chinese Taipei, only small between-school variations (less than 2%) were found.

Findings also show some significant differences in awareness of global issues related to students' socio-demographic profiles. In 45 of 65 countries and economies that took the questionnaire, girls showed significantly greater awareness of global issues than boys. This gender gap was largest in Albania, Jordan, Kazakhstan, Kosovo, Montenegro, North Macedonia and Saudi Arabia, while it was non-significant in 19 countries and economies, including Hong Kong (China), Iceland, Israel, Scotland (United Kingdom), Singapore and Chinese Taipei. The only country where boys exhibited greater awareness of global issues than girls was Korea. Moreover, in all countries and economies, students from advantaged backgrounds (those in the top quarter of the PISA index of economic, social and cultural status) showed greater awareness of global issues than students from disadvantaged backgrounds (those in the bottom quarter of the index). These differences were markedly large in Australia, Austria, Belarus, Brazil, Brunei Darussalam, Bulgaria, Iceland, Jordan, Korea, Lebanon, Lithuania, Malta, the Republic of Moldova (hereafter "Moldova"), New Zealand, North Macedonia, Panama, the Philippines, Saudi Arabia, the Slovak Republic, Ukraine and the United Arab Emirates. Such differences in awareness related to socio-economic status might be the result of unequal access to opportunities at school to learn about global issues, resulting from measures that separate or sort students, such as grade repetition and early selection.

Differences in awareness of global issues were also observed between immigrant and native-born students, even after accounting for students' and schools' socio-economic profile. Positive differences in favour of immigrants were observed in 17 of the 34 countries and economies where more than 5% of all students had an immigrant background. The reverse was observed only in Lebanon. The largest differences in awareness of global issues in favour of immigrant students were in Brunei Darussalam, Ireland, Saudi Arabia, Scotland (United Kingdom) and the United Arab Emirates.

When looking at individual questionnaire items, on average across OECD countries, students reported that they are most familiar with issues related to gender equality: 83% of students reported that they know about the topic or are very familiar with it (Figure VI.2.2). Students are also familiar with migration, climate change, causes of poverty and hunger and malnutrition in different parts of the world: about 78% reported being familiar with those topics. The two topics with which students were the least familiar were global health issues, such as pandemics, and international conflicts. Some 65% of students reported being familiar with each of these two issues

Figure VI.2.1 Students' awareness of global issues



<sup>1.</sup> After accounting for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Countries and economies are ranked in descending order of the index of students' awareness of global issues.

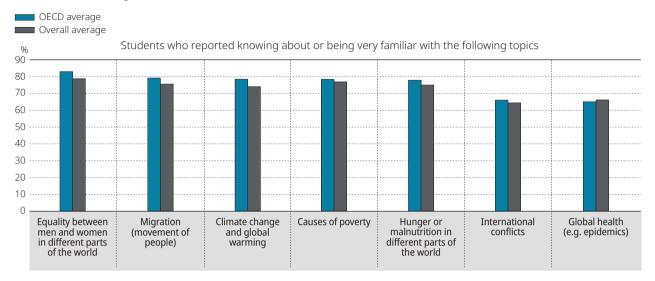
Source: OECD, PISA 2018 Database, Tables VI.B1.2.1 and VI.B1.2.3. StatLink III https://doi.org/10.1787/888934169310

<sup>2.</sup> Differences between immigrant and non-immigrant students are only presented for countries and economies where more than 5% of students have an immigrant background. The values for countries/economies with smaller proportions of immigrant students are reported as missing.

<sup>3.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Figure VI.2.2 Students' awareness of global issues, by topic

### OECD and overall averages



Source: OECD, PISA 2018 Database, Table VI.B1.2.1.

StatLink https://doi.org/10.1787/888934169329

# Box VI.2.1. Who is an immigrant student?

In PISA 2018, students were classified into several categories based on their immigrant background and that of their parents. This chapter is concerned with two categories of students:

**Non-immigrant students:** Students whose mother or father (or both) was/were born in the country/economy where the student sat the PISA test, regardless of whether the student himself/herself was born in that country or economy.

**Immigrant students:** Students whose mother and father were both born in a country/economy other than that where the student sat the PISA test. Among immigrant students, a distinction was made between first- and second-generation students, based on whether the student was born in or outside the country/economy of assessment.

- First-generation immigrant students are foreign-born students whose parents are both foreign-born.
- **Second-generation immigrant students** are students born in the country/economy of assessment whose parents are both foreign-born.

When it comes to awareness of public health issues such as pandemics, students in Albania, France, Greece, Hong Kong (China), Lithuania, Portugal, the Russian Federation (hereafter "Russia"), Chinese Taipei and Ukraine were the most aware of those issues, while students in Argentina, Austria, Brunei Darussalam, Indonesia, Korea, Lebanon, Saudi Arabia and the Slovak Republic were the least aware (Figure VI.2.3).

One area of concern for policy makers and educators is the polarisation of students' attitudes, beliefs and knowledge. One key issue of contention is climate change. In spite of the well-established body of scientific knowledge on the topic, climate change is still disputed (Corner, Whitmarsh and Xenias,  $2012_{[10]}$ ). The topic itself is complex, as it covers an extensive body of multi-disciplinary evidence interwoven with social and human issues in addition to scientific and technical issues. People disagree about the reality, seriousness and consequences of climate change because it means different things to different people. Such understanding depends on an awareness of the issues at stake and reflects differences in personal values and political ideologies (Powell et al.,  $2007_{[11]}$ ). The impact of arguments and evidence on people's attitudes is influenced by the perceived reliability of the source of information (Hahn, Harris and Corner,  $2009_{[12]}$ ), the level of personal involvement an individual has with a particular issue, personal traits (such as the degree of openness to new ideas) and previously held attitudes about a topic (Kruglanski, Webster and Klem,  $1993_{[13]}$ ). Such predispositions have the tendency to reinforce and polarise attitudes and even knowledge. The polarisation of attitudes is not unique to climate change. It extends to many other topics of global significance, such as migration, poverty and international conflicts, and it could even affect knowledge about those topics.

# Examining local, global and intercultural issues

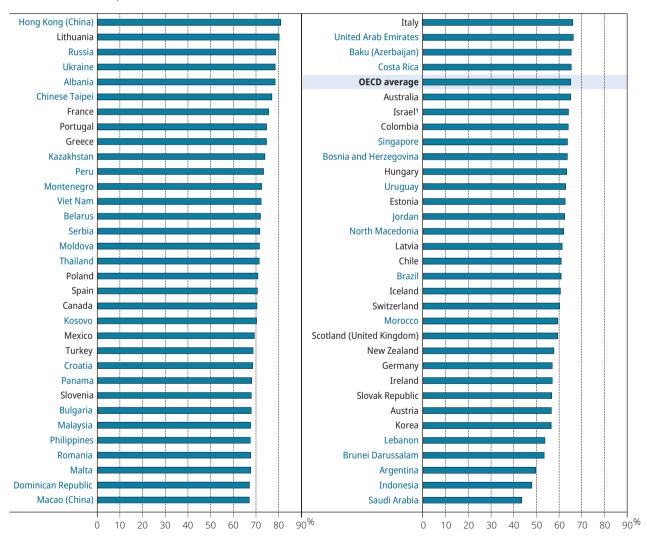
Figure VI.2.4 shows the average of the index of awareness of global issues by quarter of the index itself. Wider dispersions indicate greater polarisation of awareness among students. Polarisation could be identified in two scenarios:

- as large gaps between the second and third quarters, combined with smaller gaps between the first and second quarters and between the third and fourth quarters
- as small gaps between the second and third quarters, combined with large gaps between the first and second quarters and between the third and fourth quarters.

The findings show that, in most countries, there was a certain level of polarisation in line with the second scenario, where the average index for the top and bottom quarters was substantially distant from the average for the two middle quarters. In other words, students in the bottom quarter tended to be substantially less aware of global issues than those in the second quarter, and those in the top quarter were substantially more aware than those in the third quarter. In contrast, students in the second and third quarters tended to be more similar in their levels of awareness. In Baku (Azerbaijan), Bosnia and Herzegovina, Bulgaria, the Dominican Republic, Jordan, Kazakhstan, Montenegro, the Philippines, Russia and Serbia, differences were particularly large between students in the bottom and second quarters and between those in the third and top quarters.

Figure VI.2.3 Students' awareness of public health issues such as pandemics

# Based on students' reports

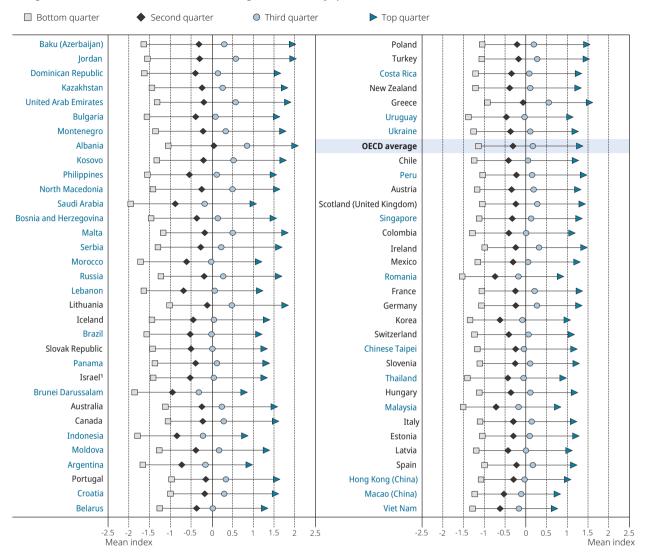


<sup>1.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Source: OECD, PISA 2018 Database, Table VI.B1.2.1.

Figure VI.2.4 Polarisation of students' awareness of global issues

Average of the index of students' awareness of global issues, by quarter of the index



<sup>1.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Countries and economies are ranked in descending order of difference between the top and bottom quarters on the index of students' awareness of global issues.

Source: OECD, PISA 2018 Database, Table VI.B1.2.3.

StatLink https://doi.org/10.1787/888934169367

# Box VI.2.2. Parents' awareness of global issues and how it is related to their children's awareness

The transmission of attitudes and interests between parents and children works through two processes, socialisation and enculturation. Socialisation involves shaping individuals to become adapted to their social environment and includes practices such as parenting. Enculturation consists of an explicit and deliberate learning process that helps people adopt the identity, language, rituals and values that will enable them to become full members of a certain culture. Through both mechanisms, whether formal or informal, children are likely to be influenced by the attitudes and practices of their parents.

While there is abundant literature on social mobility focusing on the intergenerational transmission of social status, wealth and human capital (Black, Devereux and Salvanes,  $2005_{[14]}$ ), there is a lack of evidence on the transmission of certain attitudes and behaviours, especially those related to global or intercultural issues. This box examines students' awareness of global issues in light of their parents' awareness of the same issues.

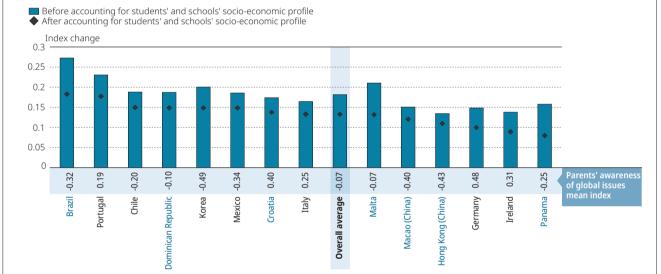
#### Examining local, global and intercultural issues

In 14 countries, parents were asked to fill out a questionnaire. One of the questions enquired about parents' awareness of global issues, using the same questions that were asked of their children. Parents had to respond to statements about seven issues: climate change and global warning; global health; migration; international conflicts; hunger or malnutrition in different parts of the world; causes of poverty; and gender equality. Answers were given on a four-point scale: "I have never heard of this"; "I have heard about this but I would not be able to explain what it is really about"; "I know something about this and I could explain the general issue"; and "I am familiar with this and I would be able to explain this well". Answers to these statements were combined to construct the index of parents' awareness of global issues. Positive values in the index indicate that parents expressed a greater sense of awareness of global issues than the average parent across OECD countries.

The findings show that the parents of students in Croatia, Germany, Ireland and Italy were more aware of global issues than the parents of students in Brazil, Chile, Hong Kong (China), Korea, Macao (China), Mexico and Panama (Table VI.B1.2.9). Students' awareness of global issues was also found to be positively associated with levels of awareness of global issues among parents across all participating countries and economies, even after accounting for students' and schools' socio-economic profile (Figure VI.2.5). These findings indicate some intergenerational transmission of attitudes that go beyond the direct effect of socio-economic status. In other words, regardless of their socio-economic background, parents may impart certain interests and knowledge to their children and, arguably, may reinforce attitudes that their children develop though their learning activities and experiences at school. The strongest associations were observed in Brazil, Chile, the Dominican Republic, Korea, Mexico and Portugal.

# Figure VI.2.5 Students' and parents' awareness of global issues

Change in students' awareness of global issues associated with a one-unit increase in the index of parents' awareness of global issues.



Note: 1. The socio-demographic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Countries and economies are ranked in descending order of the change in the index of students' awareness of global issues associated with a one-unit increase in the index of parents' awareness of global issues, after accounting for gender, immigrant background, and students' and schools' socio-economic profile.

Source: OECD, PISA 2018 Database, Table VI.B1.2.9.

#### **SELF-EFFICACY REGARDING GLOBAL ISSUES**

Self-efficacy as defined in PISA describes students' confidence in their ability to achieve the desired results through their actions (Bandura,  $1978_{[15]}$ ). PISA has traditionally asked students to judge their capabilities in specific content areas, such as mathematics or science. In 2018, PISA asked students about their general sense of efficacy regarding particular global competence tasks. Students are more likely to set challenging goals, exert effort and persist in the face of failure and adversity when they are confident they can succeed (Ozer and Bandura,  $1990_{[16]}$ ). Conversely, students who lack self-efficacy are likely to believe that putting more effort into performing a task is a waste of time. This, in turn, undermines incentives to persevere and makes success less likely (Bandura,  $1999_{[17]}$ ; Wigfield and Eccles,  $2000_{[18]}$ ; Bandura et al.,  $2001_{[19]}$ ; OECD,  $2013_{[20]}$ ).

Students in PISA 2018 were asked to report the extent to which they could do certain global competence-related tasks on their own. Answers were given on a four-point scale: "I could not do this"; "I would struggle to do this on my own"; "I could do this with a bit of effort"; and "I could do this easily". Students responded to the following prompts: "Explain how carbon-dioxide emissions affect global climate change"; "Establish a connection between prices of textiles and working conditions in the countries of production"; "Discuss the different reasons why people become refugees"; "Explain why some countries suffer from more global climate change than others"; "Explain how economic crises in single countries affect the global economy"; and "Discuss the consequences of economic development on the environment". Answers were combined to create the index of self-efficacy regarding global competence. Positive values in this index mean that the student expressed greater self-efficacy than the average student across OECD countries.

The students who sat the PISA 2018 test expressed confidence in their ability to deal with global competence tasks covering a wide range of issues, such as climate change, migration and working conditions in developing countries. Students in Albania, the Dominican Republic, Germany, Peru and the United Arab Emirates reported the highest level of self-efficacy regarding global issues, scoring substantially higher than the OECD average. By contrast, students in Indonesia, Kosovo, Morocco, North Macedonia, Romania, Saudi Arabia, the Slovak Republic and Viet Nam scored lower than the average (Figure VI.2.6). Large variations in students' self-efficacy regarding global issues were also observed within countries/economies. The largest variations between students were found in Baku (Azerbaijan), Bosnia and Herzegovina, the Dominican Republic, Jordan, Kazakhstan and Montenegro; the smallest were observed in Brunei Darussalam, Malaysia, Mexico, Peru and Viet Nam, indicating more homogeneity in the distribution of those attitudes among students (Table VI.B1.2.4).

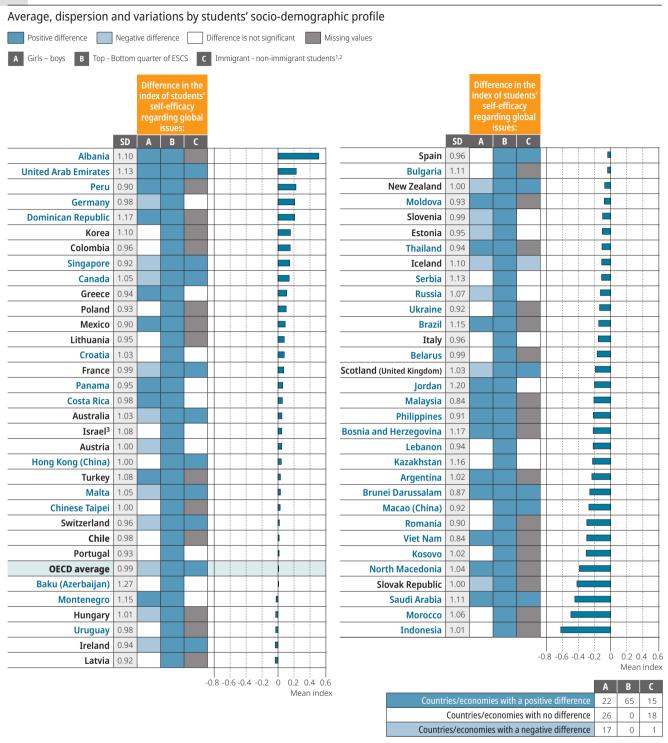
As with the index of awareness of global issues, variations between schools largely exceed variations within schools on the index of students' self-efficacy regarding global issues (Table VI.B1.2.4). On average across OECD countries, 4.5% of the total variation was observed between schools. Brazil, Germany, Malaysia, North Macedonia, the Slovak Republic, Ukraine and Viet Nam showed the largest between-school variations, ranging between 7% and 9% of the total variation.<sup>3</sup>

In 22 of 65 countries and economies that distributed the global competence questionnaire, girls showed greater self-efficacy regarding global issues than boys; the reverse was true in 17 countries. The largest differences in favour of girls were observed in Albania, Jordan, Saudi Arabia and Turkey; the largest differences in favour of boys were observed in Hungary, Malta, New Zealand and Scotland (United Kingdom). When considering students' socio-economic status, the findings show that students in the top quarter of the PISA index of economic, social and cultural status showed greater self-efficacy regarding global issues than students in the bottom quarter of that index. The largest differences were observed in Austria, Germany, Iceland, Korea, New Zealand and Scotland (United Kingdom); the smallest were observed in Chile, Colombia, the Dominican Republic, Italy, Mexico, Thailand, Uruguay and Viet Nam (Table VI.B1.2.6).

Immigrant students in 15 of 34 countries and economies with more than 5% immigrant students enrolled in their schools exhibited greater self-efficacy regarding global issues than non-immigrant students, even after accounting for students' and schools' socio-economic profile. The reverse was observed only in Iceland. Countries and economies with the largest differences in reported self-efficacy regarding global issues in favour of immigrant students are Australia, Canada, France, Ireland, Malta, Scotland (United Kingdom) and the United Arab Emirates.

Of the six questions about self-efficacy regarding global issues, students responded that they are the most confident in discussing the different reasons why people become refugees. Some 77% of students across OECD countries reported that they can do this task easily or with some effort, as opposed to not being able or struggling to do it. Some 72% of students reported feeling confident when explaining why some countries suffer more from climate change than others. Some 63% of students reported feeling confident when explaining how carbon-dioxide emissions affect global climate change. Students were less confident when it came to explaining how economic crises in single countries affect the global economy (61% of students reported that they could do this easily or with some effort) and were less confident in establishing a connection between prices of textiles and working conditions in the countries of production (58% of students so reported). One possible reason for these differences is that students may be more familiar with topics covered extensively in the media, such as the refugee crisis and global warming, than with topics requiring more specific technical knowledge (Figure VI.2.7).

Figure VI.2.6 Students' self-efficacy regarding global issues



<sup>1.</sup> After accounting for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Countries and economies are ranked in descending order of the index of students' awareness of global issues.

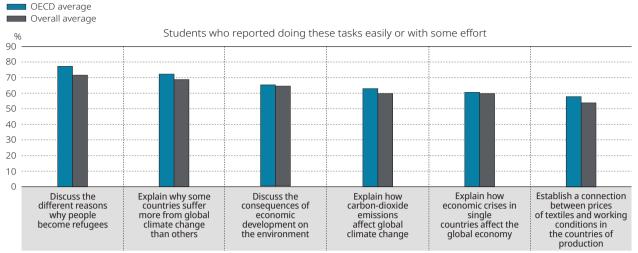
Source: OECD, PISA 2018 Database, Tables VI.B1.2.4 and VI.B1.2.6. StatLink | https://doi.org/10.1787/888934169405

<sup>2.</sup> Differences between immigrant and non-immigrant students are only presented for countries and economies where more than 5% of students have an immigrant background. Values for countries/economies with smaller proportions of immigrant students are reported as missing.

<sup>3.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Figure VI.2.7 Students' self-efficacy regarding global issues, by task



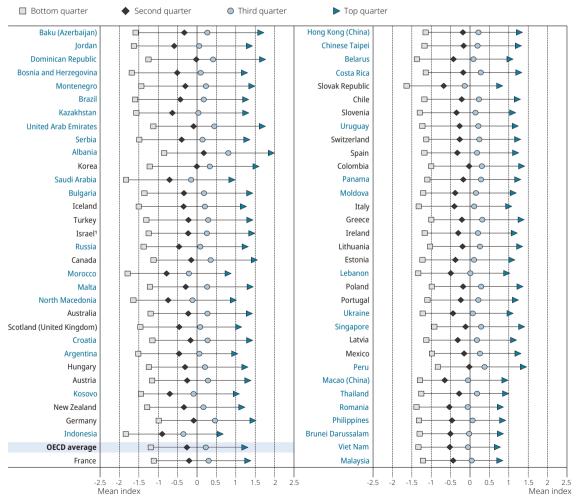


Source: OECD, PISA 2018 Database, Table VI.B1.2.4.

StatLink https://doi.org/10.1787/888934169424

Figure VI.2.8 Polarisation of students' self-efficacy regarding global issues

Average of the index of self-efficacy regarding global issues, by quarter of the index



<sup>1.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Countries and economies are ranked in descending order of difference between top and bottom quarters on the index of students' self-efficacy regarding global issues.

Source: OECD, PISA 2018 Database, Table VI.B1.2.6.

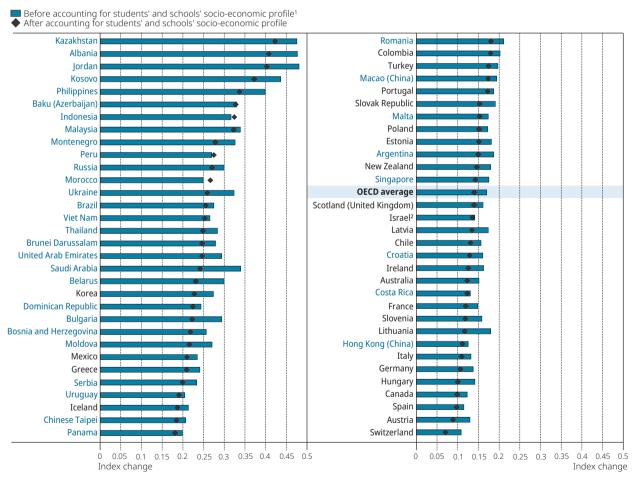
As with the index of awareness of global issues, some polarisation was observed among students when considering their self-efficacy regarding global issues (Figure VI.2.8). Results show that students in the bottom quarter of the index tended to report less self-efficacy regarding global issues than those in the second quarter, and those in the third quarter also tended to report substantially less self-efficacy than those in the top quarter. In other words, students in the top and bottom quarters of the index tended to report substantially different levels of awareness than those in the two middle quarters (Table VI.B1.2.6). In Baku (Azerbaijan), Bosnia and Herzegovina, Brazil, the Dominican Republic, Iceland, Korea, Montenegro and Saudi Arabia, differences were particularly large between the bottom and second quarters and between the third and top quarters.

# HOW STUDENTS DEVELOP AWARENESS OF AND SELF-EFFICACY REGARDING GLOBAL ISSUES

One of a number of possible factors positively associated with awareness of global issues is interest in and enjoyment of reading (other factors, such as learning activities, are explored in detail in Chapter 7). Students who read are likely to acquire knowledge about topics of interest to them and be exposed to different sources of content.<sup>4</sup> Figure VI.2.9 shows the association between enjoyment of reading and awareness of global issues before and after accounting for students' and schools' socio-economic profile. The findings show a positive association between the two indices in all countries and economies. On average across OECD countries, a one-unit increase in the index of students' enjoyment of reading was associated with an increase of 0.14 of a unit in the index of students' awareness of global issues, after accounting for students' and schools' socio-economic profile. The strongest associations were observed in Albania, Baku (Azerbaijan), Indonesia, Jordan, Kazakhstan, Kosovo, Malaysia and the Philippines.

Figure VI.2.9 Students' awareness of global issues and their enjoyment of reading

Change in students' awareness of global issues associated with a one-unit increase in enjoyment of reading



<sup>1.</sup> The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Countries and economies are ranked in descending order of the change in the index of students' awareness of global issues associated with a one-unit increase in the index of enjoyment of reading, after accounting for gender, immigrant background, and students' and schools' socio-economic profile.

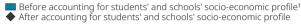
Source: OECD, PISA 2018 Database, Table VI.B1.2.8.

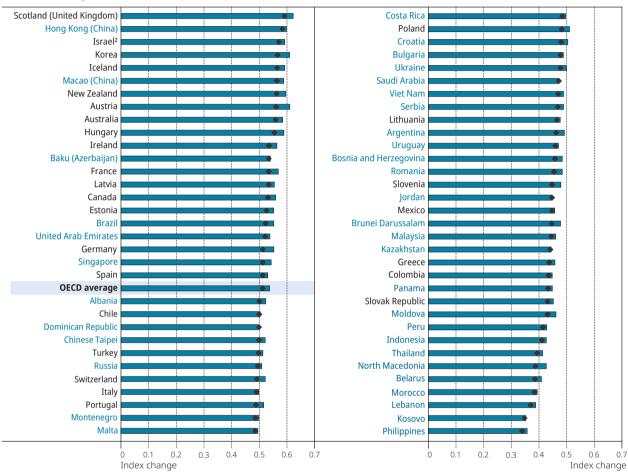
<sup>2.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

How can students be confident when dealing with global issues if they have limited awareness of them? In this sense, awareness of global issues could be a prerequisite for a number of attitudes, including self-efficacy regarding those issues. Figure VI.2.10 examines the association between the two indices. The findings show a strong positive association between them in all participating countries and economies, even after accounting for students' and schools' socio-economic profile. On average across OECD countries, an increase of one unit in the index of awareness of global issues was associated with an increase of 0.51 of a unit in the index of self-efficacy regarding global issues. The association was strong in all countries, exceeding 0.3 of a unit.

Figure VI.2.10 Students' self-efficacy regarding global issues and their awareness of global issues

Change in students' self-efficacy regarding global issues associated with a one-unit increase in their awareness of global issues





- 1. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).
- 2. The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Countries and economies are ranked in descending order of the change in the index of students' awareness of global issues associated with a one-unit increase in the index of enjoyment of reading, after accounting for gender, immigrant background, and students' and schools' socio-economic profile.

Source: OECD, PISA 2018 Database, Table VI.B1.2.8.

StatLink https://doi.org/10.1787/888934169481

# Box VI.2.3. To what extent do teachers include global topics in their lessons?

Literature on school effectiveness highlights the importance of teachers in the learning process. However, the question of what makes a teacher successful in improving students' outcomes has not been settled yet (Aaronson, Barrow and Sander,  $2007_{[21]}$ ). Existing evidence focuses on a range of teacher-related characteristics, such as teachers' qualifications (Kane, Rockoff and Staiger,  $2008_{[22]}$ ). But these observable and easily measured variables are rarely found to be correlated with student achievement and, when they are, they explain a modest fraction of the variation in performance (Rivkin, Hanushek and Kain,  $2005_{[23]}$ ). This has led to a growing interest in what teachers actually do in the classroom, as opposed to their background (Mostafa, Echazarra and Guillou,  $2018_{[24]}$ ).

In 18 countries, teachers were asked to answer a number of questions on a questionnaire addressed specifically to them. Given that reading was the main subject assessed in 2018, teachers were sampled as part of one of two populations: language teachers and non-language teachers. Moreover, students and teachers in PISA 2018 were sampled randomly and independently within each school. In other words, it was not possible to determine whether an individual teacher was teaching a particular student. In order to analyse student and teacher data jointly, teacher-reported data were aggregated at the school level. Therefore, any teacher-level variable should be interpreted as a school average of what the teachers within each school reported. For a detailed description of the sampling procedures and the aggregation procedure, see (Mostafa and Pál, 2018<sub>[25]</sub>).

Non-language teachers answered a number of questions related to teaching in an interconnected world. One question enquired about whether teachers include certain global topics in their lessons. Those topics were the same as those covered in the student and parent questionnaires: climate change and global warming; global health; migration; international conflicts; hunger or malnutrition in different parts of the world; causes of poverty; and equality between men and women in different parts of the world.

This box explores the extent to which teachers include such activities in their lessons and the associations between teaching global topics and students' awareness of those topics.

The results show that the most common global issues covered by teachers are climate change and global warming (72% of students have teachers who reported that this topic is included in their lessons Figure VI.2.11). Climate change is followed by equality between men and women (68%), global health (65%), hunger and malnutrition (60%), causes of poverty (60%), migration (56%) and international conflicts (54%). However, these averages mask considerable variations between countries, as shown in Table VI.B1.2.10.

The countries where climate change and global warming are commonly covered by teachers are Albania, the Dominican Republic, Peru and Malaysia, with more than 80% of students reporting that teachers do so (Table VI.B1.2.10). Global health issues are commonly covered by teachers in Albania, Brazil, the Dominican Republic, Malaysia and Peru (more than 75% of students report that teachers do so), while migration is commonly covered in the Dominican Republic (82%). Moreover, hunger and malnutrition are commonly covered by teachers in the Dominican Republic, Malaysia and Peru (more than 75%), and causes of poverty in the Dominican Republic, Malaysia, Panama and Peru (more than 75%). Gender equality is commonly covered in Albania, Brazil, Chile, the Dominican Republic, Panama, Peru and Spain (more than 75%) and international conflicts in the Dominican Republic (78%).

Figure VI.2.11 Students exposed to global issues in their school lessons

#### Based on teachers' reports, overall average Overall average Students in schools where teachers include these global issues in their lessons 90 50 40 20 10 0 Climate change Equality Global health Hunger or Causes of Migration International malnutrition in conflicts between men (e.g. epidemics) (movement of poverty people) and women in different parts different parts of the world of the world

StatLink https://doi.org/10.1787/888934169500

Source: OECD, PISA 2018 Database, Table VI.B1.2.10.

The results also show that, in a few countries/economies, the proportion of students exposed to global issues in their school lessons was larger among those who reported that they know about those issues or are familiar with them (compared to those who reported that they never heard of or do not know much about the issues). This indicates that greater exposure to global issues is positively associated with awareness of those issues in some countries (Table VI.B1.2.11). Three countries stood out. In the United Arab Emirates, the association was positive and significant for all seven global issues. In Albania, the

association was positive for four issues (climate change, global health, international conflicts, and hunger and malnutrition) and, in Morocco, the association was also positive for four issues (global health, migration, international conflicts and gender equality).

For the remaining 15 countries, the associations were non-significant and in some cases negative. Possible explanations of these results include the following:

- Exposure to global issues in school lessons is not necessarily effective in improving awareness of those issues if exposure occurs sporadically and if teaching practices are not well adapted to such lessons. The positive results in the United Arab Emirates could be an indication that global issues are well integrated into lessons and teachers are well prepared to teach those topics.
- Students and teachers in PISA 2018 were sampled randomly and independently within each school. In other words, it is not possible to determine whether an individual teacher is teaching a particular student. As such, exposure to global issues reported by teachers could only be analysed at the school level without knowing whether every student in the school sample is exposed to global issues in his or her lessons.

# EXAMINING ISSUES OF LOCAL, GLOBAL AND INTERCULTURAL SIGNIFICANCE: PERFORMANCE ON THE COGNITIVE TEST

Students who sat the global competence test in the 27 participating countries and economies answered 37 test items covering their experience in examining local and global issues. Figure VI.2.12 presents the average proportion of correct answers on those test items. As explained in Chapter 1, answers were scored as either full credit, partial credit or no credit. For the purpose of this analysis, partial credit was coded as no credit.

The findings show that the largest proportions of correct answers on these test items were found in Canada, Croatia, Hong Kong (China), Israel, Korea, Latvia, Scotland (United Kingdom), Singapore, the Slovak Republic, Spain and Chinese Taipei. In all of these countries and economies, the proportion of correct answers exceeded the overall average of 38%. Singapore showed the largest proportion of correct answers. By contrast, the smallest proportions were observed in Albania, Indonesia, Kazakhstan, Morocco, Panama, the Philippines and Thailand, where they did not exceed 30%.

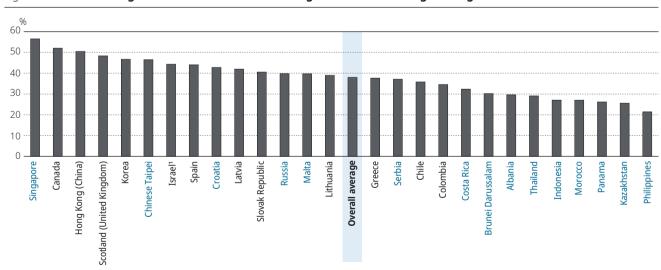


Figure VI.2.12 Percentage of correct answers: Examining issues of local and global significance

Notes: Examining issues of local and global significance was assessed using 37 items in the cognitive test.

Only the 27 countries and economies that conducted the cognitive test are shown.

Countries and economies are ranked in descending order of the percentage of correct answers on the cognitive test.

**Source**: OECD, PISA 2018 Database, Table VI.B1.2.7.

<sup>1.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

# Examining local, global and intercultural issues

Eight released test items covered students' capacity to examine global, local and intercultural issues originating from three test units: a single story, refugee Olympians and rising sea levels. Those test items ranged in difficulty from proficiency Level 1 (lowest) to proficiency Level 5 (highest).

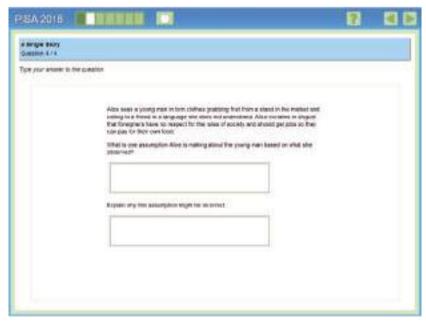
# A single story: Item 4

The test item with the highest proportion of students answering it correctly among the released test items for dimension 1 was item 4 in the "single story" unit. In this test item, a short text is presented about a woman, Alice, in a market who observes a young man in torn clothes who grabs a fruit from a stand in the market and calls to a friend in a language she does not understand. It then describes how Alice perceives him. Two independently coded open-ended items follow the text. In the first item, labelled number 4, students are asked to read the text and simply describe, in their own words, one assumption that Alice has about the young man. In the coding guide, five possible assumptions were identified that could be considered correct based on the information provided in the brief text. Full credit was given if students provided one of the assumptions about the young man listed below.

- 1. The young man is a foreigner.
- 2. The young man is poor or cannot pay for his food.
- 3. The young man has no job.
- 4. The young man is stealing.
- 5. The young man has (or foreigners have) no respect for the rules of society. Examples of answers given by students include
  - She thinks he's foreign. [1]
  - She thinks he's poor. [2]
  - He can't pay for his food. [2]
  - She thinks he doesn't have a job. [3]
  - He has not paid for the fruit. [4]
  - She thinks he has no respect for the rules.[5]
  - He wasn't raised well. [5]

This test item covered students' ability to evaluate information, formulate arguments, describe and explain complex issues and situations. It was classified as proficiency Level 1, which is the proficiency level needed to answer the easiest questions on the cognitive test. Proficiency levels are described in detail in Chapter 6.

On average across all 27 countries and economies taking the cognitive test, 62% of students provided a correct answer. The largest proportion of correct answers (exceeding 80%) was found in Canada, Scotland (United Kingdom) and Singapore (Table VI.B1.2.7).



# A single story: Item 5

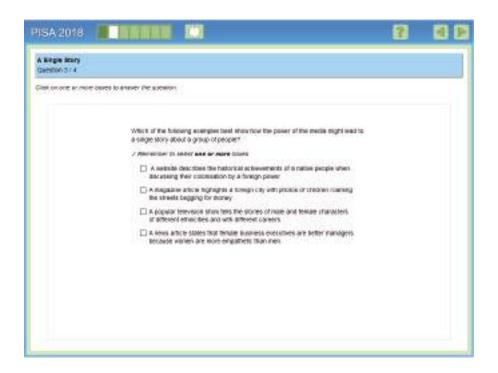
After identifying an assumption that Alice makes in the brief text, the student is then asked to explain why that assumption might be incorrect. To get full credit for this item, the student can provide a more narrow response that is a direct explanation for the assumption he/she provided in the previous item. For example, if "The young man is stealing" is identified as an assumption, the explanation could be "He might have already paid for the fruit." Alternatively, the student can get full credit by providing a broader, more general response that addresses the problem with making assumptions, such as "She is making a judgment without enough information". Both types of responses were given full credit. This test item covers the same cognitive process as the previous one (evaluate information, formulate arguments, describe and explain complex issues and situations), but it has a proficiency Level of 2, which makes it slightly more difficult to answer. For this item, students had to reflect on why an assumption about this man might be incorrect and were required to show an understanding of possible stereotypes and prejudice. On average across all countries and economies, 45% of students answered this item correctly, with the largest proportions (exceeding 70%) found in Canada, Hong Kong (China), Singapore and Chinese Taipei (Table VI.B1.2.7).

Full credit was given if students provided an explanation that is specific to the assumption provided in the previous question and were able to describe why that assumption might be incorrect. The explanation may provide another interpretation for the behaviour Alice observed or refute Alice's assumptions. Possible answers include:

- 1. Assumption: The young man is a foreigner. Explanation must focus on the language he was using.
- 2. Assumption: The young man is poor or cannot pay for his food. Explanation must focus on his torn clothes or that he was grabbing the fruit.
- 3. Assumption: The young man has no job. Explanation must focus on his torn clothes or that he was grabbing the fruit.
- 4. Assumption: The young man is stealing. Explanation must focus on the observation that he was grabbing the fruit.
- 5. Assumption: The young man has (or foreigners have) no respect for the rules of society. Explanation must focus on the observation that he was grabbing the fruit.
  - Just because he is speaking another language does not mean he is a foreigner. [1]
  - He might speak more than one language. [1]
  - He might have been born in this country but speaks a different language. [1]
  - Maybe it's the style for young people to wear torn clothes. [2]
  - He might work at the fruit stand. [2]
  - He might have permission to take the fruit from the owner of the fruit stand. [2]
  - He might be asking his friend to help him pay for the fruit. [2]
  - He could be wearing torn clothes because of the work he does. [3]
  - Just because he is grabbing the fruit doesn't mean he isn't working. [3]
  - He could have a very low-paying job and not be able to afford the food he needs. [4]
  - He might know the owner of the fruit stand and is allowed to take fruit. [4 or 5]
  - His family might own the fruit stand. [4 or 5]

# A single story: Item 3

The test item with the lowest proportion of correct answers among released test items for dimension 1 was item 3 in the unit "single story". In this test item, students must think broadly about stereotypes or single stories and consider how the media may support the creation of this misinformation. Four examples of media forms and content are described, and the student had to evaluate how each one may or may not support the formation of stereotypes. To receive full credit, the student needed to select both B and D. Partial credit was assigned if only B or only D were selected. Both B and D could lead to the creation of stereotypes about particular countries or about gender differences. If any other options were selected, no credit was assigned. By selecting the correct answers, the student demonstrates the ability to identify examples that address the complex issue of stereotype formation. This test item was assigned the highest proficiency, Level 5, which reflects its difficulty. On average across all countries and economies taking the test, 13% of students answered this question correctly. The highest proportions (ranging between 20% and 30%) were in Canada, Korea, Singapore and Chinese Taipei (Table VI.B1.2.7).

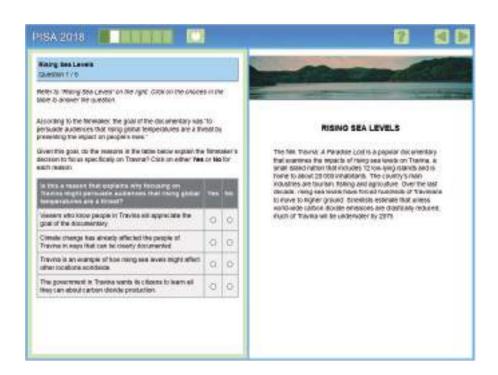


# Rising sea levels: Item 1

Another test unit focusing on global rather than intercultural issues is "rising sea levels". This unit begins with a brief introduction that describes the effects of rising temperatures on sea levels. The introduction sets the stage for the items within the unit, which explores the effects of rising sea levels on individuals who live in areas of low elevation, such as islands and coastal areas. The unit focuses on a fictional place where sea levels have risen and displaced the inhabitants of the islands, making them climate refugees. The content domain of this unit was categorised as «Socio-economic development and interdependence" with a subdomain of «Economic interactions and interdependence".

The first test item of this unit presents a brief text about a fictional film, "Travina: A Paradise Lost". The documentary focuses on a fictional island nation, Travina, that has been affected by rising sea levels. Hundreds of Travinians have had to move to higher ground to escape the changes to the low-lying areas of the islands. The text also states that unless environmental conditions improve, most of Travina will be underwater by the year 2075. With this background, the item introduces the filmmaker's goal in creating the documentary: "to persuade audiences that rising global temperatures are a threat by presenting the impact on people's lives". The item then presents four reasons that might explain why the filmmaker focused on Travina. To answer each part of the item correctly, the student must consider the filmmaker's goal and evaluate whether each statement could be a reason why Travina would present a persuasive case. In the table, the second and third statements describe reasons that support the filmmaker's goal. In both cases, the statements describe why the situation on Travina could have a broader impact on viewers, even those who live far from Travina or who do not live near the ocean. By contrast, the first and last statements do not describe why the filmmaker would use Travina as an example. These statements describe a narrow viewership and one that is likely already persuaded about the effects of rising global temperatures. Thus, to receive full credit for this item, students had to respond No, Yes, Yes, No. This test item was assigned proficiency Level 4 which reflects its difficulty.

On average across all countries and economies taking the test, 23% of students answered this question correctly. The highest proportions (ranging between 30% and 41%) were in Canada, Greece, Israel, Hong Kong (China), Scotland (United Kingdom), Serbia and Singapore (Table VI.B1.2.7).



# Examining local, global and intercultural issues

# Note

- 1. The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.
- 2. The comparability of scaled indices across countries and economies is examined in Annex A5. The annex presents the findings of in-depth measurement invariance analyses for every index used in PISA 2018, Volume VI.
- 3. The larger between-school variations in Germany and in other countries reflect the differentiated nature of school programmes and tracks that take into account students' prior academic performance.
- 4. A full description of students' index of enjoyment of reading is provided in Appendix A1.

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This chapter explores students' understanding and appreciation of the perspectives and worldviews of others. In particular, it examines students' ability to adapt to new situations, their interest in learning about other cultures and their attitudes towards people from other cultures and towards immigrants. All factors are explored through the prism of students' socio-demographic backgrounds. Moreover, the chapter explores students' performance on the cognitive test items corresponding to this second dimension of global competence.

# What the data tell us

- Students in Albania, Bosnia and Herzegovina, Korea, Kosovo, Lebanon, the Republic of North Macedonia, Romania and Turkey exhibited the greatest capacity for perspective taking, while those in Colombia, France, Italy, Lithuania and the Slovak Republic showed the least.
- Of the 63 countries and economies that had valid data on the index of students' interest in learning about other cultures, students in Albania, Bosnia and Herzegovina, Costa Rica, the Dominican Republic, Jordan, Kosovo, Montenegro, Panama, the Philippines and Turkey showed the greatest interest.
- Students in Albania, Australia, Canada, Ireland, Korea, New Zealand, Scotland (United Kingdom), Spain and Chinese Taipei reported the most positive attitudes towards immigrants, with values in the index that were significantly higher than the OECD average. The least positive attitudes, with values significantly lower than the OECD average, were observed in Bulgaria, Hungary, Latvia, Poland, Saudi Arabia, the Slovak Republic and Turkey.
- The association between students' attitudes towards immigrants and the proportion of immigrant students at school was positive and significant in Australia, Austria, Canada, Germany, Ireland, Jordan, Latvia and Saudi Arabia.
- The largest proportion of correct answers on the cognitive test related to students' ability to understand and appreciate the perspectives of others was observed in Canada, Croatia, Hong Kong (China), Korea, Scotland (United Kingdom), Singapore, Spain and Chinese Taipei. The smallest proportion of correct answers was observed in Albania, Brunei Darussalam, Indonesia, Kazakhstan, Morocco, Panama, the Philippines and Thailand.

The second dimension of global competence focuses on students' ability to understand and appreciate the perspectives and worldviews of others. As individuals acquire knowledge about other cultures' histories, values, communication styles, beliefs and practices, they acquire the means to recognise that their own perspectives and behaviours are shaped by multiple influences, that they are not always fully aware of these influences and that others have views of the world that are profoundly different from their own (Hanvey, 1982<sub>[1]</sub>).

Engaging and understanding different perspectives requires certain knowledge, skills, attitudes and dispositions, such as respect towards others and interest in who they are, their emotions and their concept of reality. Individuals who are proficient in this dimension are able to express sensitivity towards cultural diversity and towards worldviews and values that are different from their own (Council of Europe,  $2018_{[2]}$ ). Competencies in this area include: 1) curiosity and interest in discovering and learning about other cultures, worldviews, beliefs, values and practices; 2) adaptability to new situations; 3) willingness to suspend judgement of other people's beliefs and values and willingness to question the universal validity of one's own beliefs; and 4) emotional readiness to relate to other people and willingness to seek the opportunity to engage and co-operate with others, even though they might have different views, beliefs and cultural backgrounds (Fennes and Hapgood,  $1997_{[31)}$ ).

The ability to understand and appreciate others' worldviews was assessed in PISA 2018 using 18 items in the cognitive test and 5 questions in the student questionnaire. The questions focus on perspective taking, interest in learning about other cultures, respect for people from other cultures, cognitive adaptability and attitudes towards immigrants.

# STUDENTS' ABILITY TO UNDERSTAND THE PERSPECTIVES OF OTHERS

The ability to see the world from the perspective of others¹ who might differ in their cultural backgrounds, beliefs, attitudes and practices depends on self-awareness and understanding of one's own perspective, as well as those of others. It depends on knowing and understanding the assumptions that underlie one's own perspective, understanding how one's worldview is shaped by one's own cultural affiliation and experiences and, in turn, how these affect one's judgements and reactions to other people. In addition, self-awareness requires awareness of one's own motives, feelings and emotions and a clear understanding of the limits of one's own competence and expertise (Council of Europe,  $2016_{[4]}$ , Council of Europe,  $2018_{[2]}$ ). Perspective taking also relies on the ability to operationalise cultural knowledge and appraise cultural situations involving multiple perspectives (Gehlbach,  $2011_{[5]}$ ; LaRusso et al.,  $2016_{[6]}$ ). Critical thinking and analytical skills are also essential as individuals assess information and situations and make sense of their surroundings (Garside,  $1996_{[7]}$ ; OECD,  $2018_{[8]}$ ).

PISA 2018 asked students to report on their ability to understand different perspectives by responding to five statements: "I try to look at everybody's side of a disagreement before I make a decision"; "I believe that there are two sides to every question and try to look at them both"; "I sometimes try to understand my friends better by imagining how things look from their perspective"; "Before criticising somebody, I try to imagine how I would feel if I were in their place"; and "When I'm upset at someone, I try to take the perspective of that person for a while". Responses were given on a five-point scale ("very much like me" "mostly like me", "somewhat like me", "not much like me", and "not at all like me") and were combined into an index of students' ability to understand the perspectives of others. Positive values in this index indicate a greater ability to understand and take different perspectives than the average student across OECD countries.

Large variations in the average of the index of students' ability to understand the perspectives of others were observed across the 65 countries and economies that took the questionnaire (Figure VI.3.1). Students in Albania, Bosnia and Herzegovina, Korea, Kosovo, Lebanon, the Republic of North Macedonia (hereafter "North Macedonia"), Romania and Turkey, reported the greatest capacity for perspective taking, while those in Colombia, France, Italy, Lithuania and the Slovak Republic showed the least. Of the five statements related to perspective taking, on average across OECD countries, 64% of students reported a capacity to understand their friends better by imagining how things look from their own perspective (i.e. the students responded "very much like me" and "mostly like me"). Similarly, 63% of students reported that they believe that there are two sides to every question and that they try to look at them both, and 59% reported that they try to look at everybody's side of a disagreement before taking a decision. However, fewer students reported that they try to imagine how they would feel if they were in the place of someone before criticising them (55%) and that they try to take someone else's perspective when they are upset at them (40%). These results are not surprising: understanding the perspective of others becomes more challenging in the context of conflict (Table VI.B1.3.1).

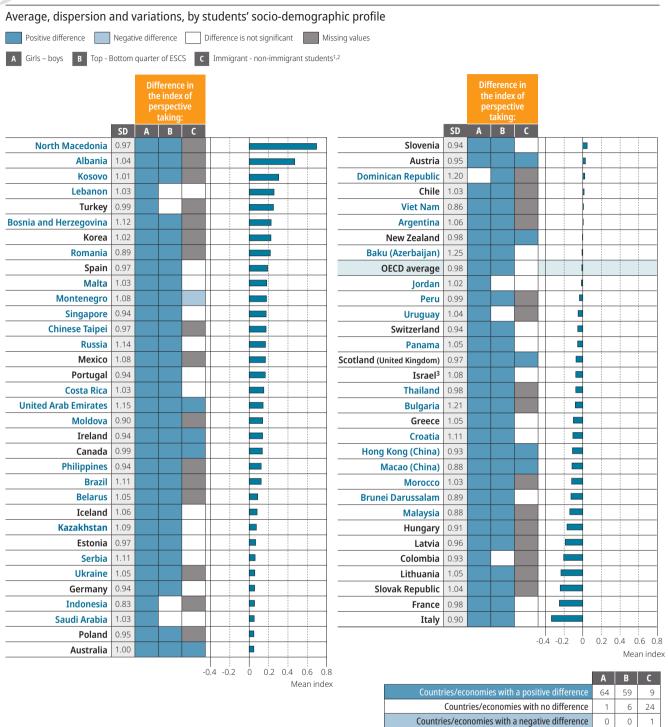
Large differences within countries were observed in Baku (Azerbaijan), Bulgaria, the Dominican Republic and the United Arab Emirates, while students in Brunei Darussalam, Indonesia, Italy, Macao (China), Malaysia, Romania and Viet Nam reported relatively similar capacity for perspective taking. As with other indices derived from student-reported data, most of the variations were observed within schools. Between-school variance as a proportion of total variance never exceeded 9% and was the greatest (exceeding 5%) only in Lebanon, Thailand and the United Arab Emirates. Between-school variations were the smallest in Greece, Iceland, Kazakhstan, Saudi Arabia and Scotland (United Kingdom) (Table VI.B1.3.1).

The index of students' ability to understand the perspectives of others varied according to students' socio-demographic characteristics. In all countries and economies except the Dominican Republic, girls reported a greater capacity than boys to take others' perspective. Differences in favour of girls were the largest in Albania, Bulgaria, Croatia, Ireland, Kosovo, Serbia and the United Arab Emirates. In all but six countries and economies with available data, socio-economically advantaged students (those in the top quarter of the PISA index of economic, social and cultural status) reported a greater capacity to understand the perspectives of others than disadvantaged students (Table VI.B1.3.3). Such large differences related to socio-economic status could reflect differential access to related learning activities across socio-economic groups, resulting from policies to select or sort students, such as tracking, ability grouping and school segregation based on residence. They could also reflect differences in home resources and parenting styles. Some of these possible influences are examined in Chapter 8.

Differences in the capacity to understand the perspectives of others were observed between immigrant and native-born students in ten countries. In Australia, Australia, Canada, Hong Kong (China), Ireland, Macao (China), New Zealand, Scotland (United Kingdom) and the United Arab Emirates, immigrant students reported a greater capacity to understand different perspectives. The reverse was observed only in Montenegro. One possible explanation is that immigrants have to deal with at least two cultural perspectives in their daily lives, that of their country of immigration and that of their country of origin. This capacity could also act as a protective factor, compensating for their relative socio-economic disadvantage in some countries.

Figure VI.3.2 shows some patterns of polarisation in the index of students' capacity to understand different perspectives. Findings show that students in the bottom quarter tended to have markedly less capacity to understand different perspectives than students in the second quarter. The same pattern was observed when comparing the third and fourth quarters. Students in the second and third quarters, on the other hand, tended to be closer to each other on this measure. Differences between the top and bottom quarters of this index were the largest in Baku (Azerbaijan), Bulgaria, the Dominican Republic, the Russian Federation (hereafter "Russia") and the United Arab Emirates.

# Figure VI.3.1 Students' ability to understand the perspectives of others



<sup>1.</sup> After accounting for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Countries and economies are ranked in descending order of the index of students' perspective taking.

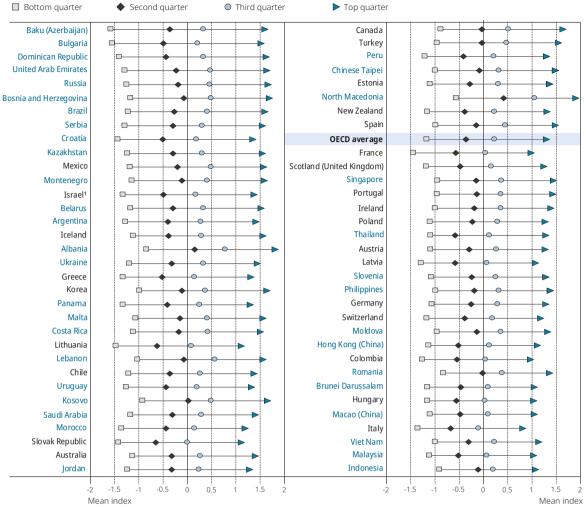
Source: OECD, PISA 2018 Database, Tables VI.B1.3.1 and VI.B1.3.3. StatLink III https://doi.org/10.1787/888934169538

<sup>2.</sup> Differences between immigrant and non-immigrant students are only presented for countries and economies where more than 5% of students have an immigrant background. The values for countries/economies with smaller proportions of immigrant students are reported as missing.

<sup>3.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Figure VI.3.2 Polarisation of students' ability to understand the perspectives of others





<sup>1.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Note: All differences between top and bottom quarters are statistically significant.

Countries and economies are ranked in descending order of difference between the top and bottom quarters of the index of students' perspective taking.

Source: OECD, PISA 2018 Database, Table VI.B1.3.3.

StatLink https://doi.org/10.1787/888934169557

# STUDENTS' INTEREST IN LEARNING ABOUT OTHER CULTURES

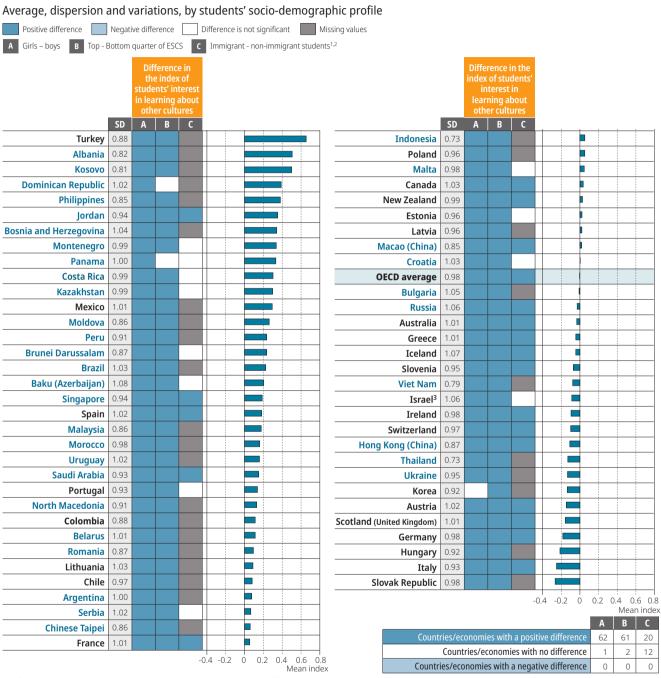
Interest in people from other cultures is likely to be related to knowledge and critical understanding of culture, as described in Chapter 1. Interest focuses on the willingness to engage with cultures, beliefs and worldviews other than a person's own. It relies on attitudes like curiosity and willingness to learn about new cultures and on sensitivity towards people from different backgrounds (Huber et al.,  $2014_{[9]}$ ; Clark and Seider,  $2017_{[10]}$ ). It also requires an ability to refrain from making judgements about people's beliefs or questioning the "naturalness" of their values and practices, in addition to an ability to relate to them. Interest in other people's cultures expresses itself in the willingness to be exposed to different cultural influences and to engage and interact with people perceived to have cultural affiliations other than one's own (Council of Europe,  $2018_{[2]}$ ).

PISA 2018 asked students about their interest in learning about other cultures. An index of students' interest in learning about other cultures was derived from responses to the following four statements: "I want to learn how people live in different countries"; "I want to learn more about the religions of the world"; "I am interested in how people from various cultures see the world"; and "I am interested in finding out about the traditions of other cultures". The five response categories were: "very much like me", "mostly like me", "somewhat like me", "not much like me", and "not at all like me". Positive values in the index indicate that the student exhibits a greater interest in learning about other cultures.

Of the 63 countries and economies that had non-missing data on the index of students' interest in learning about other cultures, students in Albania, Bosnia and Herzegovina, Costa Rica, the Dominican Republic, Jordan, Kosovo, Montenegro, Panama,

the Philippines and Turkey showed the greatest interest (Figure VI.3.3). On average across OECD countries, 59% of students reported that they want to learn about how people live in other countries (very much or mostly like them), 55% reported that they are interested in how people from various cultures see the world, and 54% reported that they are interested in finding out about traditions of other cultures. By contrast, only 40% of students reported that they are interested in learning about the religions of the world. Those findings show a distinction in students' understanding of the two concepts – culture and religion – with the latter representing a more complex or sensitive notion.

Figure VI.3.3 Students' interest in learning about other cultures



<sup>1.</sup> After accounting for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (FSCS).

Countries and economies are ranked in descending order of the index of students' interest in learning about other cultures.

**Source**: OECD, PISA 2018 Database, Tables VI.B1.3.4 and VI.B1.3.6.

<sup>2.</sup> Differences between immigrant and non-immigrant students are only presented for countries and economies where more than 5% of students have an immigrant background. The values for countries/economies with smaller proportions of immigrant students are reported as missing.

<sup>3.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

As in previous findings, girls and socio-economically advantaged students showed greater interest in other cultures than boys and disadvantaged students. Differences in favour of girls were statistically significant in all countries and economies except Korea, while the differences between students in the top quarter and those in the bottom quarter of socio-economic status were significant in all countries and economies except the Dominican Republic and Panama. The largest gender gaps were observed in Australia, Canada, Estonia, Germany, Iceland, Lithuania, New Zealand, Slovenia and Switzerland, and the largest gaps related to socio-economic status were found in Bulgaria, France, Hungary, Iceland, Ireland, Lithuania, Mexico and Poland. Moreover, in 20 out of 32 countries and economies with more than 5% immigrant students, students with an immigrant background reported higher interest in learning about other cultures than their native-born peers.

# Box VI.3.1. Parents' and children's interest in learning about other cultures

As discussed in Chapter 1, parents play a key role in developing and shaping their children's interests (Schönpflug, 2001<sub>[11]</sub>). Parents who are interested in learning about other cultures are likely to transmit this sense of curiosity to their children. This happens through a long, incremental and informal process in which a child is exposed to various cultural experiences and influences. Ultimately, this process will shape the adult this child will become and will define his/her perspectives and attitudes. This box examines students' interest in learning about other cultures in light of their parents' interest in doing so.

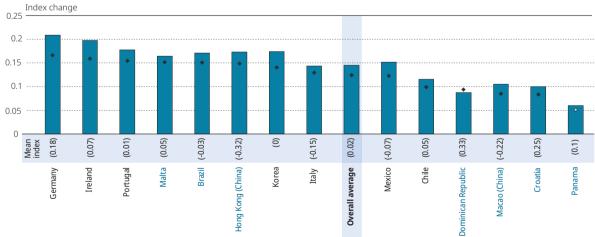
In 14 countries/economies, parents were asked to respond to the same four statements as their children about their interest in learning about other cultures. The five response categories were: "very much like me", "mostly like me", "somewhat like me", "not much like me", and "not at all like me". The index of parents' interest in learning about other cultures was constructed by combining responses to those four statements using item response theory scaling. A positive value in this index indicates that parents have a greater interest in learning about other cultures.

Parents in Croatia, the Dominican Republic and Germany reported the greatest interest in learning about other cultures, while parents in Hong Kong (China), Italy and Macao (China) reported the least interest (Figure VI.3.4). In all countries except Panama, students' interest in learning about other cultures was positively associated with their parents' interest in doing so. On average across the 14 countries and economies, a one-unit increase in the index of parents' interest in learning about other cultures was associated with an increase of 0.12 of a unit in the index of students' interest, after accounting for students' and schools' socio-economic profile. Associations were positive and significant in 13 countries/economies and were attenuated after accounting for students' and schools' socio-economic profile. The strongest associations were in Brazil, Germany, Hong Kong (China), Ireland, Malta and Portugal.

Figure VI.3.4 Students' and parents' interest in learning about other cultures

Change in students' interest in learning about other cultures associated with a one-unit increase in the index of parents' interest in learning about other cultures

■ Before accounting for students' and schools' socio-economic profile¹
◆ ♦ After accounting for students' and schools' socio-economic profile



1. The socio-demographic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Note: Statistically significant values are shown in darker tone.

Countries and economies are ranked in descending order of the change in the index of students' interest in learning about other cultures associated with a one-unit increase in the index of their parents' interest in learning about other cultures, after accounting for gender, immigrant background, and students' and schools' socio-economic profile.

Source: OECD, PISA 2018 Database, Table VI.B1.3.16.

# RESPECT FOR PEOPLE FROM OTHER CULTURES

Respect for others is an attitude where the subject of respect is judged to have importance, worth and value that warrants positive regard and esteem (Council of Europe,  $2016_{[4]}$ ; Council of Europe,  $2018_{[2]}$ ). One important form of respect in the context of cultural diversity is the respect shown to people who are perceived to have different cultural affiliations or different opinions and beliefs. Such respect assumes that all human beings have the same intrinsic dignity and enjoy an inalienable right to choose their own affiliation, beliefs, practices and opinions. This type of respect does not require agreement with the other person's beliefs or a minimisation of the differences between those beliefs and one's own views (Leask,  $2009_{[12]}$ ).

PISA 2018 asked students the extent to which they respect people from other countries. The five response categories were: "very much like me", "mostly like me", "somewhat like me", "not much like me", and "not at all like me". The index of respect for people from other cultures was derived from responses to the following statements: "I respect people from other cultures as equal human beings"; "I treat all people with respect regardless of their cultural background"; "I give space to people from other cultures to express themselves"; "I respect the values of people from different cultures"; and "I value the opinions of people from different cultures". Positive values in this index indicate that students reported greater respect for people from other cultures than the average student across OECD countries.

Students' responses to the five statements about respect for people from other cultures varied substantially across countries. The highest averages in the index were observed in Albania, Canada, Costa Rica, Ireland, Korea, Mexico, North Macedonia, Scotland (United Kingdom) and Spain. The lowest were observed in Baku (Azerbaijan), Bulgaria, Colombia, Hungary, Indonesia, Italy, the Slovak Republic, Thailand and Viet Nam (Figure VI.3.5). On average across OECD countries, about 82% of students reported that they respect people from other cultures as equal human beings (i.e. the students responded "very much like me" and "mostly like me"), while 81% reported that they treat all people with respect regardless of their cultural background. Slightly fewer students reported that they respect the values of people from different cultures (79%), that they give space to people from other cultures to express themselves (78%) and that they value the opinions of people from different cultures (78%).

The largest variations in the index were observed in Baku (Azerbaijan), Bulgaria, Croatia, the Dominican Republic, Russia and the Slovak Republic. Most of those variations were observed within schools, rather than between schools. However, the between-school variation was relatively more prevalent for this index than for other indices. It exceeded 10% in Germany, Hungary, Lebanon, Morocco, Slovenia, Thailand and the United Arab Emirates. This could indicate that system- or school-level practices or policies may be shaping students' attitudes towards other cultures (Table VI.B1.3.9).

In all countries and economies, girls reported greater respect for people from other cultures than boys. The largest gender gaps in favour of girls were observed in Croatia, Estonia, Greece, Lithuania and Poland; the smallest were observed in Colombia, Indonesia and Viet Nam. Advantaged students (those in the top quarter of the PISA index of economic, social and cultural status) were also more likely than their disadvantaged peers (those in the bottom quarter of that index) to report greater respect for people from other cultures. This difference was statistically significant in all countries and economies.

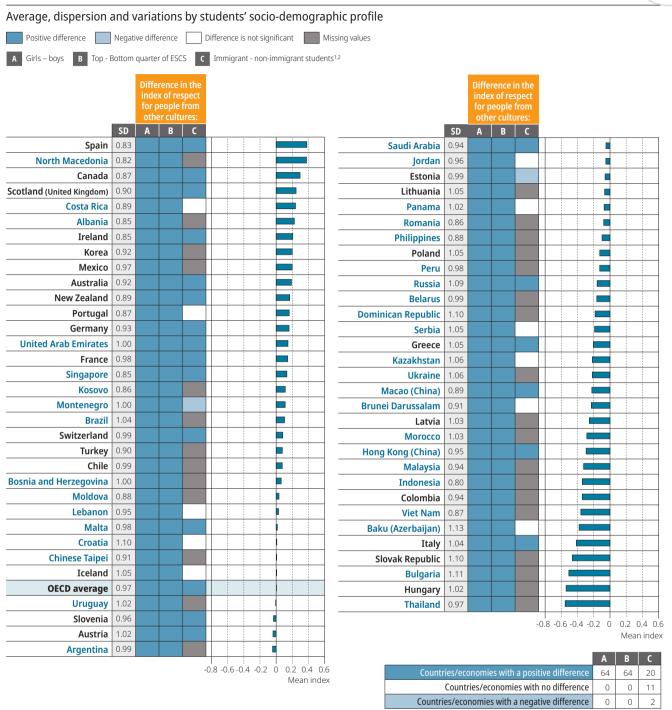
In 20 countries/economies, students with an immigrant background reported greater respect for people from other cultures than their native-born peers. The opposite was observed only in Estonia and Montenegro. The largest gaps in favour of immigrant students were observed in Austria, France, Malta, Slovenia, Switzerland and the United Arab Emirates. This finding might reflect the fact that immigrants themselves might have a hybrid culture, encompassing aspects of the culture of their country of immigration and that of their country of origin.

# Respect for people from other cultures and students' interest in learning about other cultures

How can students show respect for other cultures if they have no interest in knowing about them? One of the key drivers of respect for other cultures could be knowledge and interest in learning about them. Figure VI.3.6 presents average levels of the index of respect for people from other cultures by quarter of the index of interest in learning about other cultures. The findings show large differences in respect for other cultures in favour of students in the top quarter of the index of interest in learning about other cultures (compared to students in the bottom quarter of that index). The largest differences were observed in Baku (Azerbaijan), Bulgaria, the Dominican Republic, Kazakhstan, Morocco and Peru.

Moreover, on average across OECD countries, a one-unit increase in the index of interest in learning about other cultures was associated with a 0.39 of a unit rise in the index of respect for people from other cultures, after accounting for students' and schools' socio-economic profile (Table VI.B1.3.21). This association was positive and strong in all countries and economies. It is worth noting that the reverse causation is also possible. Students who have respect for people from other cultures are also likely to show interest in learning about them.

Figure VI.3.5 Students' respect for people from other cultures



<sup>1.</sup> After accounting for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

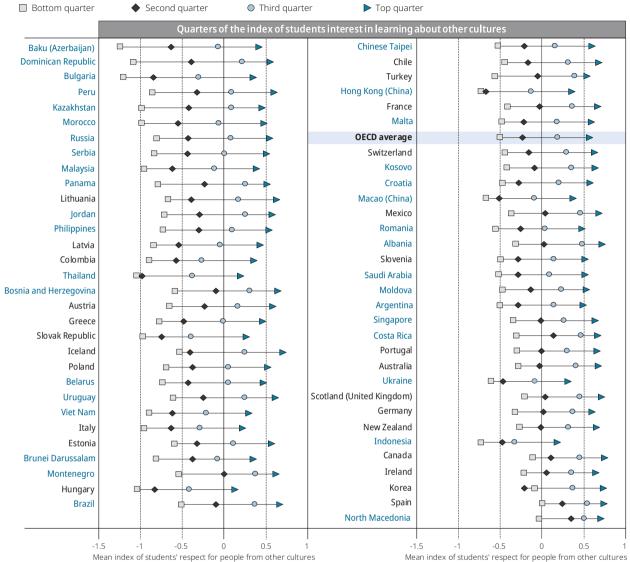
**Note**: The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Countries and economies are ranked in descending order of the index of respect for people from other cultures.

**Source**: OECD, PISA 2018 Database, Table VI.B1.3.7 and Table VI.B1.3.9.

<sup>2.</sup> Differences between immigrant and non-immigrant students are only presented for countries and economies where more than 5% of students have an immigrant background. The values for countries/economies with smaller proportions of immigrant students are reported as missing.

Figure VI.3.6 Students' respect for people from other cultures, by students' interest in learning about other cultures



Note : All differences between the top and bottom quarters are statistically significant.

Countries and economies are ranked in descending order of the difference in students' respect for people from other cultures between the top and bottom quarters of the index of interest in learning about other cultures

Source: OECD, PISA 2018 Database, Table VI.B1.3.21.

StatLink https://doi.org/10.1787/888934169633

# **COGNITIVE ADAPTABILITY**

Cognitive adaptability refers to the ability to adapt one's thinking and behaviour to the prevailing cultural environment or to novel situations and contexts that might present new demands or challenges. Individuals who acquire this skill are able to handle the feelings of "culture shock", such as frustration, stress and alienation in ambiguous situations in new environments (Levin, 2015<sub>[13]</sub>). Adaptable learners can more easily develop long-term interpersonal relationships with people from other cultures, and remain resilient in changing circumstances (Lepine, Colquitt and Erez, 2000<sub>[141</sub>).

Cognitive adaptability is likely to be associated with various student academic and non-academic outcomes (Martin et al.,  $2013_{[15]}$ ). Students go through many changes throughout their childhood, including starting school, making new friends, interacting with teachers, adjusting to school subjects and overcoming both academic and social difficulties. Such changes can disrupt routines and create uncertainty in their lives. How students deal with uncertainty and novelty can play a key role in their success (Tomasik, Silbereisen and Heckhausen,  $2010_{[16]}$ ).

PISA 2018 asked students about their ability to adapt to new situations. Students were asked to respond to six statements: "I can deal with unusual situations"; "I can change my behaviour to meet the needs of new situations"; "I can adapt to different situations even when under stress or pressure"; "I can adapt easily to a new culture"; "When encountering difficult situations with people, I can think of a way to resolve the situation"; and "I am capable of overcoming my difficulties in interacting with people from other cultures". Responses were given on a five-point scale: "very much like me", "mostly like me", "somewhat like me", "not much like me", and "not at all like me". Positive values in the index indicate that students have a greater ability to adapt than the average student across OECD countries.

Figure VI.3.7 presents the average of the index of students' cognitive adaptability and cross-tabulations of the index by students' socio-demographic characteristics. Among the 65 participating countries and economies that distributed the PISA 2018 global competence questionnaire, the highest levels of cognitive adaptability reported by students were observed in Bosnia and Herzegovina, Canada, Mexico, North Macedonia, Spain and Turkey; the lowest were observed in Brunei Darussalam, Greece, Hong Kong (China), Italy, Macao (China), Malaysia, the Slovak Republic, Thailand and Viet Nam.

In 28 out of the 65 countries/economies that took the questionnaire, boys reported greater cognitive adaptability than girls. The largest gaps in favour of boys were observed in Costa Rica, France, Greece, Iceland, Korea and Scotland (United Kingdom). Girls reported greater cognitive adaptability than boys in only six countries/economies: Baku (Azerbaijan), Bosnia and Herzegovina, Bulgaria, Jordan, Lithuania and the United Arab Emirates. The gender differences in this index were mostly the inverse of what was observed for the two indices of interest in learning about other cultures and ability to understand different perspectives. However, average differences can mask large disparities within each group. Those differences should not be regarded as definitive descriptions of what boys and girls can and cannot do.

Students in the top quarter of the PISA index of economic, social and cultural status reported greater cognitive adaptability than those in the bottom quarter. Those differences were found to be statistically significant in all countries and economies except Indonesia. The largest gaps in the index of cognitive adaptability related to socio-economic status were observed in Australia, Bulgaria, Iceland, Korea, Lithuania, New Zealand and Scotland (United Kingdom). In addition, in 13 countries/economies (Australia, Austria, Brunei Darussalam, France, Germany, Hong Kong [China], Ireland, Macao [China], Scotland [United Kingdom], Singapore, Slovenia, Spain and the United Arab Emirates), students with an immigrant background reported higher levels of cognitive adaptability than native-born students. This finding provides evidence that, in some countries, the multicultural background of immigrant students may act as a factor promoting intercultural skills such as adaptability.

Students were particularly confident in their ability to change their behaviour to meet the needs of new situations (about 67% of students across OECD countries reported "very much like me" or "mostly like me"). Moreover, about 59% of students reported that they can deal with unusual situations, think of ways to resolve difficult situations and overcome difficulties in interacting with people from other cultures. However, they were less confident in their ability to adapt to different situations when under stress or pressure (57%) or to adapt to a new culture (49%).

The largest dispersions in the index of cognitive adaptability were observed in Baku (Azerbaijan), Bulgaria, the Dominican Republic and the United Arab Emirates. Most variations in the index were observed within schools, with limited between-school differences. The only country where the between-school variation as a proportion of total variation exceeded 5% was Lebanon. The patterns of differences between quartiles were slightly different for this index, as differences between the first and second quarters were relatively similar to those between the second and the third quarters. Only students in the top quarter of the index showed substantially greater cognitive adaptability compared to those in the third quarter (Table VI.B1.3.12).

# Cognitive adaptability and how it is related to perspective taking and resilience

Cognitive adaptability could be at the root of various attitudes, such as the ability to understand multiple perspectives and the ability to overcome adverse circumstances. Both resilience and understanding perspectives require a certain degree of cognitive adaptability, as students have to deal with novel and uncertain situations (Levin, 2015<sub>[13]</sub>). The following section investigates the association between cognitive adaptability and students' resilience and capacity to take others' perspective.

Figure VI.3.8 shows the association between the index of cognitive adaptability and the index of students' capacity to understand different perspectives, before and after accounting for for students' and schools' socio-economic profile. The findings show a positive relationship across all countries and economies that remains strong after accounting for students' and schools' socio-economic profile. On average across OECD countries, a one-unit increase in the index of cognitive adaptability was associated with a rise of 0.45 of a unit in the index of perspective taking. The associations were the strongest (exceeding 0.55 of a unit increase in the index of perspective taking) in Bulgaria, the Dominican Republic, Hong Kong (China), Mexico, Peru, the Philippines, Chinese Taipei and Thailand.

# Figure VI.3.7 **Students' cognitive adaptability**

Average, dispersion a	and v	ariat	ions	, by s	tudents	s' soc	io-de	mogra <sub>l</sub>	ohic profile									
Positive difference	Negati	ve diffe	rence		ifference is	not sig	nificant	Mi	ssing values									
A Girls – boys B Top - E	Bottom	quarter	of ESC	S C	Immigran	it - non-	immigra	nt student	S1,2									
		index	rence i of cog iptabil	nitive							index		in the Initive lity:					
	SD	A	В	С			_			SD	A	В	С					
Bosnia and Herzegovina	1.14								Kazakhstan	1.10								
North Macedonia	0.98								Singapore	0.93								
Spain	0.99							-	Latvia	0.98								
Mexico	1.09							-	Scotland (United Kingdom)	0.97								
Turkey	0.99								Peru	1.02								
Canada	1.00								Panama	1.09								
Moldova	0.92								Bulgaria	1.18								
Jordan	1.12					-			Lebanon	0.96								
Belarus	1.04								Hungary	0.93								
Montenegro	1.07								Saudi Arabia	1.05								
Albania	1.01							•	Uruguay	1.04								
Romania	0.88								Chile	1.04								
Ukraine	1.05								Austria	0.93								
Australia	1.01								Korea	1.02								
United Arab Emirates	1.17								Brazil	1.10								
Iceland	1.12								Philippines	0.89					ı			
Ireland	0.95								Argentina	1.03								
Estonia	0.97								Indonesia	0.79								
Russia	1.12								France	0.99								
New Zealand	0.97								Colombia	0.99								
Malta	0.99								Portugal	0.89								
Germany	0.88								Chinese Taipei	0.92								
Poland	1.00								Morocco	1.02								
Costa Rica	1.05								Slovak Republic	0.98								
Serbia	1.08								Hong Kong (China)	0.92								
Kosovo	0.99								Greece	1.00								
Dominican Republic	1.23						ı		Thailand	0.89					<b>-</b>			
Lithuania	1.11								Malaysia	0.91					$\rightarrow$			
Switzerland	0.88								Italy	0.92								
Slovenia	0.89								Brunei Darussalam	0.87								
OECD average	0.99								Viet Nam	0.82								
Israel <sup>3</sup>	1.11								Macao (China)	0.84					_			
Croatia	1.06															+		
Baku (Azerbaijan)	1.30												-	0.6 -0.4	-0.2	0	0	2 0 n ind
Zana (r Zer zarjan)				-0.	6 -0.4	-0.2		0.2 0.4 ean index								A	В	C
							101			ries/ec	onomie	es with	a posi	tive diffe	rence	6	64	13
														no diffe		31	1	21
														tive differ		28	0	0

<sup>1.</sup> After accounting for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

 $Countries\ and\ economies\ are\ ranked\ in\ descending\ order\ of\ the\ index\ of\ students'\ cognitive\ adaptability.$ 

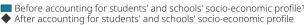
Source: OECD, PISA 2018 Database, Table VI.B1.3.10 and Table VI.B1.3.12.

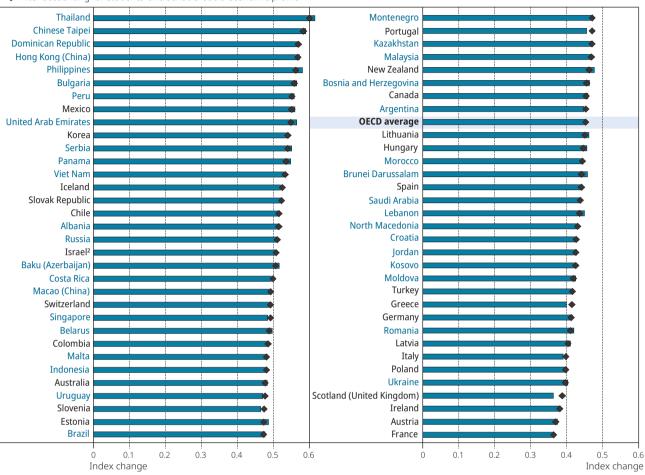
<sup>2.</sup> Differences between immigrant and non-immigrant students are only presented for countries and economies where more than 5% of students have an immigrant background. The values for countries/economies with smaller proportions of immigrant students are reported as missing.

<sup>3.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Figure VI.3.8 Students' cognitive adaptability and their capacity to understand different perspectives

Change in students' capacity to understand different perspectives associated with a one-unit increase in the index of students' cognitive adaptability





<sup>1.</sup> The socio-demographic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Countries and economies are ranked in descending order of the change in the index of students' perspective taking associated with a one-unit increase in the index of cognitive adaptability, after accounting for gender, immigrant background, and students' and schools' socio-economic profile.

Source: OECD, PISA 2018 Database, Table VI.B1.3.19.

StatLink https://doi.org/10.1787/888934169671

Resilience, or self-reported capacity to overcome adversity, was assessed by asking students to report the extent to which they agree ("strongly disagree", "disagree, "agree", "strongly agree") with the following statements about themselves: "I usually manage one way or another"; "I feel proud that I have accomplished things"; "I feel that I can handle many things at a time"; "My belief in myself gets me through hard times"; and "When I'm in a difficult situation, I can usually find my way out of it". These statements were combined to create the index of resilience. Positive values in this index mean that the student reported a greater capacity to deal with adversity than the average student across OECD countries. This index should not be confused with measures of student resilience published in Volume II of PISA 2018, which are based on students' reading proficiency and socio-economic profile (OECD, 2019<sub>[17]</sub>).

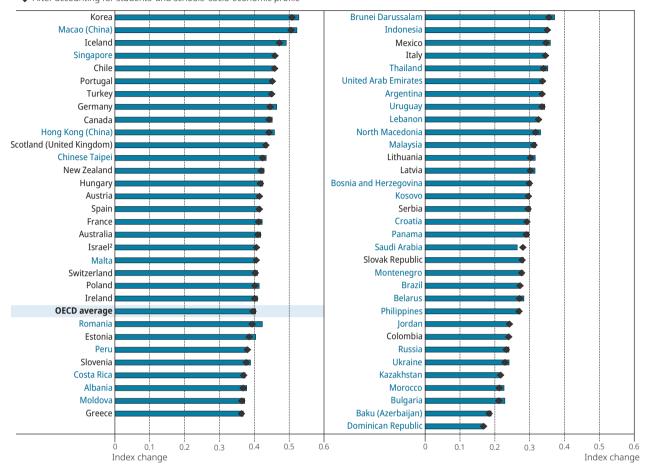
Positive associations between the index of cognitive adaptability and the index of student resilience were observed across all countries and economies. On average across OECD countries, an increase of one unit in the index of cognitive adaptability was associated with a rise of 0.4 of a unit in the index of resilience, after accounting for students' and schools' socio-economic profile. Associations were particularly strong (exceeding 0.45 of a unit increase in the index of resilience) in Chile, Iceland, Korea, Macao (China), Portugal, Singapore and Turkey (Figure VI.3.9).

<sup>2.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

# Figure VI.3.9 Students' cognitive adaptability and their resilience to adversity

Change in students' resilience to adversity associated with a one-unit increase in the index of students' cognitive adaptability

■ Before accounting for students' and schools' socio-economic profile¹
◆ After accounting for students' and schools' socio-economic profile



- 1. The socio-demographic profile is measured by the PISA index of economic, social and cultural status (ESCS).
- 2. The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Countries and economies are ranked in descending order of the change in the index of students' resilience associated with a one-unit increase in the index of cognitive adaptability, after accounting for gender, immigrant background, and students' and schools' socio-economic profile.

Source: OECD, PISA 2018 Database, Table VI.B1.3.20

StatLink https://doi.org/10.1787/888934169690

The findings in Figures VI.3.8 and VI.3.9 clearly indicate that cognitive adaptability among adolescents could be a way of fostering resilience, capacity to cope with uncertainty and ability to understand different perspectives. These life skills enable students not only to overcome adverse circumstances but also to rise to the challenges when facing unfamiliar situations. Cognitive adaptability will help students understand the diversity of the world they are living in, appreciate the worldviews of others and enjoy encounters with the unfamiliar.

# STUDENTS' ATTITUDES TOWARDS IMMIGRANTS

Many countries around the world witnessed a sharp rise in the size of their immigrant populations in recent years. In 2015 alone, an estimated 4.8 million immigrants arrived in OECD countries, reinforcing a long-term upward trend in migration (OECD/European Union,  $2018_{[18]}$ ). As societies become increasingly diverse, the question arises of how welcoming host countries are. If native populations adopt exclusionary attitudes towards immigrants, integration will be severely compromised (Janmaat,  $2014_{[19]}$ ; Hainmueller and Hopkins,  $2014_{[20]}$ ). How schools and education systems respond to these challenges can be a decisive factor in shaping relations between native-born and immigrant populations and in creating cohesive and harmonious societies (Charette and Kalubi,  $2018_{[21]}$ ; Bilgili,  $2019_{[22]}$ ).

A number of hypotheses have been advanced on what influences opinions about immigrants. These range from economic interests of the native-born population to cultural concerns about integration and identity. The first focuses on economic arguments, under which immigrants are seen as competitors for scarce jobs and resources (Mayda,  $2006_{[23]}$ ). For instance, high-skilled native-born workers might oppose high-skilled immigrants but not low-skilled immigrants. A variant of the same argument highlights the impact of immigration on public finances and spending (Facchini and Mayda,  $2009_{[24]}$ ).

Another theory focuses on immigrants' ability to integrate or assimilate into their host societies and on how such processes affect native identity (Burns and Gimpel, 2000<sub>[25]</sub>). The extent to which these hypotheses are influential in a society depends on many factors, including the cultural differences between immigrants and host societies and the attitudes, values and skills of both immigrant and host populations. Such attitudes might include any of those mentioned earlier, such as openness, interest in and respect for other cultures, the ability to understand different perspectives, and knowledge and understanding of other cultures. This section focuses on students' attitudes towards immigrants and tries to identify some of the key factors associated with them, namely diversity at school, and other attitudes, such as openness and respect.

PISA 2018 asked students to report their overall attitude towards immigrants. An index of attitudes towards immigrants was derived from responses to the following statements: "Immigrant children should have the same opportunities for education that other children in the country have"; "Immigrants who live in a country for several years should have the opportunity to vote in elections"; "Immigrants should have the opportunity to continue their own customs and lifestyle"; and "Immigrants should have all the same rights that everyone else in the country has". Responses were provided on a four-point scale: "strongly disagree", "disagree", "agree", and "strongly agree". A positive value in this index indicates that students have more positive attitudes towards immigrants than the average student across OECD countries.

Figure VI.3.10 shows that students in Albania, Australia, Canada, Ireland, Korea, New Zealand, Portugal, Scotland (United Kingdom), Spain and Chinese Taipei reported the most positive attitudes towards immigrants, with values in the index that were significantly higher than the OECD average. The opposite was observed in Bulgaria, Hungary, Latvia, Poland, Saudi Arabia, the Slovak Republic and Turkey, where students' attitudes towards immigrants tended to be negative and below the OECD average. In all countries and economies except Hong Kong (China), Macao (China) and Viet Nam, girls showed more positive attitudes towards immigrants than boys. These gender differences were particularly large in Australia, Iceland, Ireland, Lithuania, New Zealand, North Macedonia and Scotland (United Kingdom). Socio-economically advantaged students (those in the top quarter of the PISA index of economic, social and cultural status) also reported more positive attitudes towards immigrants than their disadvantaged peers (those in the bottom quarter) in all countries and economies except Hong Kong (China), Italy and Turkey. The largest differences in this index related to students' socio-economic status were observed in Australia, Brazil, Brunei Darussalam, Germany, Iceland, Ireland, Mexico, the Philippines, Romania and Scotland (United Kingdom) (Table VI.B1.3.13).

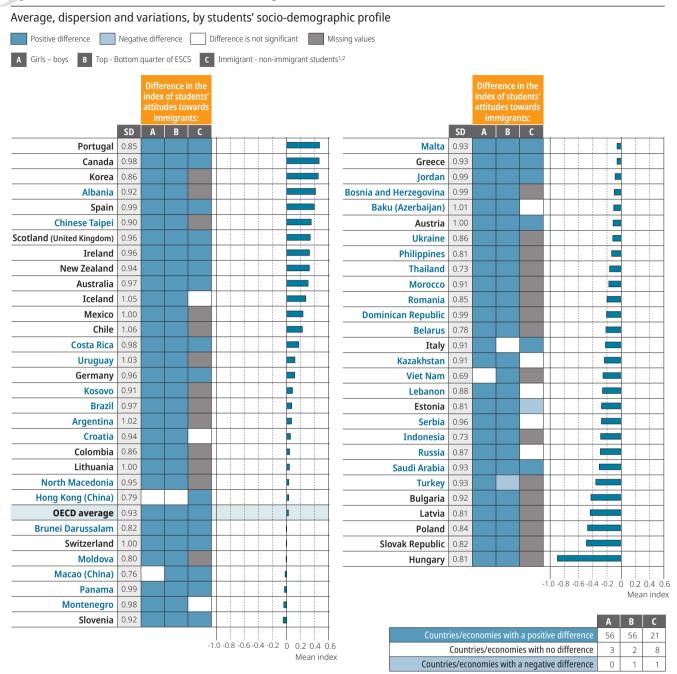
Students with an immigrant background had more positive attitudes towards immigrants than native-born students. This was true in 21 of the 30 countries and economies with more than 5% immigrant students, with the exception of Estonia where the difference was negative. This finding was particularly marked in Australia, Austria, Costa Rica, Germany, Greece, Ireland, Italy, Jordan, Malta, Panama, Saudi Arabia, Scotland (United Kingdom), Slovenia, Spain and Switzerland.

On average across OECD countries, 85% of students agreed or strongly agreed that immigrant children should have the same opportunities for education that other children in the country have; 80% agreed that immigrants should have all the same rights that everyone else in the country has; 76% agreed that immigrants should have the opportunity to continue their own customs and lifestyle; and 72% agreed that immigrants who live in a country for several years should have the opportunity to vote in elections. These results show that students tended to be more positive when it comes to universal rights, such as the right to education, but less positive when the question touched on issues related to identity or political rights, such as voting (Table VI.B1.3.13).

The index of attitudes towards immigrants varied to some extent within countries, with the widest dispersions observed in Argentina, Baku (Azerbaijan), Chile, Iceland, Lithuania and Uruguay, and the narrowest in Belarus, Hong Kong (China), Indonesia, Macao (China), the Republic of Moldova (hereafter "Moldova"), Thailand and Viet Nam. As with other indices, most of the variations were observed within schools, as opposed to between schools. The ratio of between-school variation to total variation exceeded 5% in 16 countries and exceeded 10% only in Lebanon (Table VI.B1.3.13).

In most countries, students in the middle two quarters of the index of attitudes towards immigrants were clustered close to each other. By contrast, students in the top quarter had considerably more positive attitudes than those in the third quarter (Figure VI.3.11). This shows some clear patterns of polarisation for this index.

# Figure VI.3.10 Students' attitudes towards immigrants



<sup>1.</sup> After accounting for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

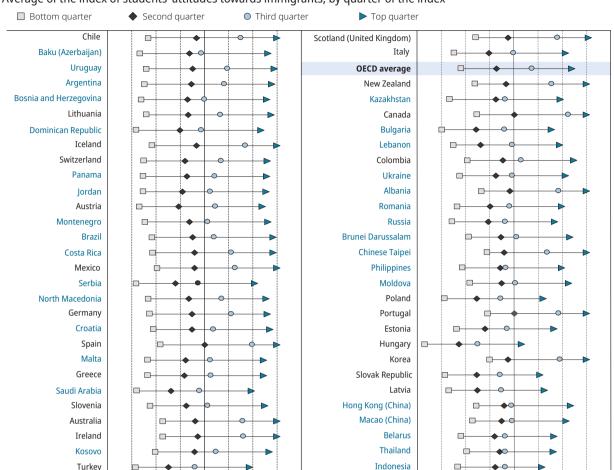
**Note**: The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Countries and economies are ranked in descending order of the index of students' attitudes towards immigrants.

Source: OECD, PISA 2018 Database, Tables VI.B1.3.13 and VI.B1.3.15 StatLink imp https://doi.org/10.1787/888934169709

<sup>2.</sup> Differences between immigrant and non-immigrant students are only presented for countries and economies where more than 5% of students have an immigrant background. The values for countries/economies with smaller proportions of immigrant students are reported as missing.

Figure VI.3.11 Polarisation of students' attitudes towards immigrants



Average of the index of students' attitudes towards immigrants, by quarter of the index

**Note**: All differences between the top and bottom quarters are statistically significant.

. -0 5

Countries and economies are ranked in descending order of difference between the top and bottom quarters of the index of students' attitudes towards immigrants. **Source**: OECD, PISA 2018 Database, Table VI.B1.3.15.

Viet Nam

-15

1.5

Mean index

StatLink https://doi.org/10.1787/888934169728

-1.5

Mean index

Morocco

#### STUDENTS' ATTITUDES TOWARDS IMMIGRANTS AND DIVERSITY AT SCHOOL

0.5

1.5

A number of important questions remain. Does diversity in itself create better attitudes towards immigrants? Would exposure to students from different backgrounds facilitate understanding of others and foster tolerance? What factors are correlated with positive attitudes towards immigrants?

Existing evidence suggests that in 90% of 700 studies drawn from a wide range of national contexts, interethnic contact is positively related to attitudes towards those with a different background (Pettigrew and Tropp, 2006<sub>[26]</sub>). However, most evidence is based on single-country analyses. PISA has the unique advantage of providing a comprehensive picture across a large number of countries and economies. If such positive associations are found, then mixing students from different backgrounds by reducing segregation in the education system could be the way forward.

Figure VI.3.12 shows the association between the proportion of immigrant students in school and students' attitudes towards immigrants, before and after accounting for students' and schools' socio-economic profile. In eight countries, the findings show a positive but weak association between attending a school where more than 10% of students have an immigrant background and students' attitudes towards immigrants. The associations were significant in Australia, Austria, Canada, Germany, Ireland, Jordan, Latvia and Saudi Arabia. In seven of those eight countries, more than 35% of students attended schools where more than 10% of students have an immigrant background. By contrast, the associations were negative in Chile, the Dominican Republic, Estonia, Italy, Lebanon and Moldova.

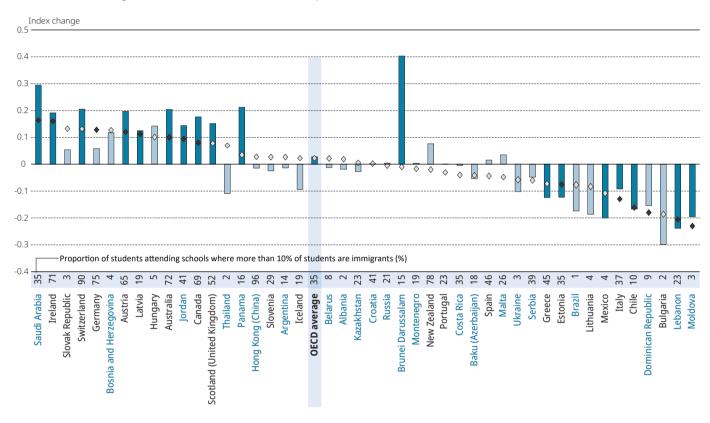
#### Understanding and appreciating the perspectives and worldviews of others

Interestingly, countries where the associations were positive are either longstanding immigrant destinations or high-income countries. This could indicate that a positive association between attitudes towards immigrants and the proportion of immigrant students in school is conditional on successful integration policies and the availability of resources to fund quality education for all.

Figure VI.3.12 Students' attitudes towards immigrants and the proportion of immigrants in school

Change in students' attitudes towards immigrants associated with attending schools where more than 10% of students have an immigrant background

■ ■ Before accounting for students' and schools' socio-economic profile¹
◆ ◇ After accounting for students' and schools' socio-economic profile



<sup>1.</sup> The socio-demographic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Note: Statistically significant values are shown in darker tones.

Countries and economies are ranked in descending order of the change in the index of students' attitudes towards immigrants associated with attending a school where more than 10% of students have an immigrant background, after accounting for gender, immigrant background, and students' and schools' socio-economic profile.

Source: OECD, PISA 2018 Database, Table VI.B1.3.22.

StatLink https://doi.org/10.1787/888934169747

#### STUDENTS' AND PARENTS' ATTITUDES TOWARDS IMMIGRANTS

Another factor that may influence students' attitudes towards immigrants is their parents' attitudes towards immigrants. Parents' attitudes were assessed through the parent questionnaire, using responses to the same statements as those used in the student questionnaire. A similar index was constructed. Figure VI.3.13 shows the association between the two indices before and after accounting for students' and schools' socio-economic profile. The findings show a positive association in all 14 countries/economies that collected data from the parents' questionnaire. On average across all countries and economies, a one-unit increase in the index of parents' attitudes towards immigrants was associated with a rise of 0.17 of a point in the index of students' attitudes towards immigrants. Associations were the strongest in Brazil, Germany, Ireland, Italy and Malta.

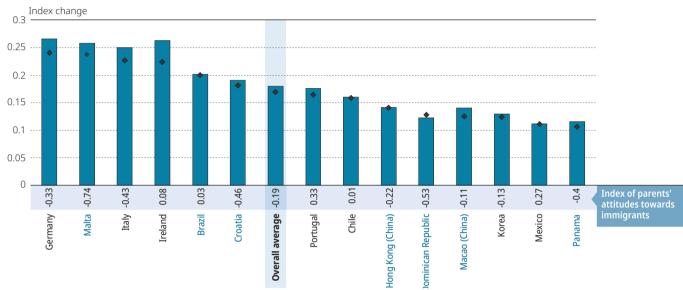
While most indices related to living together in an interconnected world tended to be positively associated, some might be more strongly correlated than others. Figure VI.3.14 presents the average correlation coefficient between pairs of the five indices discussed above. On average across OECD countries, the strongest correlations were between the index of perspective taking and the indices of

cognitive adaptability (correlation coefficient of 0.45). The weakest correlations were observed between attitudes towards immigrants, on the one hand, and cognitive adaptability and perspective taking, on the other. Attitudes towards immigrants were found to be correlated with respect for people from other cultures (0.38). While there were some variations across countries, most countries and economies clustered around the average (Table VI.B1.3.18).

Figure VI.3.13 Students' and parents' attitudes towards immigrants

Change in students' attitudes towards immigrants associated with a one-unit increase in the index of parents' attitudes towards immigrants.

■ Before accounting for students' and schools' socio-economic profile¹
◆ After accounting for students' and schools' socio-economic profile



<sup>1.</sup> The socio-demographic profile is measured by the PISA index of economic, social and cultural status (ESCS).

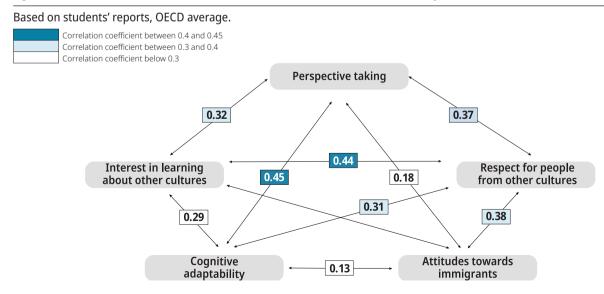
**Note**: All associations are statistically significant.

Countries and economies are ranked in descending order of the change in the index of students' attitudes towards immigrants associated with a one-unit increase in the index of parents' attitudes towards immigrants, after accounting for gender, immigrant background, and students' and schools' socio-economic profile.

Source: OECD, PISA 2018 Database, Table VI.B1.3.23.

StatLink https://doi.org/10.1787/888934169766

Figure VI.3.14 Correlations between students' intercultural attitudes and dispositions



Source: OECD, PISA 2018 Database, Table VI.B1.3.18.

#### UNDERSTANDING THE PERSPECTIVES OF OTHERS: PERFORMANCE ON THE COGNITIVE TEST

Students who sat the global competence test in the 27 participating countries and economies answered 18 test items that focused on understanding and appreciating others' worldviews. Answers to those questions were scored as either full credit, partial credit or no credit. For the purpose of this analysis, partial credit was coded as no credit. Figure VI.3.15 shows the average proportion of correct answers on those test items. The largest proportions were observed in Canada, Croatia, Hong Kong (China), Korea, Scotland (United Kingdom), Singapore, Spain and Chinese Taipei; the smallest were observed in Albania, Brunei Darussalam, Indonesia, Kazakhstan, Morocco, Panama, the Philippines and Thailand. On average across the 27 countries and economies, students answered 38% of the test items correctly.

Six released test items covered students' capacity to understand and appreciate the worldviews of others. The test items originated from four test units: Refugee Olympians, ethical clothing, a single story and rising sea levels. Those test items ranged in difficulty from proficiency Level 1 to proficiency Level 4.

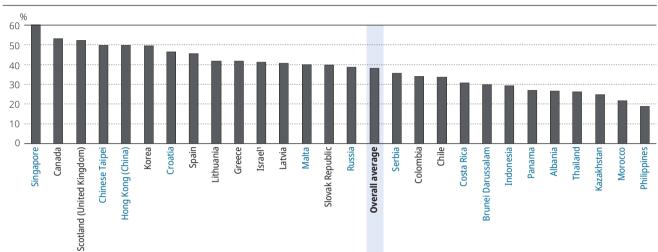


Figure VI.3.15 Percentage of correct answers: Understanding the perspectives of others

**Notes:** Understanding the perspectives of others was assessed using 18 items in the cognitive test.

Only the 27 countries and economies that conducted the cognitive test are shown.

Countries and economies are ranked in descending order of the percentage of correct answers in the cognitive test.

Source: OECD, PISA 2018 Database, Table VI.B1.3.17.

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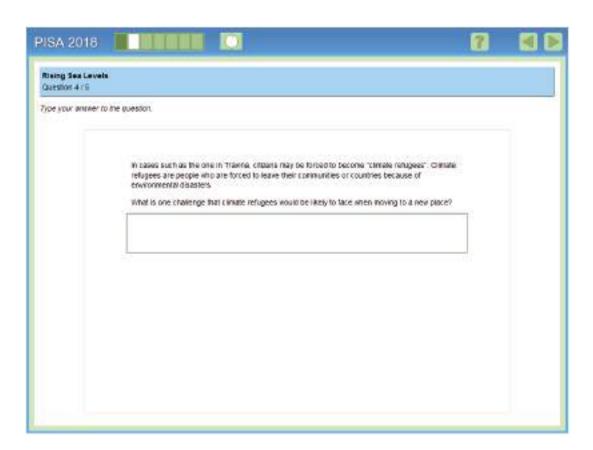
#### Rising sea levels: Item 4

The test item with the highest proportion of students answering correctly came from the rising sea levels test unit. This unit begins with a brief introduction that describes the effects of rising temperatures on sea levels, as described in Chapter 2.

The fourth item on this test unit asks students to provide one challenge that climate refugees would face when moving to a new place. This item was one of the easiest items in the cognitive test's item pool. While the item is focused on a climate refugee, all refugees face a similar set of challenges when leaving their home and moving somewhere else. While the majority of PISA students were not refugees, the challenges of moving to a new place are ones that many students can imagine or have experienced themselves. Thus, students could apply their prior knowledge to this context in order to recognise the challenges that affect climate refugees. Four broad categories of challenges relevant for climate refugees are: communication; financial or economic; difficulties adjusting to life in new places; and difficulties associated with leaving or losing the community or home and/or finding a new place to live. If students provided a response that fell within one of those categories, they received full credit. The item corresponded to proficiency Level 1.

On average, across the 27 countries and economies that took the cognitive test, 65% of the students answered this question correctly (Table VI.B1.3.17). The countries/economies with the largest proportion (exceeding 80%) of students answering the question correctly were Canada, Hong Kong (China), Korea, Scotland (United Kingdom), Singapore and Chinese Taipei, while the lowest proportion (lower than 50%) were observed in Brunei Darussalam, Morocco, the Philippines, the Slovak Republic and Thailand.

<sup>1,</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.



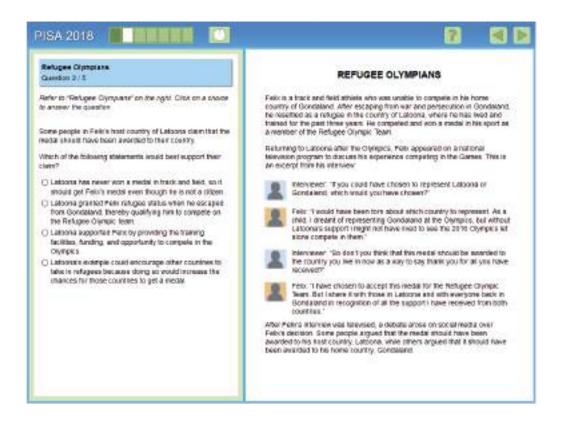
#### **Refugee Olympians**

This unit focused on the experience of team of refugees who participated in the 2016 Olympic games in Rio de Janeiro. The unit contained an introduction that explains the context of the Refugee Olympic Team. Background information was provided so that all students would start with a similar level of knowledge of the topic. The rest of the unit focused on a fictional character's participation on the Refugee Olympic Team. The stimulus for this unit introduces Felix, an athlete who fled his homeland and has been living as a refugee in another country. He was an athlete who trained in his home country before fleeing and has been training in his new country of residence. In the stimulus, the student learns that Felix participated as a member of the Refugee Olympic Team and won a medal. The stimulus then presents an interview with Felix about his feelings on accepting the medal for the Refugee Olympic Team rather than his homeland or his current country of residence. Finally, the student learns that a debate took place on social media about his decision. The content domain of this unit is institutions, conflicts and human rights, with a focus on universal human rights and local traditions.

#### Item 2

This item requires the student to consider the perspective of some residents of the country of Latoona who feel the medal should have been awarded to their country, where Felix has refugee status and asks students to select the statements which would best support this claim. The correct answer is C because this statement provides the best support for this claim: Latoona made a commitment by supporting Felix's training, and therefore the medal should be awarded to Latoona. The other answers are either not relevant to the specific scenario described in the stimulus or they fall short of recognising the perspective of the people described in the item. The item corresponded to proficiency Level 3.

On average across the 27 participating countries and economies, 47% of the students answered this item correctly (Table VI.B1.3.17). The proportion of correct answers exceeded 60% in Croatia, Singapore and the Slovak Republic and was below 30% in Panama and Thailand.



#### Item 5

The item with the lowest proportion of students answering correctly was item 5 in the test unit Refugee Olympians. In the fifth item of the unit, the student must consider Felix's perspective based on what is provided in the stimulus, go beyond what is explicitly written in the text and provide a reason for why Felix thought it was appropriate to accept the medal for the Refugee Olympic Team. Felix never directly states why he made the decision or why he thought it was the appropriate decision to make. The coding guide for this item specified ways to receive both full credit and partial credit. The partial credit description represents a more literal or fact-based way to answer the question which only references the fact that Felix is a refugee. Such responses like this are technically correct but, unlike the full-credit responses, they don't fully demonstrate an attempt to take Felix's perspective and construct an answer that reflects why he may have felt his decision was the most appropriate one. The item corresponded to proficiency Level 4 and was coded as follows:

#### Full credit

Code 2: Refers to one of the following reasons why Felix may have wanted to accept the medal for the Refugee Olympic Team.

- 1. It helped resolve his conflict about which country to represent. (Note: This reason refers to an internal conflict within Felix, not a conflict between Latoona and Gondaland).
- 2. It reflects the financial, emotional and/or training support of the Refugee Olympic Team. (Note: This information is not provided in the interview, but it is factually correct that the Refugee Olympic team provides support for its athletes. Students may have outside knowledge of this fact and it is acceptable for them to apply this knowledge.)
- 3. It provides inspiration for other refugees.
- There was no good way for him to decide between Latoona and Gondaland.
- He could call two countries home.
- He wanted to share it between both countries.
- He didn't want to offend either country.
- It was difficult for him to decide.
- It was Felix's training with the Refugee Olympic Team that directly supported him to win the gold model.
- He probably felt supported by the people going through the same thing he was.
- Felix should have accepted the medal for the team because it will encourage the refugees.

#### Partial credit

Code 1: Refers to Felix's status as a refugee or that he competed as a member of the Refugee Olympian Team.

- Felix is a refugee so the Refugee Olympic Team best represents his situation.
- He was competing for the Refugee Olympic Team.
- He was a refugee.

On average across the 27 countries and economies taking the cognitive test, 33% of students answered this correctly (full credit only). The largest proportions of correct answers (exceeding 40%) were observed in Canada, Colombia, Greece, Indonesia, Israel<sup>2</sup>, Scotland (United Kingdom), Singapore, Spain and Chinese Taipei, while the smallest (below 20%) were observed in Albania, Brunei Darussalam, Kazakhstan, Latvia and the Philippines (Table VI.B1.3.17).



#### Understanding and appreciating the perspectives and worldviews of others

### Note

- 1. The comparability of scaled indices across countries and economies is examined in Annex A5. The annex presents the findings of in-depth measurement invariance analyses for every index used in PISA 2018, Volume VI.
- 2. The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

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This chapter examines students' ability to engage in open, appropriate and effective communication across cultures. In particular, it examines students' awareness of intercultural communication, their contact with people from other cultures and their mastery of languages other than their own. All factors are explored considering variations in students' socio-economic status and circumstances.

#### What the data tell us

- The proportion of students who reported having contact with people from other countries at school ranged between 70% and 78% in Albania, Germany, Greece, Italy, New Zealand, Panama, Singapore, Switzerland, Chinese Taipei and the United Arab Emirates, while it ranged between 20% and 30% in Argentina, Brazil, Mexico, Turkey and Viet Nam.
- Significant and positive associations between having contact with people from other countries and students' attitudes
  and dispositions were observed in most countries and economies. The indices that were highly associated with contact
  with people from other countries are students' cognitive adaptability, self-efficacy regarding global issues and interest in
  learning about other cultures.
- The largest proportions of students who speak several languages were observed in Croatia, Estonia, Hong Kong (China), Latvia, Macao (China), Malta and Singapore, where more than 90% of students reported that they speak two or more languages.
   The smallest proportions were observed in Australia, Brazil, Chile, Colombia, Korea, Mexico, Scotland (United Kingdom) and Viet Nam. Language-learning opportunities are widely available.
- On average across OECD countries, only 12% of students reported that they do not learn any foreign language at school,
   while 38% reported that they learn one foreign language and 50% reported that they learn two or more.
- Speaking multiple languages and learning one or more foreign languages at school were positively associated with students' dispositions and attitudes in a large number of countries and economies.

A third dimension of knowledge, skills and attitudes required to thrive in an interconnected world is the ability to engage in effective communication across cultures (Chen and Starosta,  $1996_{[1]}$ ; Deardorff,  $2009_{[2]}$ ). Students who are proficient in this competence understand cultural norms, interactive styles and degrees of formality in intercultural contexts and can adapt their behaviour and communication to suit every situation. They appreciate the importance of respectful dialogue, strive to understand others and make an effort to include marginalised groups. Effective communication requires being able to express oneself clearly, confidently and without anger, even when expressing a fundamental disagreement (Wiseman, Hammer and Nishida,  $1989_{[3]}$ ; Collier,  $2015_{[4]}$ ). Respectful communication involves understanding the expectations and perspectives of diverse audiences and applying that understanding to meet the audience's needs. In effective communication, all participants are able to make themselves understood and to understand the others (Huber et al.,  $2014_{[5]}$ ).

Speaking more than one language is a clear asset for effective intercultural communication (Bialystok,  $2016_{[6]}$ ). Effective communication in intercultural contexts is also facilitated through active listening. This means listening not only to what is being said, but also to how it is being said, through both voice and accompanying body language. Competent students are capable speakers who can use their body language and voice effectively when they discuss and debate global issues. They can express and justify a personal opinion and persuade others to pursue a particular course of action.

This chapter examines students' awareness of intercultural communication, their contact with people from other cultures and their mastery of languages other than their own. All of these factors are explored considering variations in students' socio-economic status and circumstances and in association with other attitudes, such as interest in and respect for other cultures, perspective taking, and knowledge and understanding of other cultures.

#### **AWARENESS OF INTERCULTURAL COMMUNICATION**

The student questionnaire in PISA focused on two aspects of intercultural communication: awareness of intercultural communication<sup>1</sup> and multilingualism. The construct of awareness of intercultural communication focuses on students' ability to communicate clearly in a range of situations, even if they are speaking a language that is not their mother tongue or with people speaking a language different from their own (Svalberg, 2012<sub>[7]</sub>; Corcoll, 2013<sub>[8]</sub>; P. M. Ribeiro, 2016<sub>[9]</sub>). Students should be able to recognise the different forms of expression, the subtleties of cross-cultural communication and the ways of expressing disagreement. They should be able to listen for understanding and manage breakdowns in communication. They should be able to adjust and modify their behaviour in order to effectively communicate with others (OECD, 2018<sub>[10]</sub>; Council of Europe, 2018<sub>[11]</sub>).

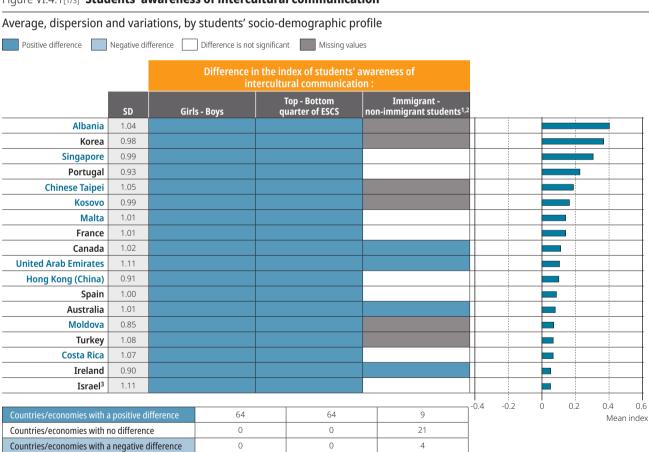
PISA 2018 asked students to describe their awareness of intercultural communication. They were asked to respond to seven statements related to the following hypothetical scenario: "Imagine you are talking in your native language to people whose native language is different from yours." The statements were: "I carefully observe their reactions"; "I frequently check that we are understanding each other correctly"; "I listen carefully to what they say"; "I choose my words carefully"; "I give concrete examples

to explain my ideas"; "I explain things very carefully"; and "If there is a problem with communication I find ways around it". Answers were given on a four-point scale ("strongly disagree", "disagree", "strongly agree") and were combined into the index of awareness of intercultural communication. A positive value in this index indicates that students have a greater awareness of intercultural communication than the average student across OECD countries.

Students in Albania, Korea, Kosovo, Portugal, Singapore and Chinese Taipei reported the greatest awareness of intercultural communication, while those in Baku (Azerbaijan), Bulgaria, Kazakhstan, Latvia, Morocco, the Russian Federation, the Slovak Republic, Slovenia, Thailand and Ukraine reported the lowest values in this index (Figure VI.4.1). Across all countries and economies, girls reported greater awareness of intercultural communication than boys. The largest gaps in favour of girls were observed in Albania, Jordan, Lithuania, Saudi Arabia and Turkey, while the smallest were found in Colombia and Indonesia. Large differences were also observed between advantaged and disadvantaged students. Advantaged students (those in the top quarter of the PISA index of economic and cultural status) in all countries and economies reported greater awareness of intercultural communication than disadvantaged students. The largest differences were found in Bulgaria, France, Israel<sup>2</sup>, New Zealand, the Philippines and Romania.

Across the 35 countries and economies with more than 5% immigrant students, differences in awareness of intercultural communication in favour of immigrant students were observed in 9 countries/economies: Australia, Canada, Ireland, Macao (China), Saudi Arabia, Scotland (United Kingdom), Slovenia, Switzerland and the United Arab Emirates, after accounting for students' and schools' socio-economic profile. The reverse was observed only in Estonia, Italy, Lebanon and Montenegro (Table VI.B1.4.3).

Figure VI.4.1[1/3] Students' awareness of intercultural communication



<sup>1.</sup> After accounting for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (FSCS).

Countries and economies Countries and economies are ranked in descending order of the index of students' awareness of intercultural communication.

**Source**: OECD, PISA 2018 Database, Table VI.B1.4.1 and Table VI.B1.4.3.

<sup>2.</sup> Differences between immigrant and non-immigrant students are only presented for countries and economies where more than 5% of students have an immigrant background. The values for countries/economies with smaller proportions of immigrant students are reported as missing.

<sup>3.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details

Figure VI.4.1[2/3] Students' awareness of intercultural communication

Average, dispersion and variations, by students' socio-demographic profile Positive difference Negative difference Difference is not significant Missing values Difference in the index of students' awareness of Top - Bottom Immigrant -SD non-immigrant students<sup>1,2</sup> Girls - Boys quarter of ESCS **New Zealand** 0.96 Romania 0.92 Germany 1.02 **Brunei Darussalam** 0.83 Peru Lebanon 1.14 1.10 Chile Italy 0.95 **OECD** average 0.98 Scotland (United Kingdom) 0.95 **Philippines** 0.94 Macao (China) Lithuania 1.05 Malaysia 0.80 Montenegro 1.07 0.97 Croatia Jordan 1.10 Austria 1.10 1.06 **Panama** Greece 0.91 Mexico 1.08 **Iceland** Uruguay 1.09 Switzerland 0.97 **Poland Dominican Republic** 1.19 **Argentina** Serbia 1.07 **Brazil** 1.00 Saudi Arabia Estonia 0.87 Indonesia 0.82 Colombia 0.87 **Belarus Bosnia and Herzegovina** 1.07 **Viet Nam** 0.90 Hungary Baku (Azerbaijan) 1.24 1.14 Bulgaria Ukraine 0.91 Slovenia 9 0 2  $0\dot{4}$ 0.6 Mean index 0 0 21 Countries/economies with no difference

4

Countries and economies Countries and economies are ranked in descending order of the index of students' awareness of intercultural communication.

Source: OECD, PISA 2018 Database, Table VI.B1.4.1 and Table VI.B1.4.3.

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Countries/economies with a negative difference

0

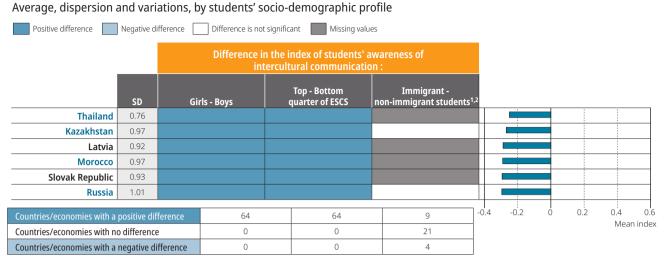
<sup>0</sup> 1. After accounting for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

<sup>2.</sup> Differences between immigrant and non-immigrant students are only presented for countries and economies where more than 5% of students have an immigrant background. The values for countries/economies with smaller proportions of immigrant students are reported as missing.

<sup>3.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details

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#### Figure VI.4.1[3/3] Students' awareness of intercultural communication



- 1. After accounting for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS)
- 2. Differences between immigrant and non-immigrant students are only presented for countries and economies where more than 5% of students have an immigrant background. The values for countries/economies with smaller proportions of immigrant students are reported as missing.
- 3. The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details

Countries and economies Countries and economies are ranked in descending order of the index of students' awareness of intercultural communication.

Source: OECD, PISA 2018 Database, Table VI.B1.4.1 and Table VI.B1.4.3. StatLink | https://doi.org/10.1787/888934169823

A large majority of students agreed or strongly agreed with each of the seven statements (Figure VI.4.2). Some 88% agreed or strongly agreed that they listen to what others say; 85% agreed or strongly agreed that they can find a way around problems with communications; 84% agreed or strongly agreed that they check to be sure that people understand each other correctly; 82% agreed or strongly agreed that they observe others' reactions; 81% agreed or strongly agreed that they give concrete examples to explain ideas; 80% agreed or strongly agreed that they choose their words carefully; and 78% agreed or strongly agreed that they explain things very carefully (Table VI.B1.4.1). These results highlight that nine out of ten students report that listening for understanding is a key element of communication. This is supported by several frameworks on intercultural communication (OECD, 2018<sub>[110]</sub>; Council of Europe, 2018<sub>[111]</sub>).

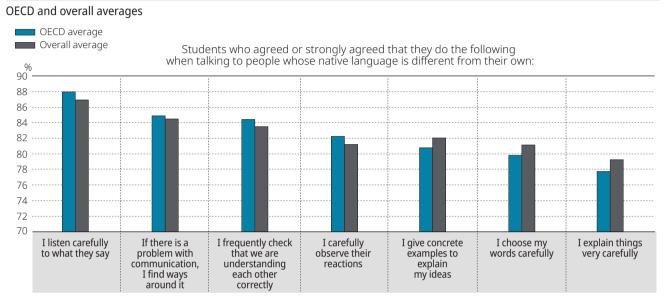
Larger dispersions in the index of awareness of intercultural communication were observed in Austria, Baku (Azerbaijan), Bulgaria, the Dominican Republic, Israel, Jordan, Lebanon, Saudi Arabia and the United Arab Emirates. Most of the variations were observed within schools. Only 10% of the variation or less was observed between schools, except in Lebanon, where 18% of the variation was observed between schools. Large dispersions indicate greater inequalities in the distribution of this attitude, while large variations between schools are a sign of greater stratification on this measure. Polarisation was observed in many countries, as students in the two middle quarters of the distribution show similar average levels of awareness of intercultural communication. By contrast, students in the bottom quarter of the index reported markedly less awareness about intercultural communication than those in the second quarter, while students in the top quarter reported significantly greater awareness than those in the third quarter (Table VI.B1.4.1 and Table VI.B1.4.3).

Awareness of intercultural communication is likely to be associated with other attitudes required for living together. For instance, students who are interested in learning about other cultures or have greater respect for people from other cultures are likely to develop stronger cultural sensitivity, which is reflected in their behaviour. Figure VI.4.3 presents the correlation coefficients between the index of awareness of intercultural communication and the seven indices explored in Chapters 2 and 3.

On average across OECD countries, the correlations were positive but modest. The strongest correlations were between awareness of intercultural communication and respect for people from other cultures (correlation coefficient of 0.3) and students' awareness of global issues (correlation coefficient of 0.29). The weakest correlation was with students' index of cognitive adaptability (correlation coefficient of 0.25). This finding shows that students who have positive attitudes, such as respect towards people from other cultures, who are able to understand the perspectives of others and who exhibit higher levels of awareness and self-efficacy regarding global issues tend to have greater awareness of the nuances of intercultural communication.

The strength of the correlation between the index of awareness of intercultural communication and the index of respect for people from other cultures varied between 0.38 and 0.4 in Brunei Darussalam, Korea, Kosovo and Romania and between 0.14 and 0.2 in Baku (Azerbaijan), Bulgaria and the Dominican Republic. The associations with awareness of global issues ranged between 0.2 in Scotland (United Kingdom) and 0.47 in Jordan. When considering the correlation between the index of awareness of intercultural communication and students' attitudes towards immigrants, none of the correlations exceeded the threshold of 0.5 of a unit in any country/economy.

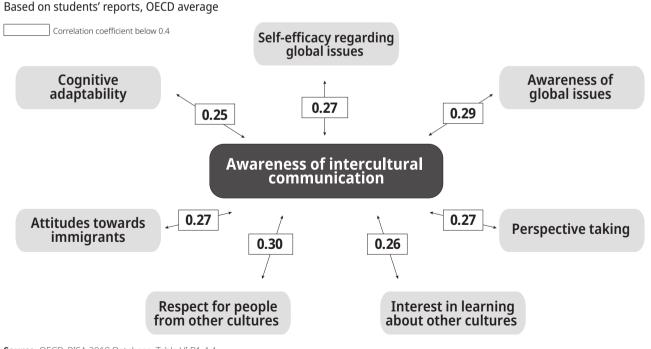
Figure VI.4.2 Components of students' awareness of intercultural communication



Source: OECD, PISA 2018 Database, Table VI.B1.4.1.

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Figure VI.4.3 Correlations between awareness of intercultural communication and other indices



**Source**: OECD, PISA 2018 Database, Table VI.B1.4.4.

## oss cultures

#### **CONTACT WITH PEOPLE FROM OTHER COUNTRIES**

Contact with people from different cultures, in itself, has the potential to stir curiosity, open minds and create understanding (Brown and Zagefka,  $2011_{[12]}$ ; Aronson and Brown,  $2013_{[13]}$ ). By contrast, ignorance is a source of fear, closed-mindedness and indifference (Rosenthal and Levy,  $2010_{[14]}$ ; Bernardo, Rosenthal and Levy,  $2013_{[15]}$ ). The concept of connectedness is linked to cognitive change, in the sense that, if certain conditions are met, contact among different groups of people will enhance mutual understanding, reduce prejudice and improve relations (Allport,  $1954_{[16]}$ ; de Oliveira Andreotti, Biesta and Ahenakew,  $2014_{[17]}$ ).

Connectedness challenges arguments that contact between people of different cultural backgrounds would inevitably lead to prejudice and conflict. Such arguments were prevalent in the rhetoric about a clash of civilisations, but they have been criticised as demonstrating a lack of understanding about diversity within cultures and interdependence between cultures. Opposing paradigms have emerged focusing on dialogue between civilisations and different faiths. Those paradigms acknowledge that all major world traditions have evolved through contact and in dialogue with each other.

This section focuses on students' contact with people from other countries and how it is related to their attitudes and dispositions, such as interest in and respect for other cultures, attitudes towards immigrants, ability to understand different perspectives, and intercultural communication. Students were asked a yes-or-no question about whether they have contact with people from other countries at school, in their family, in their neighbourhood and in their circle of friends. Figure VI.4.4 shows the proportion of students who reported that they have contact with people from other countries. On average across all OECD countries, 53% of students reported having contact with people from other countries in their school, 54% in their family, 38% in their neighbourhood and 63% in their circle of friends. Those four categories overlap, as schoolmates and family members may also be friends or neighbours.

OECD average

70

60

50

40

30

20

In their circle of friends In their family At school In their neighbourhood

Figure  $VI.4.4\,$  Students who reported having contact with people from other countries

Source: OECD, PISA 2018 Database, Table VI.B1.4.5.

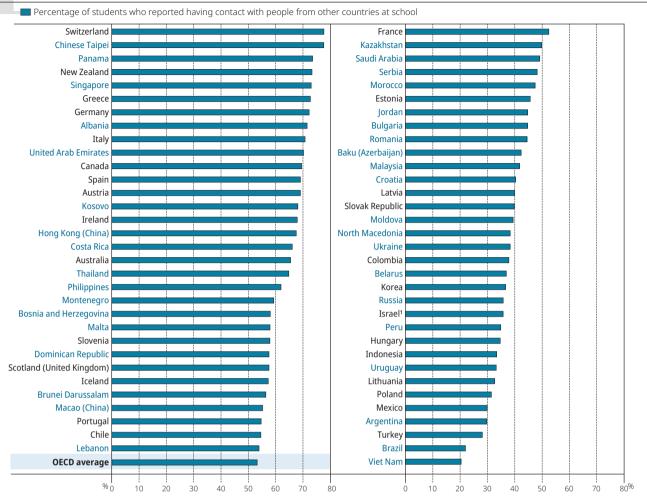
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There were substantial variations in those proportions between countries. The proportion of students who reported having contact with people from other countries at school ranged between 70% and 78% in Albania, Germany, Greece, Italy, New Zealand, Panama, Singapore, Switzerland, Chinese Taipei and the United Arab Emirates, while it ranged between 20% and 30% in Argentina, Brazil, Mexico, Turkey and Viet Nam. These results may reflect several factors, such as the proportion of first-generation immigrants in a country/economy, student mobility and the degree of interconnectedness between that country and the rest of the world (Figure VI.4.5).

Boys were more likely than girls to report having contact with people from other countries at school in 24 countries and economies, while the reverse was true in 11 (Table VI.B1.4.6). Advantaged students were more likely than disadvantaged students to report having contact with people from other countries at school in 44 countries and economies, with the largest differences observed in Macao (China), Scotland (the United Kingdom), Singapore, Thailand and the United Arab Emirates. The reverse was true in Greece, Malaysia, Romania and the Philippines. Immigrant students were more likely to report having contact with people from other countries at school in 29 countries and economies of the 35 with more than 5% immigrant students. This could reflect the fact that due to stratification, immigrants are more likely to attend schools with other immigrants than their native-born peers.

Students also had contact with people from other countries in their families. This was most common (80% to 92% of students so reported) in Albania, the Dominican Republic, Kosovo, Lebanon, the Republic of Moldova, Montenegro, Morocco, New Zealand, the Philippines and Serbia. Conversely, much smaller proportions of students (between 10% and 30%) reported contact with people from other countries in their families. This was the case in Hong Kong (China), Italy, Korea and Thailand.

Figure VI.4.5 Students who reported having contact with people from other countries at school



<sup>1.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details

Countries and economies are ranked in descending order of the percentage of students who reported having contact with people from other countries at school.

Source: OECD, PISA 2018 Database, Table VI.B1.4.5.

StatLink https://doi.org/10.1787/888934169899

Some 60% to 78% of students in Albania, Bosnia and Herzegovina, the Dominican Republic and Kosovo reported having contact with people from other countries in their neighbourhood, while only 22% to 25% of students in Brazil, Macao (China), Poland, Portugal and Viet Nam so reported. On average, larger proportions of students reported having contact with people from other countries in their circle of friends. The proportions ranged between 81% and 86% in Albania, the Dominican Republic, Kosovo, Montenegro, Switzerland and the United Arab Emirates. By contrast, less than 20% of students in Thailand so reported (Table VI.B1.4.5).

Contact with people from different countries or cultures boosts knowledge about those countries and can help create an understanding of their customs and traditions. Ultimately, students might acquire certain abilities and attitudes, such as curiosity, respect for others, the ability to understand different perspectives, adaptability in unfamiliar situations and awareness of different communication styles. In this section, variations in students' attitudes are examined by the degree of contact with people from other countries at school. The discussion in this section mainly focuses on the school context because of its policy relevance and because it could be influenced by school and teaching practices. However, results for the other three settings (family, neighbourhood and circle of friends) are provided in Annex B1.

In general, having contact with people from other countries at school (and in the family, neighbourhood and circle of friends) is positively associated with students' skills in and attitudes towards living with others. However, the associations tended to be only weak to moderate after accounting for students' and schools' socio-economic background. This could indicate that socio-economic background acts as a mediator of those relationships.

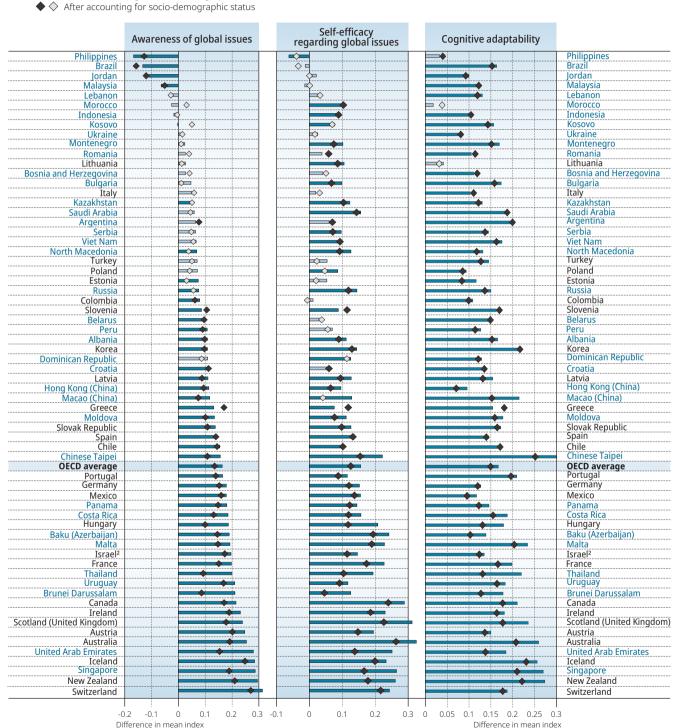
In 42 countries and economies, students who reported that they have contact with people from other countries at school exhibited greater awareness about global issues. The strongest associations, after accounting for students' and schools' socio-economic

profile, were observed in Iceland, New Zealand and Switzerland. Associations were negative only in Brazil, Jordan, Malaysia and the Philippines. In all other countries, the associations were non-significant (Figure VI.4.6).

#### Figure VI.4.6 Contact with people from other countries, and attitudes towards global issues

Differences in indices between students who reported that they have contact with people from other countries and those who reported that they do not have such contact

Before accounting for socio-demographic status<sup>1</sup>



<sup>1.</sup> Socio-demographic status includes gender, immigrant status and student's and school's index of economic, social and cultural status (ESCS).

**Note**: Statistically significant values are shown in a darker tone.

 $Countries\ and\ economies\ are\ ranked\ in\ ascending\ order\ of\ the\ difference\ in\ the\ index\ of\ awareness\ of\ global\ issues$ 

Source: OECD, PISA 2018 Database, Table VI.B1.4.8.

<sup>2.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Students who reported that they have contact with people from other countries at school showed greater confidence when dealing with global and intercultural issues. The associations were positive and significant in 49 countries and economies and non-significant in all others. They ranged between 0.05 and 0.26 of a point increase in the index of students' self-efficacy regarding global issues. Associations were the strongest in Australia, Canada, Scotland (United Kingdom) and Switzerland.

Associations between contact with people from other countries at school and the index of cognitive adaptability were positive and significant in all countries and economies except Lithuania and Morocco, after accounting for students' and schools' socio-demographic profile. On average across OECD countries, having contact with people from other countries was associated with a rise of 0.15 of a unit in the index of cognitive adaptability. Associations were strongest in Australia, Iceland, Korea, Malta, New Zealand, Singapore and Chinese Taipei.

Having contact with people from other countries at school is positively associated with students' interest in learning about other cultures. Associations with the index of interest in learning about other cultures were positive in all but nine countries and economies and were strongest in Australia, Canada, Germany, Iceland, New Zealand and Scotland (United Kingdom). On average across OECD countries, having contact with people from other countries was associated with a rise of 0.17 of a point in the index of interest in learning about other cultures (Figure VI.4.7).

Similar findings were observed for the index of respect for people from other cultures. Associations were positive in 35 countries and economies and negative in 6 (Brazil, Indonesia, Lithuania, Morocco, the Philippines and Ukraine). Associations exceeded 0.3 points increase in the index only in Switzerland.

Associations with attitudes towards immigrants were positive, but mostly weak, in 19 countries and economies, while they were negative in 7 countries/economies. On average across OECD countries, having contact with people from other countries at school was associated with a rise of only 0.07 of a point in the index of attitudes towards immigrants.

#### Box VI.4.1. Study-abroad programmes

Study-abroad programmes have emerged as an alternative to intercultural contact in the classroom. These programmes allow students to interact directly with people from other countries and have the advantage of offering an immersive experience of another culture. Several studies (Berg,  $2009_{[18]}$ ) have shown that studying abroad does not automatically result in improved attitudes and dispositions; in some cases it could be a stressful experience for the student. However, when students are appropriately prepared, the experience can lead to gains in intercultural competence (Barrett,  $2018_{[19]}$ ). This finding emerges from research done on exchange programmes organised by AFS (formerly known as American Field Service). In AFS programmes, high-school students spend ten months studying and living with host families in a foreign country. This experience is highly structured and aims to prepare participants to engage with other cultures. Students get

Service). In AFS programmes, high-school students spend ten months studying and living with host families in a foreign country. This experience is highly structured and aims to prepare participants to engage with other cultures. Students get to learn first-hand about the impact of culture on values and on the decisions people make. They gain the ability to see themselves through the eyes of others, challenge assumptions and broaden their views on cultural stereotypes and global issues. They begin to understand the perspectives of others and how to change their own perspectives effectively.

AFS relies on a number of principles in designing student exchange programmes. The approach involves a goal-based curriculum focused on the needs of students as future leaders. It combines immersive experiences and complements structured classroom learning with experiential and lifelong learning. Its objectives include building values and skills and developing intercultural knowledge, sensitivity and global awareness.

Evaluation studies (AFS,  $2012_{[20]}$ ; Hammer,  $2004_{[21]}$ ; Hansel,  $2008_{[22]}$ ; Hansel,  $2008_{[23]}$ ) show that high school students who have participated in the AFS programme have higher levels of intercultural competence, experience less anxiety when interacting with people from other cultures and have more friendships with people from other cultures. They also have greater knowledge of the host country and greater fluency in the language of the host country. More important, students maintain these advantages into their adulthood.

In 32 countries and economies, contact with people from other countries at school was positively associated with students' ability to understand different perspectives (Figure VI.4.8). Associations were negative only in Brazil and the Philippines. The strength of the association varied greatly, but was mostly weak, except in Chinese Taipei where it was moderate.

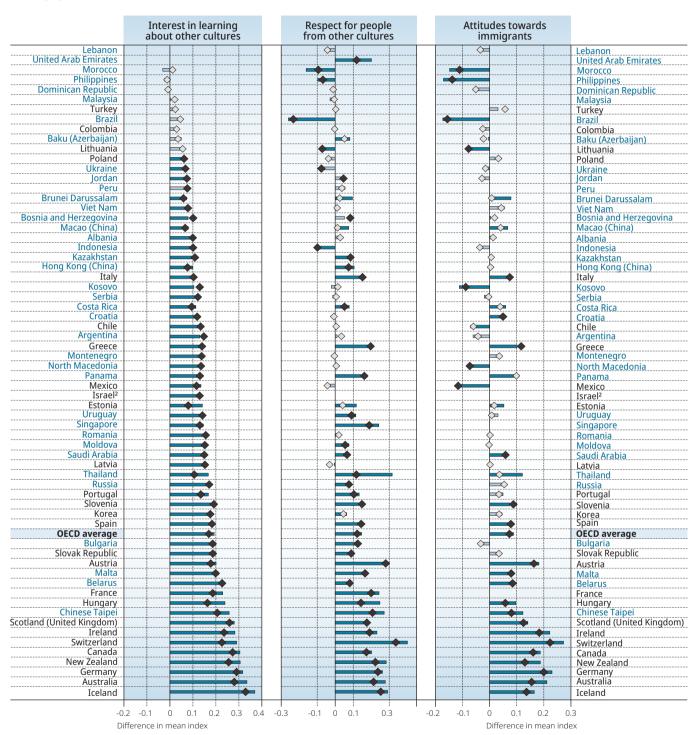
Associations with the index of awareness of intercultural communication were positive in 24 countries and economies and negative in 8, but the associations were mostly weak. On average across OECD countries, having contact with people from other countries at school was associated with a rise of 0.08 of a unit in the index of awareness of intercultural communication.

s cultures

#### Figure VI.4.7 Contact with people from other cultures and differences in attitudes towards other cultures

Differences in indices between students who reported that they have contact with people from other cultures and those who reported that they do not have such contact

■ ■ Before accounting for socio-demographic status¹ ◆ ◇ After accounting for socio-demographic status



<sup>1.</sup> Socio-demographic status includes gender, immigrant status and student's and school's index of economic, social and cultural status (ESCS).

Note: Statistically significant values are shown in a darker tone.

Countries and economies are ranked in ascending order of the differences in the index of interest in learning about other cultures.

Source: OECD, PISA 2018 Database, Table VI.B1.4.8.

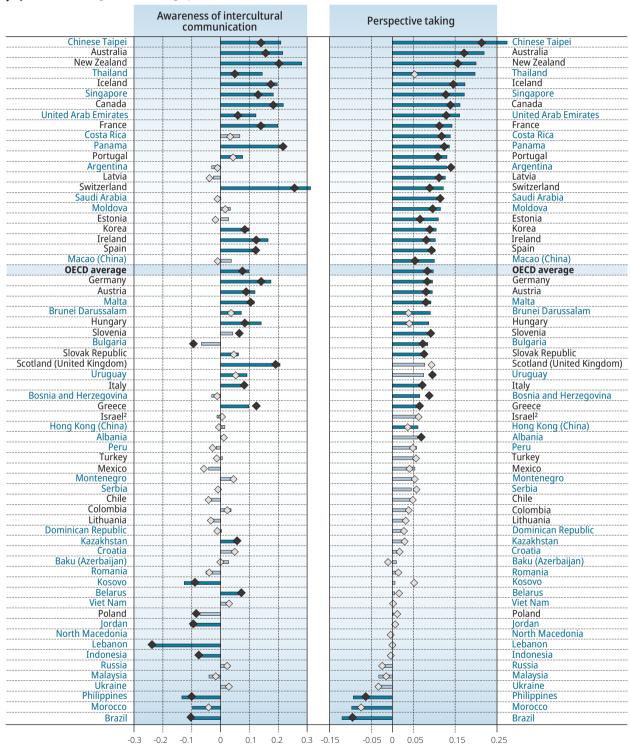
<sup>2.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

#### Figure VI.4.8 Contact with people from other cultures and understanding others

Difference in indices between students who reported that they have contact with people from other cultures and those who reported that they do not have such contact

■■ Before accounting for socio-demographic status¹

◆ ♦ After accounting for socio-demographic status



<sup>1.</sup> Socio-demographic status includes gender, immigrant status and stuudent's and school's index of economic, social and cultural status (ESCS).

Note: Statistically significant values are shown in a darker tone.

Countries and economies are ranked in ascending order of the differences in the index of perspective taking.

Source: OECD, PISA 2018 Database, Table VI.B1.4.8.

<sup>2.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

In summary, the positive association between contact with people from other countries in the different settings specified in the questionnaire and students' intercultural and global knowledge, skills and attitudes indicates that contact could foster understanding and mitigate prejudice, even though such associations vary in magnitude between countries. These findings add to the mounting evidence challenging the hypothesis that misunderstanding and conflict could result when people of different backgrounds interact. If anything, the findings tell us that creating opportunities for contact at school and beyond, virtual or in person, could be an effective way of fostering positive intercultural dispositions. However, the negative associations in some countries and economies warrant further analysis about the possible reasons.

#### **LANGUAGES SPOKEN AND LEARNED BY STUDENTS**

Speaking one language is a basic tool for communicating, but speaking two or more could be a valuable asset in an increasingly diverse and interconnected world (Vertovec,  $2007_{[24]}$ ). The ability to speak several languages is a key skill that improves people's employment prospects and broadens their horizons (Gross and Dewaele,  $2017_{[25]}$ ). Learning multiple languages has the potential of developing a range of skills that extend beyond the realm of language proficiency (Byers-Heinlein and Garcia,  $2014_{[26]}$ ). Multilingualism can promote social cohesion and intercultural dialogue. It equips immigrants with the opportunity to learn the language of the host country while cultivating their own native languages (Romaine,  $2013_{[27]}$ ). For native-born students, multilingualism opens a window onto the world and grants them access to all sorts of materials, ranging from literature to cinema. Languages allow young people to access international media and open the channels of intercultural dialogue. Supporting multilingualism through policy has become a major objective for many education systems around the world (Krzyżanowski and Wodak,  $2011_{[28]}$ ).

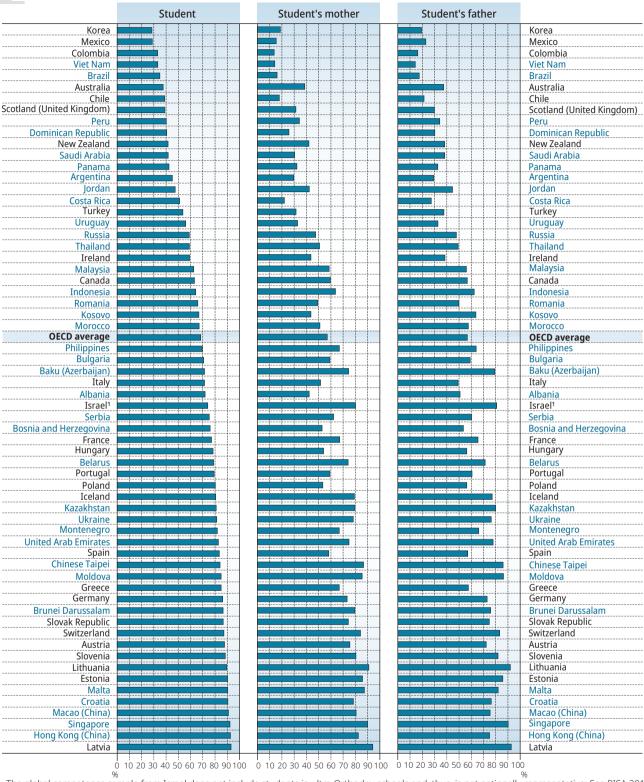
The prevalence of multilingualism was assessed in PISA 2018 using a number of questions about the languages students and their parents speak well enough to converse (including the language they speak at home) and the language students learn at school. The following section explores the proportion of students who speak and learn multiple languages and the association between the mastery of multiple languages and certain student attitudes.

The largest proportions of students who speak several languages were observed in Croatia, Estonia, Hong Kong (China), Latvia, Macao (China), Malta and Singapore, where more than 90% of students reported that they speak two or more languages. Those countries and economies are mostly small but well-connected to the rest of the world, and some are economic hubs in their region. This group of countries was followed by Austria, Brunei Darussalam, Germany, Lithuania, the Slovak Republic, Slovenia and Switzerland, where 85% to 90% of students reported speaking two or more languages. Some of those countries have large populations of immigrant students with diverse linguistic and cultural backgrounds. By contrast, in Australia, Brazil, Chile, Colombia, Korea, Mexico, Scotland (United Kingdom) and Viet Nam, less than 40% of students reported that they speak two or more languages. Students in English-speaking countries may not have much incentive to learn a second language, given that English has become the lingua franca of the world; but in other countries, if multilingualism is rare, it may be because of a lack of learning opportunities at school. On average across OECD countries, 68% of students reported that they are multilingual (Figure VI.4.9).

The findings also show that girls were more likely to speak several languages than boys in 30 countries and economies, while the reverse was only true in eight. In Albania, Brunei Darussalam and Ireland, as much as 10% more girls than boys reported that they speak two or more languages. By contrast, in Chile, Colombia, Israel and Korea, more than 5% more boys than girls reported that they speak two or more languages (Table VI.B1.4.11). Large differences were observed between socio-economically advantaged and disadvantaged students, with more advantaged students reporting that they speak two or more languages. The largest differences were observed in Argentina, Brazil, Chile, Colombia, Costa Rica, Jordan, Romania and Uruguay, while the smallest were in Hong Kong (China), Israel, Latvia and Macao (China). Immigrant students were more likely to speak two or more languages than their native-born peers. This was the case in 21 countries and economies with more than 5% immigrant students, with the largest differences observed in Australia, New Zealand and Scotland (United Kingdom), where more than 40% more immigrants than native-born students spoke two or more languages. The reverse was true only in Costa Rica, Malta and Spain. This finding reflects the fact that immigrants are likely to speak the language of their country of immigration in addition to their heritage language.

When comparing the multilingual skills of students with those of their mothers and fathers, two patterns emerged. Students who reported that they speak two or more languages tended to have multilingual parents. However, in most countries, the proportion of multilingual parents was smaller than that of multilingual students. This shows some intergenerational transmission of multilingual skills from parents to children, but also a clear trend of rising multilingualism over time that goes beyond simple intergenerational transmission. This could be explained by the growing need for multilingual skills in the 21st century, the spread of the Internet and mass media, and the expansion of language learning and global student mobility (Table VI.B1.4.11).

Figure VI.4.9 Students who speak two or more languages



<sup>1.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Countries and economies are ranked in descending order of the percentage of students who speak two or more languages.

Source: OECD, PISA 2018 Database, Table VI.B1.4.11.

StatLink https://doi.org/10.1787/888934169975

Language-learning opportunities seem to be widely available across countries and economies that participated in PISA 2018. On average across OECD countries, only 12% of students reported that they do not learn any foreign language at school, while 38% reported that they learn one foreign language and 50% reported that they learn two or more. The largest proportion

of students (more than 20%) who reported that they do not learn any foreign language were observed in Australia, Brunei Darussalam, Canada, Hong Kong (China), Malaysia, New Zealand, the Philippines, Saudi Arabia and Scotland (United Kingdom). In three English-speaking countries (Australia, New Zealand and Scotland [United Kingdom]), 60% of students so reported. By contrast, in 42 countries and economies, more than 90% of students reported that they learn at least one foreign language at school. The proportion exceeds 99% in Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Estonia, Hungary, Italy, Latvia, Lithuania, Montenegro, Poland, Romania, Serbia, the Slovak Republic, Slovenia and Ukraine (Figure VI.4.10). It is worth noting that, in Hong Kong (China), English is an official language and not considered as a foreign one. Therefore, all students in Hong Kong (China) learn English and Chinese. This explains the relatively high proportion of students (21%) reporting that they do not learn any foreign languages while in reality most of them are bilingual. This could also be the case in Canada where both French and English are official languages taught to students.

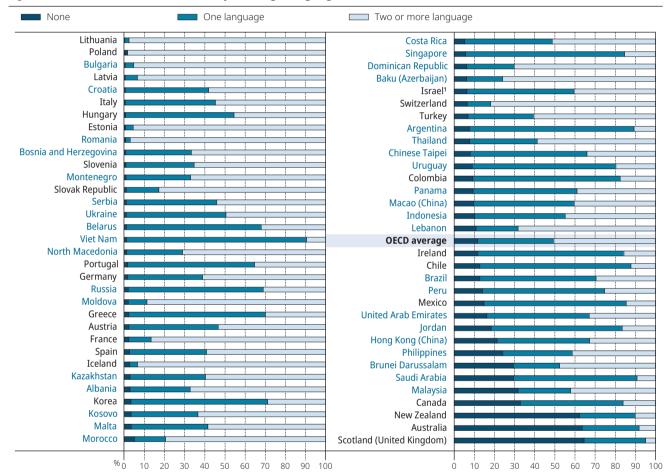


Figure VI.4.10 Students who learn multiple foreign languages at school

Countries and economies are ranked in ascending order of the percentage of students who do not learn a foreign language at school.

Source: OECD, PISA 2018 Database, Table VI.B1.4.11.

StatLink https://doi.org/10.1787/888934169994

#### How is multilingualism related to students' attitudes?

An analysis explored the association between speaking two or more languages and eight student indices: awareness of global issues, self-efficacy regarding global issues, interest in learning about other cultures, respect for people from other cultures, perspective taking, attitudes towards immigrants, cognitive adaptability and awareness of intercultural communication (Table VI.B1.4.12). Associations were positive and statistically significant in almost all countries. Given that speaking multiple languages is positively associated with socio-economic advantage, associations were slightly attenuated once the socio-economic profile of students and schools was accounted for. This shows that the associations between multilingualism and positive attitudes were not uniquely driven by socio-economic status, as the strength of the associations was mostly preserved after accounting for socio-economic status.

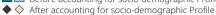
<sup>1.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

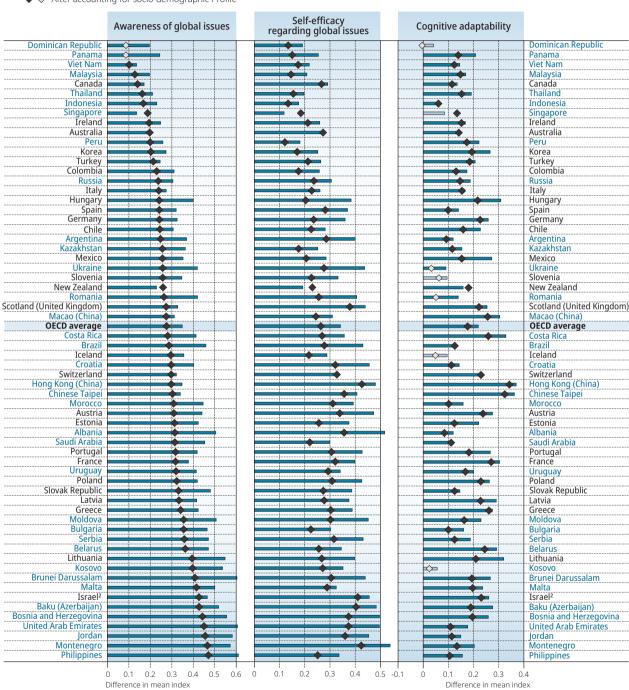
In 28 countries/economies, speaking two or more languages was strongly associated with awareness of global issues, exceeding a 0.3 of a point increase in the index (Figure VI.4.11). The strongest associations were observed in Baku (Azerbaijan), Bosnia and Herzegovina, Brunei Darussalam, Israel, Jordan, Malta, Montenegro, the Philippines and the United Arab Emirates, after accounting for students' and schools' socio-economic profile. On average across OECD countries, speaking two or more languages was associated with a rise of 0.28 of a unit in the index of awareness of global issues.

Figure VI.4.11 Speaking two or more languages and attitudes towards global issues

Differences in indices between students who speak two or more languages and those who do not

Before accounting for socio-demographic Profile<sup>1</sup>





<sup>1.</sup> Socio-demographic status is measured by the PISA index of economic, social and cultural status (ESCS).

Note: Statistically significant values are shown in a darker tone.

Countries and economies are ranked in ascending order of the differences in the index of awareness of global issues, after accounting for gender, and students' and schools' socio-economic profile.

Source: OECD, PISA 2018 Database, Table VI.B1.4.12.

<sup>2.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Multilingualism is also associated with self-efficacy regarding global issues. In 21 countries and economies, including Baku (Azerbaijan), Hong Kong (China), Israel and Montenegro, associations exceeded a 0.3 of a point increase in this index while, on average across OECD countries, speaking two or more languages was associated with a rise of 0.26 of a unit in the index of self-efficacy regarding global issues.

Associations with cognitive adaptability were moderate in most countries and exceeded a 0.3 of a point increase in the index only in Hong Kong (China) and Chinese Taipei; they were non-significant in only six countries. On average across OECD countries, speaking two or more languages was associated with a rise of 0.18 of a unit in the index of cognitive adaptability.

In Australia, Austria, Canada, New Zealand and Switzerland, the index of students' interest in learning about other cultures was strongly associated with speaking two or more languages (Figure VI.4.12). In most countries, the associations were modest; they were non-significant in only six countries. On average across OECD countries, speaking two or more languages was associated with a rise of 0.24 of a unit in the index of interest in learning about other cultures.

Similarly, students who reported that they speak two or more languages exhibited greater respect for people from other cultures. The associations were strong and exceeded 0.3 points increase in the index of respect for people from other cultures in Austria, Estonia, Germany, Hong Kong (China), Latvia, Malta and Switzerland. Associations were positive and significant in all but five countries and economies (the Dominican Republic, Korea, Panama and Singapore).

Attitudes towards immigrants were more positive among students who speak two or more languages. On average across OECD countries, speaking two or more languages was associated with an increase of 0.19 of a unit in the index of positive attitudes towards immigrants. The associations were strongest in Austria, Brunei Darussalam, Germany, Slovenia and Switzerland; they were non-significant in only three countries (the Dominican Republic, Hungary and Viet Nam).

In all countries and economies except the Dominican Republic and Panama, students who speak two or more languages exhibited greater awareness of intercultural communication. This association was the strongest in Estonia, Israel, Jordan and Malta. On average across OECD countries, speaking two or more languages was associated with a rise of 0.23 of a unit in the index of awareness of intercultural communication (Figure VI.4.13).

Multilingualism was also positively associated with students' ability to understand perspectives other than their own. However, the associations were moderate to weak. On average across OECD countries, speaking two or more languages was associated with a rise of 0.11 of a unit in the index of students' ability to understand different perspectives. The strongest associations were observed in Greece, Malta, New Zealand and Chinese Taipei.

Associations between speaking multiple languages and demonstrating the skills and attitudes needed to interact with people from different cultures could be reciprocal. In other words, students who have positive attitudes towards learning about and interacting with other cultures may also be motivated to study languages other than their own. Hence, such positive attitudes and proficiency in foreign languages could feed into each other through a virtuous cycle.

In summary, the findings show that language teaching and learning have become common around the world and are a priority in many education systems. Moreover, the positive association between speaking multiple languages and the eight student attitudes and dispositions towards intercultural communication and relations is a clear indication that expanding multilingual education could help students thrive in an interconnected world.

#### Is learning multiple languages at school positively related to students' attitudes?

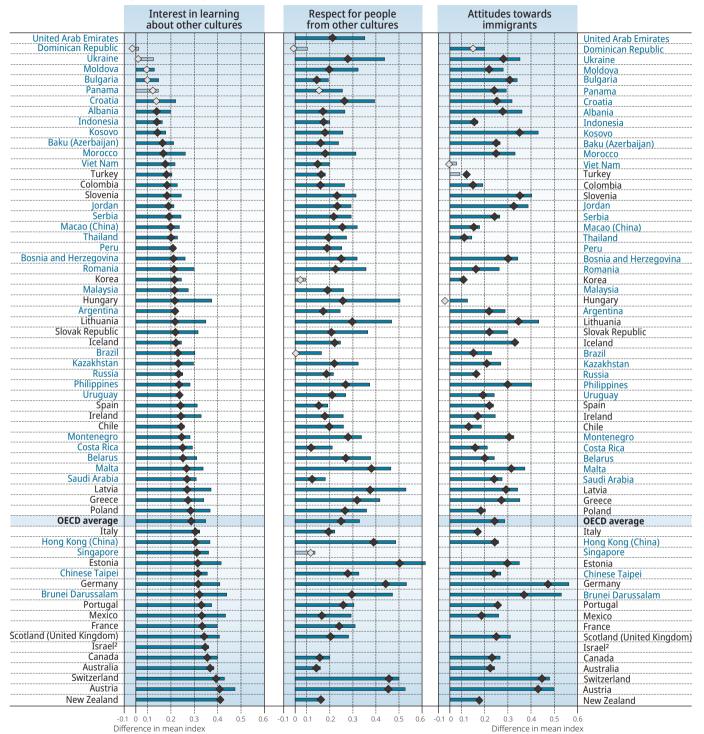
The positive associations between speaking multiple languages and students' attitudes and dispositions are mirrored by positive associations between learning multiple languages at school and the same attitudes and dispositions (Table VI.B1.4.13). Those associations are strong and positive across a majority of countries and economies and on average across OECD countries. They are attenuated when students' and schools' socio-demographic profiles are accounted for.

On average across OECD countries, learning one or more foreign languages (as opposed to learning none) is associated with a rise of 0.21 of a unit in the index of respect for people from other cultures and a rise of 0.19 of a unit in the indices of students' awareness of intercultural communication and students' self-efficacy regarding global issues. It is also positively associated with the indices of students' awareness of global issues and students' attitudes towards immigrants (a rise of 0.18 of a unit in both indices), students' interest in learning about other cultures (a rise of 0.14 of a unit), students' perspective taking (a rise of 0.11 of a unit) and students' cognitive adaptability (a rise of 0.08 of a unit).

#### Figure VI.4.12 Speaking two or more languages and attitudes towards other cultures

Differences in indices between students who speak two or more languages and those who do not

- ■■ Before accounting for socio-demographic Profile¹
- ♦ ♦ After accounting for socio-demographic Profile



<sup>1.</sup> The socio-demographic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Note: Statistically significant values are shown in a darker tone.

Countries and economies are ranked in ascending order of the differences in the index of interest in learning about other cultures, after accounting for gender, and students' and schools' socio-economic profile.

**Source**: OECD, PISA 2018 Database, Table VI.B1.4.12

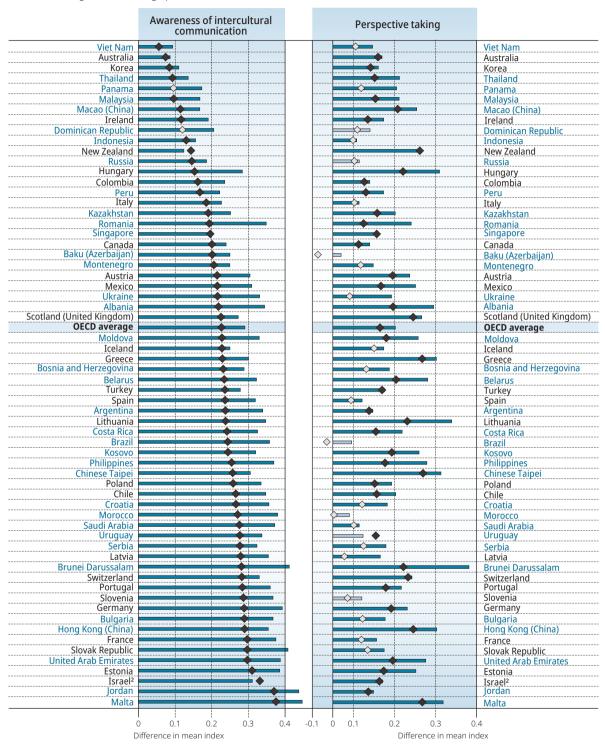
<sup>2,</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

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#### Figure VI.4.13 Speaking two or more languages and understanding others

Differences in indices between students who speak two or more languages and those who do not

- ■ Before accounting for socio-demographic status¹
- ◆ ♦ After accounting for socio-demographic status



<sup>1.</sup> The socio-demographic profile is measured by the PISA index of economic, social and cultural status (ESCS).

**Note**: Statistically significant values are shown in a darker tone.

Countries and economies are ranked in ascending order of the differences in the index of awareness of intercultural communication, after accounting for gender, and students' and schools' socio-economic profile.

Source: OECD, PISA 2018 Database, Table VI.B1.4.12.

<sup>2.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

The associations are positive for the following indices: 1) students' awareness of intercultural communication (in 37 of the 57 countries/economies with non-missing results); 2) students' self-efficacy regarding global issues (32 countries/economies); 3) students' awareness of global issues (41 countries/economies); 4) perspective taking (19 countries/economies); 5) students' interest in learning about other cultures (28 countries/economies); 6) students' respect for people from other cultures (34 countries/economies); 7) students' attitudes towards immigrants (32 countries/economies); and 8) students' cognitive adaptability (23 countries/economies).

One important question remains: Do monolingual students (those who speak just one language) have more positive attitudes and dispositions when they learn one or more foreign languages at school?

On average across OECD countries, 83% of students who speak only one language with others learn at least one foreign language at school. The proportions are relatively large and exceed 95% in 24 countries and economies. This shows that foreign-language learning opportunities are widespread, even among monolingual students. The largest proportions are observed in Bosnia and Herzegovina, Bulgaria, Estonia, Italy, Latvia, Lithuania, Poland, Romania, Serbia and Viet Nam (Table VI.B1.4.14).

In general, learning one or more foreign languages at school while being monolingual is positively associated with students' knowledge, skills, attitudes and dispositions (compared to monolingual students who do not learn foreign languages at school). However, these associations are moderate to weak, on average across OECD countries, and are attenuated once students' and schools' socio-demographic profiles are accounted for.

The associations are positive for the following indices:

- 1) students' awareness of intercultural communication (in 17 of the 44 countries/economies with valid results);
- 2) students' self-efficacy regarding global issues (17 countries/economies);
- 3) students' awareness of global issues (20 countries/economies);
- 4) perspective taking (5 countries/economies);
- 5) students' interest in learning about other cultures (9 countries/economies);
- 6) students' respect for people from other cultures (19 countries and economies);
- 7) students' attitudes towards immigrants (16 countries/economies); and
- 8) students' cognitive adaptability (5 countries/economies).

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#### Note

- 1. The comparability of scaled indices across countries and economies is examined in Annex A5. The annex presents the findings of in-depth measurement invariance analyses for every index used in PISA 2018, Volume VI.
- 2. The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

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<b>Wiseman, R., M. Hammer and H. Nishida</b> (1989), "Predictors of intercultural communication competence", <i>International Journal of Intercultural Relations</i> , Vol. 13/3, pp. 349-370, http://dx.doi.org/10.1016/0147-1767(89)90017-5	[3]



### Taking action for collective well-being and sustainable development

This chapter examines students' ability to take action for collective well-being and sustainable development. This fourth dimension of global competence builds on the three other dimensions and highlights the action-oriented and practical nature of these skills. The chapter explores students' sense of agency regarding global issues and their capacity to take action and highlights differences related to their socio-economic background. It also explores students' performance on the cognitive test items covering this dimension.

#### What the data tell us

- Students in Albania, Baku (Azerbaijan), Costa Rica, Jordan, Korea, Kosovo, Malta, Portugal, Singapore, Spain, Chinese Taipei and Turkey reported the highest levels of agency regarding global issues. The lowest levels were observed in Austria, Germany, Hungary, Latvia, the Russian Federation and the Slovak Republic.
- Students were most likely to report that they take action concerning energy consumption: some 71% of students across
  OECD countries reported that they do so. The second most common activity was following world events via Facebook and
  Twitter (64% of students reported that they do so).
- Students who exhibited more positive intercultural attitudes were more likely to report that they take action than those
  who exhibited less positive attitudes. This positive association held in almost all countries/economies and for all indices.
  Large differences in the number of actions taken were observed between students in the top and bottom quarters of the
  indices of students' interest in learning about other cultures and of agency regarding global issues.
- The largest proportions of correct answers in the part of the assessment covering taking action for sustainability and collective well-being were observed in Canada, Hong Kong (China), Korea, Scotland (United Kingdom), Spain and Chinese Taipei. In all of those countries and economies, students answered more than 40% of the items correctly.

The fourth dimension of global competence explores students' ability and willingness to take action for collective well-being and sustainable development (Boix Mansilla, V & Jackson, A.,  $2011_{[1]}$ ; UNESCO,  $2014_{[2]}$ ). This dimension focuses on young people's role as active and responsible members of society and refers to their readiness to respond to a given local, global or intercultural issue or situation. Students proficient in this dimension are willing and able to take informed, reflective action. This might involve standing up for a schoolmate whose human dignity is being threatened, initiating a media campaign at school about environmental issues, disseminating a personal viewpoint on the refugee crisis via social media or taking considered actions to avoid spreading a life-threatening virus. Students who are willing to take action are engaged in improving living conditions in their own communities and in building a more just, peaceful, inclusive and environmentally sustainable world (OECD,  $2018_{[3]}$ ; Council of Europe,  $2018_{[4]}$ ).

In recent years, the concept of global citizenship has emerged as a response to the growing need for people who are actively engaged in the development of sustainable societies. Since many of the challenges that the world is facing are global, responses to them should be too. However, individuals cannot be citizens of the world in the same way that they are citizens of a country (Davies, 2006<sub>[13]</sub>). This apparent paradox raises a question about the nature of global citizenship: How does it work?

Citizenship implies playing an active role that goes beyond having positive attitudes or emotions. It has implications for rights, responsibilities, duties and entitlements. Three components have emerged as key aspects of global citizenship: 1) social justice; 2) rights; and 3) culture and global links. Social justice means understanding the global implications of social and economic policy and being able to influence decision-making processes at the global level, as well as in other people's lives (Wringe,  $1999_{[14]}$ ). Rights, on the other hand, focus on the ethical side of citizenship, in the sense that global citizenship transcends national boundaries. Global citizens regard planet Earth as our common home. As such, the identity that unites human beings is not cultural, social, national or political, but rather ethical (Griffiths,  $1998_{[15]}$ ). This notion emphasises human rights and social responsibility (Lynch,  $1992_{[16]}$ ). Culture and global links highlight the complex notion of "us" and "them" in a world marked by migration and hybrid identities (Yamashita,  $2006_{[17]}$ ). Culture is not only about the origins of people, but also about the links between them and the outside world, whether social, cultural or economic. Global citizens are expected to understand the implication of actions for themselves and for others, and they should ultimately translate this understanding into actions for collective well-being and sustainable development.

Taking action is the ultimate goal of the three dimensions explored in previous chapters. Students who are able to examine local and global issues, who understand the perspectives of others and who are able to communicate effectively across different cultures should be capable of taking action for collective well-being and sustainable development. In PISA 2018, the capacity to take action was assessed using 2 questions in the student questionnaire and 14 test items in the cognitive test. One of the challenges in measuring this skill is that real actions are not directly observed. In this case, one has to explore the factors that enable effective action taking, such as understanding actions and their consequences, a sense of agency regarding global issues and self-reported information on activities in which students are involved.

#### A SENSE OF AGENCY REGARDING GLOBAL ISSUES

Agency regarding global issues<sup>1</sup> is defined as a worldview in which one sees oneself as connected to the world community and feels a sense of responsibility for its members. An engaged person, one with a sense of agency, has concerns for people in other parts of the world, as well as feelings of moral responsibility to try to improve others' conditions, irrespective of distance and cultural differences (Veronica Boix Mansilla,  $2016_{[5]}$ ). People who have a sense of agency regarding global issues care about future generations and so act to preserve the environmental integrity of the planet. They exercise agency with critical awareness of the fact that other people might have a different vision of what humanity needs, and they are open to reflecting on and changing their vision as they learn about those different perspectives. Rather than believing that all differences can be eliminated, they strive to create space for different ways of living with dignity (Engberg and Hurtado,  $2011_{[6]}$ ).

In recent years, the formation of a wider outlook on the world has gained importance with the rise of notions like global citizenship and global engagement (Andreotti,  $2009_{[7]}$ ; Paige et al.,  $2009_{[8]}$ ; Mannion et al.,  $2011_{[9]}$ ; de Oliveira Andreotti, Biesta and Ahenakew,  $2014_{[10]}$ ). Global agency is seen as a learning task through which adolescents learn about people and ideas to gain a better understanding of them. Such contact with people and ideas can dispel prejudice and ultimately stimulate a desire to take action for improving collective well-being and sustainable development (Allport,  $1954_{[11]}$ ). Students who feel a sense of agency regarding global issues are those who perceive themselves as global citizens who have certain responsibilities towards others and the world.

PISA 2018 asked students the extent to which they agree ("strongly disagree", "disagree", "agree", "strongly agree") with the following six statements: "I think of myself as a citizen of the world"; "When I see the poor conditions that some people live under, I feel a responsibility to do something about it"; "I think my behaviour can impact people in other countries"; "It is right to boycott companies that are known to provide poor workplace conditions for their employees"; "I can do something about the problems of the world"; and "Looking after the global environment is important to me". Responses to these statements were combined to create the index of agency regarding global issues. Positive values in this index indicate that students have a greater sense of global-mindedness than the average student across OECD countries.

The results show that students in Albania, Baku (Azerbaijan), Costa Rica, Jordan, Korea, Kosovo, Malta, Portugal, Singapore, Spain, Chinese Taipei and Turkey reported the highest level of agency regarding global issues. The lowest levels of agency were observed in Austria, Germany, Hungary, Latvia, the Russian Federation (hereafter "Russia") and the Slovak Republic (Figure VI.5.1). In 53 of 63 countries and economies that took the student global competence questionnaire, girls reported greater agency regarding global issues than boys. The largest gender gaps in favour of girls were observed in Australia, Ireland, Jordan, Lithuania and New Zealand. By contrast, no difference between boys and girls was observed in Baku (Azerbaijan), Belarus, Bosnia and Herzegovina, Hong Kong (China), Kosovo, Montenegro, Panama, Russia, Thailand and Viet Nam. Moreover, in all countries/economies, advantaged students (those in the top quarter of the PISA index of economic, social and cultural status) reported greater agency regarding global issues. The socio-economic differences in this index were widest in Australia, Austria, France, Germany, Iceland, Ireland, Korea, Kosovo and Scotland (United Kingdom) and narrowest in Peru, Russia and Turkey.

Few differences in agency regarding global issues were observed between immigrant and native-born students. In seven countries and economies (Australia, Canada, France, Hong Kong [China], Ireland, Saudi Arabia and New Zealand), immigrant students exhibited greater agency regarding global issues; the reverse was true only in Kazakhstan and Lebanon (Table VI.B1.5.3).

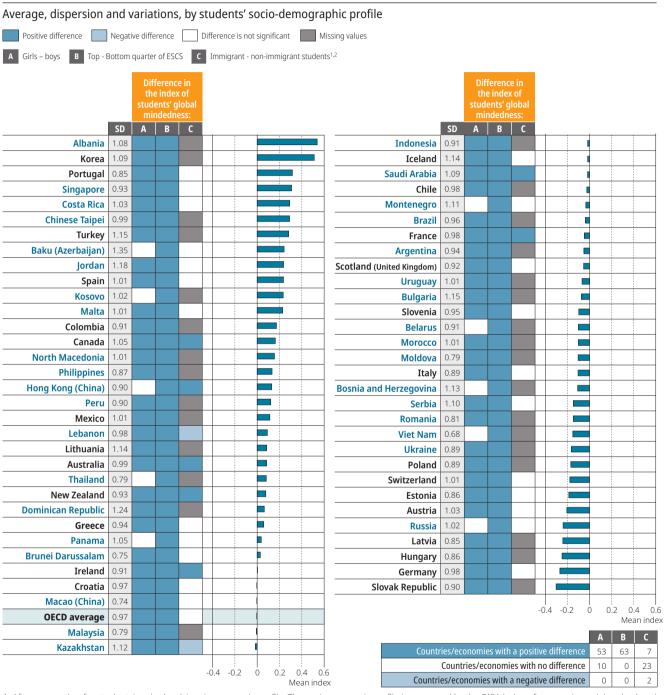
The index of agency regarding global issues varied between students within each participating country and economy. The widest dispersions were found in Baku (Azerbaijan), the Dominican Republic and Jordan, while students in Brunei Darussalam, Macao (China), Malaysia, the Republic of Moldova (hereafter "Moldova"), Thailand and Viet Nam tended to respond in similar ways. Between-school variations in this index were also small. Between-school variation exceeded 10% of all variation only in Lebanon and exceeded 5% only in Germany (Table VI.B1.5.1). Large dispersions indicate greater inequalities in the distribution of this attitude, while large variations between schools are a sign of greater stratification on this measure. Patterns of polarisation were found to be similar to those of other indices. Students in the middle two quarters of the index of agency regarding global issues had similar mean indices, while those in the top quarter showed much higher values in the index than those in the third quarter, and those in the bottom quarter showed much lower values than those in the second quarter (Table VI.B1.5.3).

Some 78% of students, on average across OECD countries, agreed or strongly agreed that looking after the global environment is important to them (Figure VI.5.2). Some 76% of students agreed or strongly agreed that they think of themselves as citizens of the world; 67% agreed or strongly agreed that when they see the poor conditions that some people in the world live under, they feel a responsibility to do something about it; 66% agreed or strongly agreed that it is right to boycott companies that are known to provide poor workplace conditions for their employees; 58% agreed or strongly agreed that they can do something about the problems of the world; and 56% agreed or strongly agreed that they think their behaviour can impact people in other countries.

#### Taking action for collective well-being

Students were more likely to agree with statements that did not involve an active role (i.e. the first two statements) than with statements that imply that they need to take action. This could indicate some degree of pessimism about whether students can make a difference. In other words, students may well be aware of a global issue and have positive attitudes about it, but remain reluctant to take action or may not see themselves as responsible for solving that issue (Table VI.B1.5.1).

Figure VI.5.1 Students' agency regarding global issues



<sup>1.</sup> After accounting for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

**Note**: The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

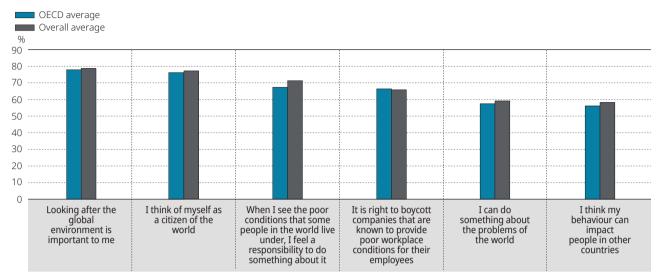
Countries and economies are ranked in descending order of the index of students' agency regarding global issues.

Source: OECD, PISA 2018 Database, Tables VI.B1.5.1 and VI.B1.5.3. StatLink III https://doi.org/10.1787/888934170070

<sup>2.</sup> Differences between immigrant and non-immigrant students are only presented for countries and economies where more than 5% of students have an immigrant background. The values for countries/economies with smaller proportions of immigrant students are reported as missing.

Figure VI.5.2 Students' agency regarding global issues

#### OECD and overall averages



**Source**: OECD, PISA 2018 Database, Table VI.B1.5.1.

StatLink https://doi.org/10.1787/888934170089

#### HOW AGENCY REGARDING GLOBAL ISSUES IS RELATED TO STUDENTS' ATTITUDES

Having a sense of agency regarding global issues is likely to be associated with knowledge about and self-efficacy regarding those issues and positive attitudes towards other cultures. These associations highlight the conditional nature of the fourth dimension of global competence. One cannot feel a sense of agency regarding global issues, and ultimately be willing to take action, without being interested in those issues, without respecting others, and while lacking the confidence required for an active role. The following sections explore the associations between agency regarding global issues and key attitudes.

Associations between the index of agency regarding global issues and the eight indices explored in previous chapters were positive, albeit modest in strength. The strongest associations were with attitudes towards immigrants (correlation coefficient of 0.36), followed by awareness of intercultural communication (correlation coefficient of 0.31) and students' interest in learning about other cultures (correlation coefficient of 0.3). Correlation coefficients with the indices of knowledge of global issues, self-efficacy regarding global issues, perspective taking, respect for people from other cultures and cognitive adaptability were slightly weaker and ranged in strength between 0.18 and 0.26 (Figure VI.5.3). Minor variations in the strength of the associations were observed between countries/economies, and few correlation coefficients exceeded the threshold of 0.5.

The positive sign of those associations confirms the hypothesis that students' agency regarding global issues is a product (and a producer) of those positive attitudes and dispositions. However, the weakness of those associations indicates that the different indices are distinct enough from each other and measure different constructs. In other words, the nine attitudes and dispositions form the complementary ingredients that enable students to live in an interconnected world.

#### **CAPACITY TO TAKE ACTION**

The capacity to take action is seen as the culmination of the knowledge, skills and attitudes acquired by students. Students who have knowledge of global and intercultural issues, who are able to understand the perspectives of others and who have interest in other cultures should also be able to translate such positive attributes into actions that benefit their local communities and the world in which they live (Milfont and Sibley, 2012<sub>[12]</sub>).

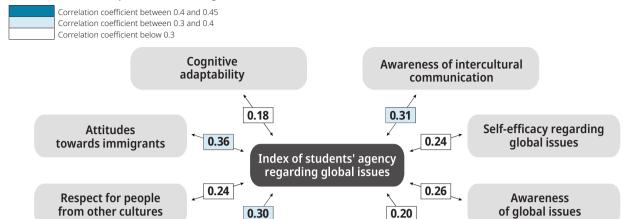
PISA 2018 assessed students' willingness to take action using a series of eight statements requiring a yes-or-no answer, covering topics related to environmental protection, gender equality, and staying informed about international and social issues, such as poverty and human rights. The eight statements were: "I reduce the energy I use at home to protect the environment"; "I choose certain products for ethical or environmental reasons, even if they are a bit more expensive"; "I sign environmental or social petitions online"; "I keep myself informed about world events via Twitter or Facebook"; "I boycott products or companies for political, ethical or environmental reasons"; "I participate in activities promoting equality between men and women"; "I participate in activities in favour of environmental protection"; and "I regularly read websites on international social issues (e.g. poverty, human rights)".

Figure VI.5.3 Engagement with global issues and other student attitudes

Interest in learning

about other cultures

#### Based on students' reports, OECD average.



**Source**: OECD, PISA 2018 Database, Table VI.B1.5.5

StatLink https://doi.org/10.1787/888934170108

Students were most likely to report that they take action concerning energy consumption. Some 71% of students across OECD countries reported that they reduce the energy they consume at home by turning the heating or air-conditioning down in order to protect the environment (Figure VI.5.4). The second most common activity was following world events via Facebook and Twitter (64% of student reported that they do so). Some 46% of students reported that they read websites on international social issues, and around 45% reported that they choose certain products for ethical or environmental reasons even if they are more expensive. The least common actions among students were participating in activities in favour of environmental protection (39% of students reported that they do so), participating in activities promoting gender equality (33%), boycotting products or companies for political, ethical or environmental reasons (27%), and signing environmental or social petitions online (25%).

Perspective taking

These findings show that students are more likely to engage with simple actions that do not require time or financial commitments. Reducing energy consumption is the easiest and most common action. Following global issues via social media and the Internet, which are commonly used and readily available to adolescents, is the second most commonly exhibited form of agency. The least common actions are those that require active participation or involve forms of active citizenship that adolescents may not be familiar with or that require time and effort, such as signing petitions.

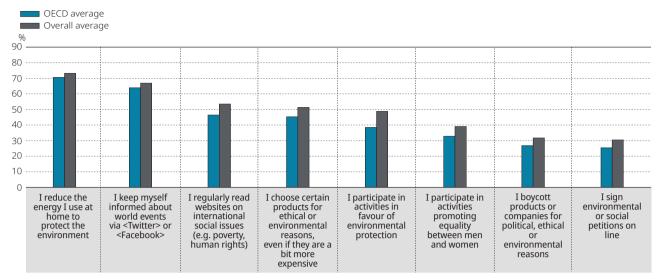
However, there were substantial variations between countries. For instance, more than 80% of students in Albania, Colombia, Costa Rica, the Dominican Republic, Indonesia, Jordan, Kosovo, Macao (China), Peru, the Philippines, Singapore, Chinese Taipei, Thailand, Turkey and the United Arab Emirates reported that they reduce energy consumption, while less than 65% of students in Belarus, Bulgaria, Germany, Italy, Latvia, Montenegro, Russia, Scotland (United Kingdom), Serbia, the Slovak Republic, Switzerland and Ukraine so reported. In contrast, signing environmental or social petitions was relatively more common than the OECD average (more than 50% of students reported doing so) in Baku (Azerbaijan), Jordan and Turkey, while it was uncommon in Australia, Canada, Croatia, France, Germany, Ireland, Italy, Macao (China) and Portugal (less than 20% of students reported that they sign petitions).

Participation in activities to promote equality between men and women was common, with more than 50% of students reporting engagement in this type of action in Baku (Azerbaijan), the Dominican Republic, Iceland, Indonesia, Jordan, Morocco, the Philippines, Chinese Taipei, Thailand, Turkey, the United Arab Emirates and Viet Nam. Student participation in these activities was least common in Belarus, Estonia, France, Germany, Hungary, Italy, Latvia, Scotland (United Kingdom), Switzerland and Ukraine.

More than 75% of students in Belarus, Hong Kong (China), Lithuania, Malta, Moldova, the Philippines, Portugal, Russia, Scotland (United Kingdom), Chinese Taipei, Thailand, the United Arab Emirates, Ukraine and Viet Nam reported that they follow global events via social media, while less than 55% of students in Austria, Brunei Darussalam, Germany, Kazakhstan, Panama and Switzerland so reported.

Figure VI.5.4 Students' capacity to take action

#### OECD and overall averages



Source: OECD, PISA 2018 Database, Table VI.B1.5.8.

StatLink https://doi.org/10.1787/888934170127

#### Students' knowledge, skills and attitudes and capacity to take action

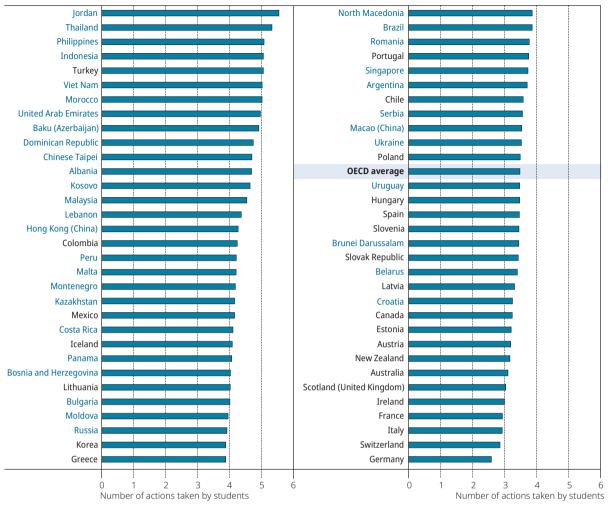
This subsection explores students' capacity to take action as reflected in their sense of self-efficacy regarding global issues; 1) awareness of global issues; 1) capacity to understand different perspectives; 3) interest in learning about other cultures; 4) respect for people from other cultures; 5) attitudes towards immigrants; 6) awareness of intercultural communication; 7) cognitive adaptability; and 8) agency regarding global issues. Tables VI.B1.5.9 to VI.B1.5.16 present the proportion of students who reported taking action by quarters of those indices. In general, students with higher values in these indices were more likely to report that they take actions for collective well-being and sustainable development. The differences between the top and bottom quarters of the indices were positive and significant across most countries/economies and for all types of actions.

Table VI.B1.5.17 presents the total number of actions for collective well-being and sustainable development that each student reported that he or she takes. This consists of a summative index of the eight activities the questionnaire asked students about. The index has a minimum of 0 and a maximum of 8. This index has an average of 3.5 across OECD countries and a standard deviation of 2. Students in Indonesia, Jordan, Morocco, the Philippines, Thailand, Turkey and Viet Nam reported taking more than five actions, on average, while those in France, Germany, Ireland, Italy and Switzerland reported taking fewer than three (Figure VI.5.5).

In 26 countries and economies, boys reported a greater number of actions taken for sustainability and collective well-being. The largest gender differences in favour of boys were observed in Baku (Azerbaijan), the Dominican Republic, Kazakhstan, Kosovo and Serbia. The reverse was true in 17 countries and economies, with the largest differences in favour of girls observed in Canada, Iceland, Ireland and New Zealand (Table VI.B1.5.19). In 47 countries and economies out of the 64 that took the global competence student questionnaire, students from an advantaged background reported a greater number of actions taken for sustainability and collective well-being. The largest socio-economic differences are found in Canada, Macao (China), Morocco, New Zealand, Scotland (United Kingdom) and Viet Nam. Minor differences were observed between immigrant and non-immigrant students. Among countries and economies with more than 5% immigrant students, immigrants reported taking more actions for sustainability and collective well-being in seven countries/economies while the reverse was true only in five.

Figure VI.5.6 shows the average number of actions taken by students across OECD countries by quarters of the indices of students' self-reported knowledge, skills, attitudes and dispositions. Students who exhibited more positive attitudes (those in the top quarter of the nine indices) were more likely to report that they take action than those who exhibited less positive attitudes (those in the bottom quarters of the indices). This positive association held in all countries/economies that took the questionnaire and for almost all indices. Large differences in the number of actions taken (greater than 0.5 of a standard deviation) between students in the top and bottom quarters of indices were observed for the indices of students' interest in learning about other cultures and agency regarding global issues. It logically follows that students are more likely to take action if they believe that they can make a difference and feel a moral obligation towards others in the world.

Figure VI.5.5 Number of actions taken by students for collective well-being and sustainable development

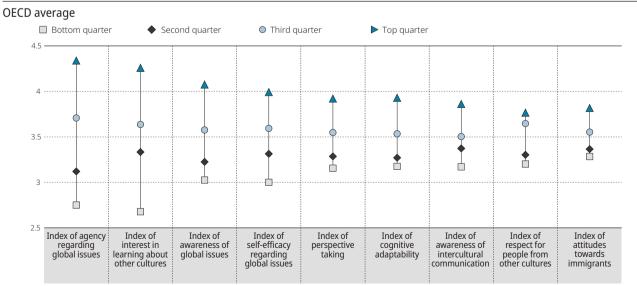


Countries and economies are ranked in descending order of the number of actions taken by students for collective well-being and sustainable development.

Source: OECD, PISA 2018 Database, Table VI.B1.5.17.

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Figure VI.5.6 Number of actions taken, by students' attitudes



**Source**: OECD, PISA 2018 Database, Table VI.B1.5.17.

These positive associations held in most countries, even after accounting for students' and schools' socio-economic profile. Figure VI.5.7 shows the rise in the number of actions students take associated with an increase of one unit in each of the indices. The strongest associations were with the indices of interest in learning about other cultures and agency regarding global issues.

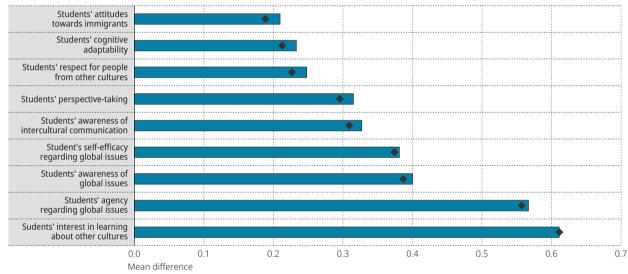
On average across OECD countries, an increase of one unit in the index of interest in learning about other cultures was associated with a rise of 0.61 in the number of actions taken by students. All associations were positive and significant. The strongest associations were observed in Australia, Iceland, Ireland, Korea, New Zealand, Scotland (United Kingdom), Slovenia and Chinese Taipei. Similarly, an increase of one unit in the index of agency regarding global issues was associated with a rise of 0.56 in the number of actions taken by students. The associations were particularly strong in Australia, Ireland, Macao (China), Moldova, New Zealand, Romania, Scotland (United Kingdom) and Viet Nam (Table VI.B1.5.18).

Figure VI.5.7 Change in students' attitudes and in number of actions taken

#### **OECD** average

■ Before accounting for students' and schools' socio-economic profile¹
◆ After accounting for students' and schools' socio-economic profile

Change in the number of actions taken by students associated with a one-unit increase in the following indices:



1. The socio-demographic profile is measured by the PISA index of economic, social and cultural status (ESCS). The school socio-economic profile is measure by average ESCS for the school.

**Note**: All associations are statistically significant. **Source**: OECD, PISA 2018 Database, Table VI.B1.5.18.

StatLink https://doi.org/10.1787/888934170184

#### Box VI.5.1. Students' and parents' capacity to take action

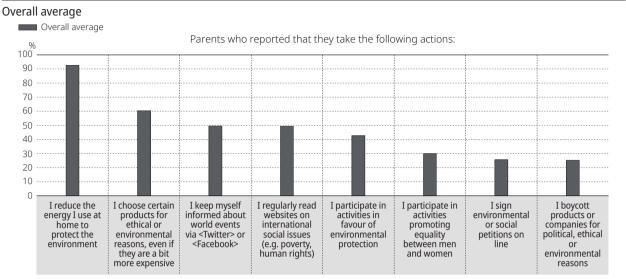
Chapter 2 explored the relationships between parents' and students' awareness of global issues. Findings show that parents, regardless of their socio-economic background, may impart certain interests and knowledge to their children and, arguably, may reinforce certain attitudes. This finding is in line with existing evidence on parents' role in the lives of their children (Black, Devereux and Salvanes, 2003<sub>[18]</sub>). This chapter explores the associations between students' and parents' capacity to take action. Parents were presented with the same eight statements as their children about actions taken for collective well-being and sustainable development.

Figure VI.5.8 presents the proportion of parents who reported that they take action for collective well-being and sustainable development. The findings show that across the 14 countries that distributed the parent questionnaire, 93% of parents reported that they reduce energy consumption at home. Some 60% of parents reported that they choose certain products for ethical reasons and 49% of parents reported that they read websites on social issues and follow world events via social media. The least common actions parents take were: 1) participating in activities in favour of environmental protection (43% of parents reported that they do this); 2) participating in activities to promote gender equality (30%); 3) signing petitions on line (26%); and 4) boycotting products for ethical or environmental reasons (25%).

#### Taking action for collective well-being

When comparing parents' and students' responses on these same questions, it is clear that parents were more likely to report that they reduce energy consumption at home or that they choose certain products for ethical reasons, while students' were more likely to report that they follow world events on the Internet or via social media.

Figure VI.5.8 Parents who take action for collective well-being and sustainable development



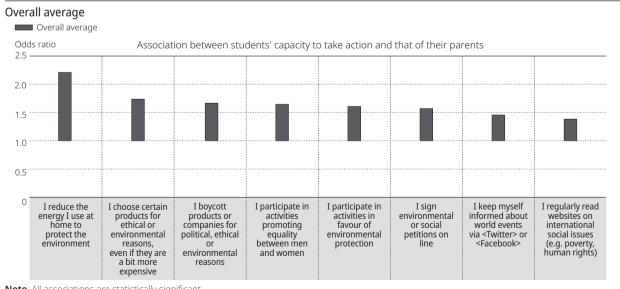
Source: OECD, PISA 2018 Database, Table VI.B1.5.7.

StatLink https://doi.org/10.1787/888934170203

Figure VI.5.9 presents the association between parents' and students' capacity to take action. In general, parents who perform a particular action, such as reducing energy consumption or engaging in a participative activity, are likely to have children who do the same. Associations between parents taking an action and the likelihood that their children take the same action were positive and significant, on average, in most countries/economies that distributed the parents' questionnaire.

The strongest association observed was between parents reducing energy consumption by turning off the lights, heating or air-conditioning and children doing the same. On average across the 14 countries and economies that distributed the parent questionnaire, the children of parents who reported that they take this action were 100% more likely to follow suit than the children of parents who reported that they do not take this action. The other associations were also positive and significant, with the children of parents who reported that they take those actions being about 50% to 70% more likely to take the same actions as their parents.

Figure VI.5.9 Students and parents who take action for collective well-being and sustainable development



Note: All associations are statistically significant.

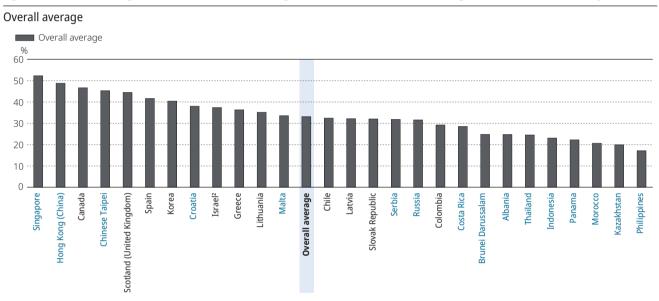
Source: OECD, PISA 2018 Database, Table VI.B1.5.7.

## TAKING ACTION FOR COLLECTIVE WELL-BEING AND SUSTAINABLE DEVELOPMENT: PERFORMANCE ON THE COGNITIVE TEST

Students who sat the global competence test in the 27 participating countries and economies answered 14 test items covering students' capacity to take action for collective well-being and sustainable development. Figure VI.5.10 presents the average proportion of correct answers on all test items. As explained in Chapter 2, answers were scored as full credit, partial credit or no credit. For the purpose of this analysis, partial credit was coded as no credit.

The findings show that the largest proportion of correct answers on these test items were observed in Canada, Hong Kong (China), Korea, Scotland (United Kingdom), Singapore, Spain and Chinese Taipei. In all of these countries and economies, students answered more than 40% of the items correctly; students in Singapore answered 52% of the items correctly. On average across all countries and economies, students answered 33% of the test items correctly. The smallest proportions of correct answers (less than 25%) were observed in Albania, Brunei Darussalam, Indonesia, Kazakhstan, Morocco, Panama, the Philippines and Thailand.

Figure VI.5.10 Percentage of correct answers: Taking action for collective well-being and sustainable development



Note: Taking action for collective well-being and sustainable development was assessed using 14 items in the cognitive test.

Only the 27 countries and economies that conducted the cognitive test are shown.

Countries and economies are ranked in descending order of the percentage of correct answers on the cognitive test.

Source: OECD, PISA 2018 Database, Table VI.B1.5.6.

StatLink https://doi.org/10.1787/888934170241

Nine released test items covered students' capacity to take action for collective well-being and sustainable development. The test items originated from three test units: "ethical clothing", "language policy" and "rising sea levels". Those test items ranged in difficulty from proficiency Level 2 to proficiency Level 5.

#### Language policy: Test item 2

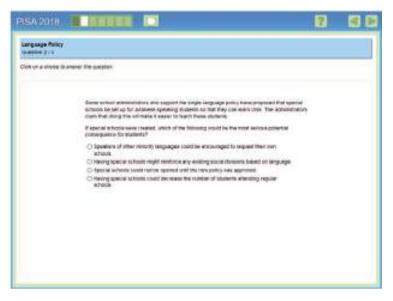
The test item with the largest proportion of correct answers among released items was Item 2 in the test unit "language policy". The language policy unit is about a fictional country, Armaz, where the fictional language, Ursk, is spoken. A group of Ursk-speaking lawmakers proposed a policy that would require all public schools to teach all classes except foreign-language classes in Ursk. There are a number of citizens in Armaz who speak Jutanese, which is a minority language in Armaz but is spoken widely outside its borders. They are concerned about the effects of this policy. In this unit, PISA students must consider the impacts of the policy and reason through its possible consequences. The content domain of this unit was categorised as evaluating actions and consequences, culture and intercultural relations with an emphasis on perspective taking, stereotypes, discrimination and intolerance.

In the second test item in this unit, students must consider four possible consequences (see figure below) and determine which one would be the most serious if the Ursk-only policy is enacted. All consequences are possible, but one summarises a serious potential consequence of the policy. Here, B is the correct answer. In order to understand why this is the correct answer, students must consider the fact that a special school would remove Jutanese-speaking students from the general population. By isolating

#### Taking action for collective well-being

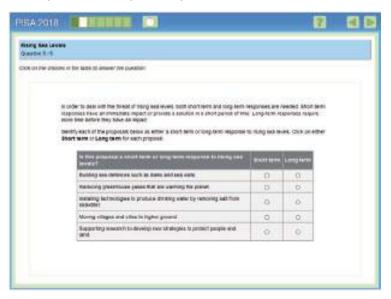
a group of students like this, the Ursk-speaking students would have fewer personal interactions with them, which could lead to Ursk-speaking students relying on generalisations and stereotypes rather than interactions with individuals. This could then lead to widening divisions between Ursk and Jutanese speakers. This test item corresponds to proficiency Level 3.

Across the 27 participating countries and economies, 49% of students answered this test item correctly. At least 60% of students in Hong Kong (China), Korea, Singapore and Chinese Taipei answered this question correctly (Table VI.B1.5.6).



#### Rising sea levels: Test item 5

The test item with the smallest proportion of correct answers among released items was Item 5 in the unit "rising sea levels". In this test item, students were asked to consider a set of proposals and identify which represent a short-term response to rising sea levels and which a long-term response. The students must recognise which proposals are a response to an immediate need of the country and which are longer-term responses to more systemic challenges. Here, sea defences, desalination technologies for drinking water and moving villages are all short-term responses. Each proposed response might require several years to complete, but they all address short-term problems faced by people who live on an island in the midst of rising sea levels. By contrast, reducing greenhouse gases and supporting research for new protection strategies are responses that must unfold over a longer period of time. Each of these solutions could take decades before people feel their effects and before they fully address the systemic causes of rising sea levels. The correct responses, therefore, were: Short term, Long term, Short term, Long term. This test item corresponds to proficiency Level 5, as it requires knowledge about global issues, critical evaluation of actions and consequences, and response on a complex multiple-choice format.



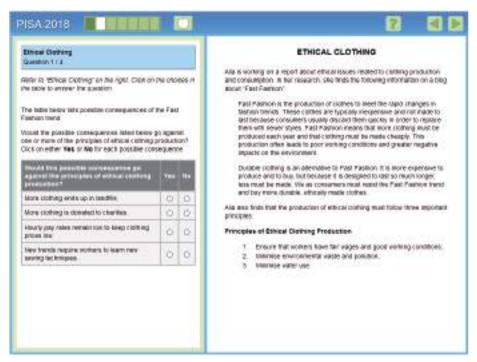
Only 12% of students in the 27 participating countries and economies answered this test item correctly. The largest proportions of students who gave correct answers were observed in Hong Kong (China) (23% of students) and Chinese Taipei (28%).

#### **Ethical clothing: Test item 1**

In another released test unit, "ethical clothing", students were introduced to the concept of "fast fashion", which is a trend whereby clothing is inexpensive, of poorer quality and produced to meet the frequent changes to fashion trends. This clothing is not intended to be worn by consumers for several seasons; instead, it is likely to be discarded or donated once the style has become less popular. Students also learn about an alternative concept: durable fashion. Durable clothing is more expensive, of better quality and is intended to be worn over a longer period. In addition, students are told about three principles of ethical clothing production: fair wages, minimising environmental waste and minimising water usage. Throughout the unit, students are asked to consider the consequences of clothing production and make connections with these principles. The content domain of this unit was categorised as environmental sustainability, with a focus on policies, practices and behaviours for environmental sustainability.

In the first test item in this unit, a list of four possible consequences of the fast fashion trend is presented (see figure below), and students need to decide whether each consequence violates one or more of the principles of ethical clothing production. The first and third consequences violate the principles. The first consequence violates the second principle because more clothing in landfills adds to environmental waste instead of minimising it. The third consequence violates the first principle because keeping pay rates low means the company or industry is not working to ensure that workers earn fair wages. The second and fourth consequences do not violate the principles. To receive credit on this item, students had to answer all parts of the item correctly. The correct answers are: Yes, No, Yes, No. This item corresponds to proficiency Level 4.

On average across all countries and economies that conducted the test, 26% of students gave a correct answer to this item. The largest proportions of students who answered correctly (more than 40%) were observed in Canada, Hong Kong (China), Korea, Singapore and Chinese Taipei; the smallest proportions (less than 15%) were observed in Indonesia, Kazakhstan, Morocco, Panama, the Philippines and Thailand.



#### Taking action for collective well-being

### Note

- 1. The comparability of scaled indices across countries and economies is examined in Annex A5. The annex presents the findings of in-depth measurement invariance analyses for every index used in PISA 2018, Volume VI.
- 2. The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

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This chapter examines the links among the knowledge, skills and attitudes needed to thrive in an interconnected world. It explores students' performance on the cognitive global competence test and analyses how performance is related to students' demographics and their global and intercultural skills, attitudes and dispositions. The chapter also examines how certain students' outcomes are associated with system-level factors.

#### What the data tell us

- On the global competence cognitive test, students in Canada, Croatia, Greece, Hong Kong (China), Israel<sup>1</sup>, Korea, Latvia, Lithuania, Scotland (United Kingdom), Singapore, the Slovak Republic, Spain and Chinese Taipei scored significantly higher than the overall average, while those in Albania, Brunei Darussalam, Chile, Colombia, Costa Rica, Indonesia, Kazakhstan, Morocco, Panama, the Philippines, Serbia and Thailand scored below the average. Students' performance in Malta and the Russian Federation was not significantly different from the average.
- The top-performing countries/economies were Canada, Hong Kong (China), Scotland (United Kingdom), Singapore and Chinese Taipei, with mean performance scores more than 50 points above the overall average.
- The range and variation of relative scores after accounting for performance in mathematics, science and reading were noticeably smaller than that of raw performance scores. Canada, Colombia, Greece, Israel, Panama, Scotland (United Kingdom), Singapore and Spain showed the highest relative performance in global competence, while Albania, Brunei Darussalam, Kazakhstan, Korea and the Russian Federation showed the lowest relative performance.
- Across all countries and economies, positive associations were observed between performance on the cognitive test
  and students' attitudes and dispositions, notably with students' respect for people from other cultures, attitudes towards
  immigrants and self-efficacy regarding global issues.

Professional success in the 21st century requires that students know about global issues and other cultures and have the ability to interact and communicate effectively with others (British Council, 2013<sub>[1]</sub>). Such skills are important for individuals, but also for communities and societies as a whole. This chapter examines the links among the knowledge, skills and attitudes needed to thrive in an interconnected world. The chapter first explores students' performance on the cognitive test in global competence. It then investigates variations in performance related to student characteristics and the association between performance on the cognitive test and students' self-reported skills, attitudes and dispositions. The chapter also examines the relationship between various student outcomes and system-level factors, such as per capita GDP, employment and immigration.

#### THE PISA 2018 GLOBAL COMPETENCE COGNITIVE ASSESSMENT

As described in Chapter 1, the global competence cognitive assessment was conducted at the same time as the PISA 2018 test of reading, mathematics and science. The global competence assessment consisted of 69 test items organised in 18 units and in 4 clusters (OECD, forthcoming $_{[2]}$ ). As discussed earlier, the global competence framework identifies four dimensions that together form the foundation of the multidimensional construct of global competence: 1) examine issues of local, global and cultural significance; 2) understand and appreciate the perspectives and worldviews of others; 3) engage in open, appropriate and effective interactions across cultures; and 4) take action for collective well-being and sustainable development. Each of the dimensions is supported by a combination of knowledge, skills, attitudes and values. The global competence cognitive test in the 2018 main survey assessed three cognitive processes that support global competence: 1) evaluate information, formulate arguments and explain issues and situations; 2) identify and analyse multiple perspectives; and 3) evaluate actions and consequences. The cognitive process relating to the third dimension, "engage in open, appropriate and effective communication across cultures", was not assessed in the cognitive test.

The first cognitive process supporting students' capacity to examine local, global and intercultural issues was tested using 37 test items assessing cognitive sub-processes such as selecting sources, weighing sources' reliability and relevance, employing sources as a form of reasoning with evidence, and describing and explaining complex situations or problems. The second cognitive process, which supports understanding and appreciating the perspectives and worldviews of others, was assessed using 18 test items covering cognitive sub-processes such as recognising perspectives and worldviews and identifying connections. The cognitive process supporting the fourth dimension of global competence, taking action for collective well-being and sustainable development, was assessed using 14 test items covering cognitive sub-processes such as considering actions and assessing consequences and implications.

Each test unit in the assessment had a primary focus on a particular global or intercultural issue or knowledge area. Some units had a secondary focus. The framework specified four major knowledge domains that were deemed relevant to students regardless of their specific socio-cultural background. The four major knowledge domains were: culture and intercultural relations; socio-economic development and interdependence; environmental sustainability; and institutions, conflicts and human rights. The scenarios were developed to correspond to one of the four knowledge domains, with the objective of achieving the widest coverage across the test units.

Chapters 2, 3, and 5 present results on individual test items from the five released test units. This chapter analyses the scaled indices (i.e. plausible values) constructed using students' answers to all 69 test items in the cognitive test. Results of a dimensionality analysis based on the PISA 2018 pilot study suggested that the test items can be reported on one unidimensional scale. Those findings were confirmed by analyses of data from the main survey.<sup>2</sup>

It is important to note that the cognitive test only covers the cognitive aspects of global competence, which include knowledge and cognitive skills. Answers to the test items were used to create a unidimensional scale of those cognitive aspects (i.e. plausible values). However, the concept of global competence itself is multidimensional and includes cognitive aspects in addition to non-cognitive skills, attitudes and values.

#### PERFORMANCE IN GLOBAL COMPETENCE

This subsection focuses on students' average performance on the cognitive test before and after accounting for their proficiency in other subjects (i.e. reading, mathematics and science), variations in their performance and the proportion of students who achieved a certain level of performance.

#### Average level of performance in the global competence cognitive test

Of the 27 countries and economies that participated in the global competence cognitive test, only 11 were OECD countries. For this reason, all averages presented in this chapter are for all 27 participating countries and economies combined.<sup>3</sup>

Figure VI.6.1 shows the average performance on the cognitive test for each country and economy and for which pair of countries and economies the difference is not statistically significant. For each country and economy in the middle column, differences in performance with the countries/economies listed in the right column are not statistically significant. For instance, Singapore scored higher than all other 26 countries and economies, while Canada scored higher than all other countries/economies but lower than Singapore.

The countries and economies in Figure VI.6.1 are divided into three groups: those whose mean scores are statistically around the overall average (highlighted in white); those whose mean scores are above the overall average (highlighted in blue); and those whose mean scores are below the overall average (highlighted in grey). Students in Canada, Croatia, Greece, Hong Kong (China), Israel, Korea, Latvia, Lithuania, Scotland (United Kingdom), Singapore, the Slovak Republic, Spain and Chinese Taipei scored significantly higher than the overall average, while those in Albania, Brunei Darussalam, Chile, Colombia, Costa Rica, Indonesia, Kazakhstan, Morocco, Panama, the Philippines, Serbia and Thailand scored below the average. Students' performance in Malta and the Russian Federation (hereafter "Russia") was not significantly different from the average.

The top-performing countries, in descending order, were: Singapore, Canada, Hong Kong (China), Scotland (United Kingdom) and Chinese Taipei, with mean performance scores more than 50 points above the overall average (overall average score = 474 points). By contrast, the countries with the lowest mean performance (50 score points below average) were, in descending order: Thailand, Panama, Indonesia, Kazakhstan, Morocco and the Philippines.

While differences in average performance across countries and economies were large, the gap that separates the highest-performing and lowest-performing students within each country was even larger. The standard deviation summarises the variation in performance among 15-year-old students within each country/economy across the entire distribution. The average standard deviation in performance in the global competence cognitive assessment was 91 score points. Variations measured by the standard deviation in performance scores were the largest in Canada, Israel, Malta, Scotland (United Kingdom) and Singapore (exceeding 100 score points), while the smallest variations in performance were found in Albania, Indonesia, Kazakhstan, Morocco and Thailand (not exceeding 80 score points) (Table VI.B1.6.1).

Figure VI.6.2 shows a scatterplot of the mean and standard deviation of the performance scores. Canada, Scotland (United Kingdom) and Singapore stand out as three countries with the highest mean performance and greatest variations, while Indonesia, Kazakhstan, Morocco and the Philippines showed lower mean performance and the smallest variations.

Moreover, results of the decomposition of the total variance in performance between schools and within schools revealed that most variations were observed within schools. However, a relatively large proportion of the variance lies between schools. In 19 of the 27 countries and economies that participated in the global competence cognitive test, the proportion of between-school variance to total variance exceeds 30%; in Croatia, Israel, Morocco, Serbia and the Slovak Republic, it exceeds 40% (Table VI.B1.6.1). This is similar to findings from the reading test, where 29% of average variation in reading performance was observed between schools (OECD, 2019<sub>[3]</sub>). Larger between-school dispersions could result from stratification of students between schools according to their socio-demographic characteristics or their prior academic performance.

#### Figure VI.6.1 Comparing countries' and economies' performance in the global competence cognitive test

Significantly **above** the overall average Not Significantly different from the overall average Significantly **below** the overall average

Mean score	Comparison country/economy	Countries and economies whose mean score is not statistically significantly different from the comparison country's/economy's score
576	Singapore	
554	Canada	
542	Hong Kong (China)	Scotland (United Kingdom)
534	Scotland (United Kingdom)	Chinese Taipei, Hong Kong (China)
527	Chinese Taipei	Scotland (United Kingdom)
512	Spain	Croatia, Korea
509	Korea	Croatia, Spain
506	Croatia	Korea, Spain
497	Latvia	Israel <sup>1</sup>
496	Israel <sup>1</sup>	Greece, Latvia, Lithuania
489	Lithuania	Greece, Israel, Slovak Republic
488	Greece	Israel, Lithuania, Russia, Slovak Republic
486	Slovak Republic	Greece, Lithuania, Russia
480	Russia	Greece, Malta, Slovak Republic
479	Malta	Russia
466	Chile	Serbia
463	Serbia	Chile, Colombia, Costa Rica
457	Colombia	Costa Rica, Serbia
456	Costa Rica	Colombia, Serbia
429	Brunei Darussalam	Albania, Thailand
427	Albania	Brunei Darussalam, Thailand
423	Thailand	Albania, Brunei Darussalam
413	Panama	Indonesia, Kazakhstan
408	Indonesia	Kazakhstan, Morocco, Panama
408	Kazakhstan	Indonesia, Morocco, Panama
402	Morocco	Indonesia, Kazakhstan
371	Philippines	

<sup>1.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Countries and economies are ranked in descending order of the mean global competence score in PISA 2018.

**Source**: OECD, PISA 2018 Database, Table VI.B1.6.1. and Table VI.B1.6.2. **StatLink SEP** https://doi.org/10.1787/888934170260

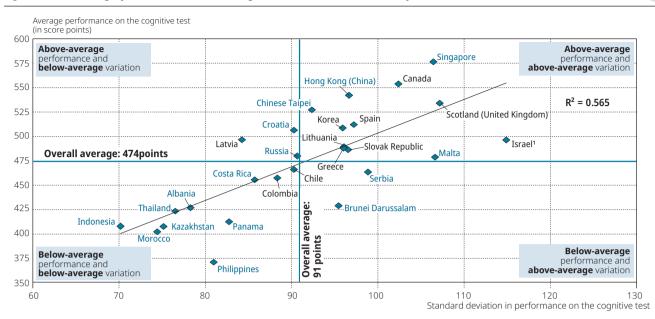


Figure VI.6.2 Average performance on the cognitive test and variation in performance

1. The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Source: OECD, PISA 2018 Database, Table VI.B1.6.1.

StatLink https://doi.org/10.1787/888934170279

#### **Proficiency in global competence**

The previous subsection presented the average performance of students in the global competence cognitive assessment. However, average scores do not adequately describe variations in performance. This subsection examines students' performance according to PISA proficiency levels. Five proficiency levels were identified, covering the whole range of performance on the cognitive test. Proficiency scales describe not only student performance, but also the difficulty of the tasks presented to students in the assessment.

The Global Competence items were developed based on the task characteristics identified in the framework. Then, using the main survey data, those items were placed along the scale based on their statistical properties. The knowledge and cognitive skills required to successfully complete those items were reviewed and used to define performance at each level of difficulty. Four main factors that drove difficulty across the range of items were identified within this assessment of Global Competence. These four factors are described below, along with the description of proficiency at each level of performance (Figure VI.6.3). The four factors are:

#### Identifying and analysing perspectives

Items that require identification of only one perspective to solve the problem are the easiest among the items that require this cognitive process. The problem itself may require an explicit identification of one perspective. Other items may not require an explicit identification, but the student must be able to understand a perspective of an individual or a group of individuals to complete the problem correctly. More complex items require the ability to identify more than one perspective among several individuals or groups within a community. Furthermore, these more complex items require the student to analyse one or more perspectives in relation to the other perspectives of actors in the problem or in relation to a viewpoint or stance described in the problem. The most complex items require identifying and analysing as many as three to five perspectives.

#### Reasoning beyond the information given in the problem

Items vary with respect to how much the student must reason beyond the information explicitly provided in the stimulus and item. Items for which students can reason with the information provided within a problem tend to be easier. In contrast, items for which students must reason beyond the provided information tend to be harder. For example, in a problem where the actions of actors are described, it is more challenging for the student to reason about possible consequences of those actions than to evaluate the actions themselves. Similarly, it is very challenging to evaluate whether a proposed solution would have a short-term or a long-term impact. This kind of evaluation requires the student to reason even further beyond the information provided within the problem. To successfully complete these evaluations, students need to engage in critical thinking that is domain-general.

#### Quantity of information to evaluate

Each Global Competence item contains information such as facts about a situation described in the problem, perspectives expressed by individuals or groups in a community or actions taken by individuals. When evaluating the information within a problem, by selecting, weighing or employing sources, the quantity of information that must be evaluated varies across items. Similarly, the amount of information that must be considered to evaluate actions and consequences varies. In general, easier items typically contain less information to evaluate, while more difficult items tend to have more information to evaluate to solve the problem. A unit's scenario can make evaluating larger quantities of information more accessible to students if it provides background knowledge on the main topic of the unit or assists the student in making connections between ideas.

#### Describing versus explaining the situation

Several items require the student to describe or explain the situation or aspects of the situation presented in the problem. In some cases, students must select a description or explanation from a set of provided choices, and in others they must provide their own description or explanation in an open-ended, constructed-response format. Regardless of the item's response format, the item is easier when the scope of the item is more focused on a description of the situation or aspects of the situation than when it is focused on an explanation. Items that require the student to identify or create an explanation for a situation often draw upon causal reasoning and a deeper connection between sources of information in the problem.

Even though a student's performance at any moment in time can be located on the performance and proficiency scales, one should keep in mind that developing global competence is a lifelong learning process. Students who start at a lower proficiency level could develop their knowledge, skills and attitudes through exposure to the right learning opportunities. Moreover, unlike mathematics and science, which require a certain level of specialisation in adult life if students choose a particular career orientation, global competence constitutes a general set of knowledge, skills and attitudes that all people, young and old, need at all stages of life, regardless of their professional choices. Indeed, students may lose their proficiency in mathematics in adult life if they specialise in a field that does not require extensive use of their mathematical skills. However, knowledge, skills and attitudes related to global and intercultural understanding are less likely to erode with time, as they are relevant in nearly all social contexts.

Figure VI.6.3[1/2] Summary description of the six levels of proficiency in global competence in PISA 2018

Level	Lower score limit	Percentage of students able to perform tasks at each level or above (Overall average)	Characteristics of tasks
5	661 or higher	4.3	At Level 5, students can identify and analyse multiple perspectives. These students can reason about ideas and make predictions well beyond the information given in the problem while also effectively evaluating very large amounts of information. Students at this level can reason with this large amount of information without additional support provided in the unit's scenario, meaning they can make connections across elements of the problem on their own. Students can effectively explain situations and aspects of situations that require complex types of thinking such as recognizing unintended consequences, evaluating information to differentiate between biased and unbiased sources and identifying short- and long-term consequences of actions. Students at Level 5 are capable of building complex models of the situation described in the stimulus and item in order to solve the problem. They demonstrate consistency in their ability to explain situations across multiple activities within a problem.
4	596	13.6	At Level 4, students can identify and analyse as many as five different perspectives within a problem. Students at this level demonstrate the ability to reason further beyond the explicit information provided in the text while evaluating a large amount of information. However, this evaluation is supported by information such as background knowledge that is provided in the scenario of the unit, which may facilitate connections between pieces of information in the problem. Students can provide descriptions of situations that are less familiar or require deeper reasoning such as ones that require causal reasoning. Students can also provide explanations of situations and aspects of situations. They demonstrate consistency in their ability to assess, describe and/or explain situations across multiple activities within a problem.
3	531	29.8	At Level 3, students can identify and analyse two to three different perspectives within a situation. At this level, a trade-off is observed between students' ability to reason beyond the explicit information provided in the problem and the amount of information that must be evaluated. Students can reason further beyond the information provided in the problem as long as the amount of information that must be evaluated is more minimal. Conversely, students demonstrate the ability to evaluate greater amounts of information as long as the item does not require reasoning that extends too much beyond the information provided in the problem. Under these conditions, students can evaluate a medium to high amount of information within the stimulus and item. Students at Level 3 can explain the situation or aspects of the situation. They demonstrate consistency in being able to assess, describe and/or explain situations across multiple activities within a given problem.

Source: OECD, PISA 2018 Database, Table VI.B1.6.1.

Figure VI.6.3[2/2] Summary description of the six levels of proficiency in global competence in PISA 2018

	Lower score	Percentage of students able to perform tasks at each level or above	
Level	limit	(Overall average)	Characteristics of tasks
2	466	51	At Level 2, students can correctly identify two different perspectives within a situation.  Students can reason beyond the described situation when the quantity of information remains minimal. When students are asked to reason about information provided in the problem, students at this level can evaluate minimal to medium amounts of information. Students can describe the situation or aspects of the situation as well as identify a correct explanation of a situation. When there is a minimal amount of information to evaluate, they can explain the situation or aspects of the situation.
1	401	73.5	At Level 1, students can identify one perspective correctly and use information from that perspective to complete the item. Students can reason beyond the explicit information provided in the stimulus or item to understand a novel situation when the context is very familiar such as having to relocate. The cause of the move can be novel (i.e. climate change), but the hardships that come from relocating are familiar and the student can easily "put themselves in someone else's shoes" by thinking about what it was like or would be like to move. At this level, students are able to evaluate a minimal amount of information while completing the item. Students can describe the situation or aspects of the situation.

Source: OECD, PISA 2018 Database, Table VI.B1.6.1.

StatLink https://doi.org/10.1787/888934170298

#### Proficiency at Level 5

At the highest level of proficiency in global competence, students are able to analyse and understand multiple perspectives. They are able to examine and evaluate large amounts of information without much support provided in the unit's scenario. Students can effectively explain situations that require complex thinking and extrapolation and can build models of the situation described in the stimulus. On average across all countries, 4% of students attained the highest level of proficiency (Level 5) in global competence (Figure VI.6.4). The largest proportions of students who scored at this level were found in Singapore (22%), Canada (15%) and Scotland (United Kingdom) (12%). Less than 2% of students in Albania, Brunei Darussalam, Chile, Colombia, Costa Rica, Indonesia, Kazakhstan, Morocco, Panama, the Philippines and Thailand attained this level of proficiency. In general, countries and economies with high average performance on the cognitive test tended to have more students performing at the highest proficiency levels.

#### Proficiency at Level 4

At Level 4, students could analyse as many as five different perspectives while demonstrating the ability to reason further beyond the information that is provided in the scenario. Students can provide explanations of unfamiliar situations that require deeper reasoning, such as causal inference. However, at this level, explanations provided by the students are facilitated by the information provided in the test unit's summary. On average across all countries, 9% of students attained proficiency Level 4 in global competence. The proportions of students who scored at this level were the largest in the top-performing countries. The largest proportions, ranging between 20% and 24% of students, were observed in Canada, Hong Kong (China) and Singapore, while the smallest proportions (ranging between 0.6% and 1.7% of students) were observed in Albania, Indonesia, Kazakhstan, Morocco, Panama, the Philippines and Thailand.

#### Proficiency at Level 3

Students at Level 3 of proficiency in global competence are able to analyse two to three perspectives. They are able to reason with the information provided in the scenario of the test unit as long as the amount of information that must be evaluated is manageable. Students also demonstrate an ability to evaluate greater amounts of information as long as they do not have to extrapolate too much beyond the information provided to them. On average across all countries, 16% of students attained proficiency Level 3 in global competence. Between 20% and 27% of students in Canada, Croatia, Greece, Hong Kong (China), Korea, Latvia, Lithuania, Scotland (United Kingdom), Singapore, Spain and Chinese Taipei scored at this level, while no more than 8% attained Level 3 in Albania, Indonesia, Kazakhstan, Morocco, Panama, the Philippines and Thailand.

#### Proficiency at Level 2

At this level of proficiency, students can identify two perspectives and can evaluate minimal to medium amounts of information. They can reason beyond the described situation when the amount of information provided to them remains minimal. On average across all countries, 21% of students attained Level 2 proficiency in global competence. Between 26% and 29% of students in Croatia, Latvia and Russia performed at this level, while between 9% and 15% of students in Indonesia, Kazakhstan and the Philippines did so.

#### Proficiency at Level 1

At Level 1, students can identify one perspective correctly and use information from the summary of a scenario to complete the corresponding question. They can reason beyond the explicit information provided in the stimulus to understand a novel situation when the context is very familiar. At this level, students are able to evaluate a minimal amount of information and to describe a situation or aspects of a situation. On average across all countries, 23% of students performed at proficiency Level 1 in global competence. Around 30% of students in Albania, Indonesia, Kazakhstan and Thailand performed at this level, while less than 15% of students in Canada, Hong Kong (China) and Singapore did so.

#### Proficiency below Level 1

While none of the items in the Global Competence item pool fell within a "below Level 1" category, it is nevertheless useful to consider the characteristics of tasks that could be developed to assess skills at that level. Future assessments could focus on developing items that assess the precursor skills that support a student's ability to engage in more in-depth problems within this innovative domain. Items built to assess skills below Level 1 should be more explicit in nature, drawing heavily on the information provided within the stimulus and item itself. These items should not require the student to reason beyond the information provided in the text. Students could engage in problems where the primary task is an explicit identification of a perspective. For example, students could be asked to select the correct perspective of an actor in the problem from a set of choices. This would be a precursor to Level 1 because, at Level 1, students must already use information derived from identifying a perspective to complete the problem, not simply identify the perspective. The amount of information the student must evaluate should be kept to a minimum by limiting the number of perspectives to only one and/or limiting the number of sources of information. For items below Level 1, the unit's scenario can also be used to provide additional support through background knowledge or by making connections between perspectives or pieces of information explicit to the student. On average across all countries, 26% of students did not attain Level 1 proficiency in global competence. More than 40% of students in Brunei Darussalam, Indonesia, Kazakhstan, Morocco, Panama, the Philippines and Thailand performed below Level 1. By contrast, less than 10% of students in Canada, Hong Kong (China), Singapore and Chinese Taipei performed at this level.

### How performance on the global competence test is related to performance in reading, mathematics and science

A comparison of country/economy performance in reading, mathematics, science and global competence reveals that students in Canada, Hong Kong (China), Scotland (United Kingdom), Singapore and Chinese Taipei tended to perform well in all four subjects. Thus, one may wonder about the extent to which performance on the global competence test may be correlated with performance in the other subjects.

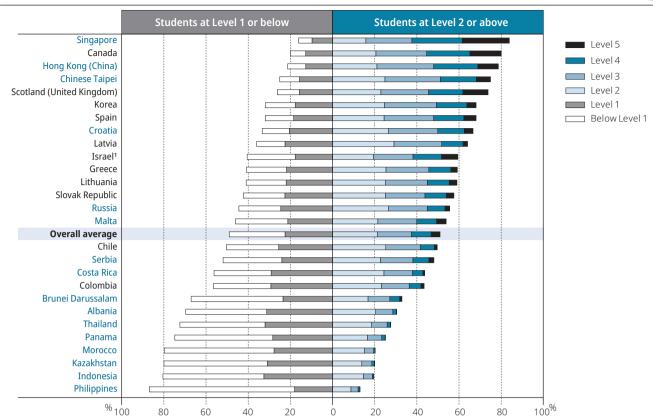
Scores in the four subjects were indeed highly correlated, as Figure VI.6.5 shows. On average across the 27 countries and economies that conducted the global competence assessment, performance on this test was correlated at 0.84 with performance in reading, at 0.79 with performance in science and at 0.73 with performance in mathematics. The correlation between performance on the global competence test and performance in reading was the same as that between performance in reading and in science. The strongest correlations between performance on the global competence and reading tests were found in Brunei Darussalam, Israel, Lithuania, Malta and Chinese Taipei, while the weakest were observed in Costa Rica, Indonesia, Kazakhstan, Scotland (United Kingdom) and Thailand (Table VI.B1.6.3).

The strong correlations could indicate that high performance on cognitive tests, regardless of the subject, could be underpinned by general cognitive skills. For instance, high performance in global competence and science would require students to be able to read and understand the scenarios provided in the test units and the questions they need to answer. As such, an adequate level of proficiency in reading is a prerequisite for sitting written tests in other subjects. Moreover, both reading and global competence require certain skills, such as weighing sources' reliability and relevance, reasoning with evidence, and describing and explaining complex situations and problems.

However, reading proficiency does not necessarily account for all variations in performance on the global competence cognitive test. This indicates that specific cognitive skills in global competence may be needed to perform well on the test. Those skills go beyond general reading skills.

Given that performance in global competence is closely linked to performance in the three core PISA domains of reading, mathematics and science, it is possible to isolate the distinctive aspects of global competence by regressing scores in global competence over scores in the three core domains. Each student's relative performance – his or her performance in global competence after accounting for proficiency in reading, mathematics and science – was calculated. This calculation pooled data from all countries and economies that participated in PISA and thus allowed for the ranking of countries and economies by their average relative performance.<sup>5</sup>

Figure VI.6.4 Students' proficiency in global competence



<sup>1.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Countries and economies are ranked in descending order of the percentage of students who performed at or above Level 2.

Source: OECD, PISA 2018 Database, Table VI.B1.6.1.

StatLink https://doi.org/10.1787/888934170317

Figure VI.6.5 Performance in global competence and in other PISA subjects

Correlation between performance in			
Mathematics	Reading	Science	and performance in
0.73	0.84	0.79	Global competence
	0.79	0.78	Mathematics
		0.85	Reading

Source: OECD, PISA 2018 Database, Table VI.B1.6.3.

StatLink https://doi.org/10.1787/888934170336

Figure VI.6.6 shows the relative performance in global competence of each participating country and economy. The values range from a high of 20 points for Colombia to a low of -25 points for Korea. Countries and economies are also divided into three broad groups: 1) those whose mean relative scores are statistically around the overall mean (pale blue bars); 2) those whose mean relative scores are above the overall mean (dark blue bars); and 3) those whose mean relative scores are below the overall mean (black bars).

The range and variation of relative scores are noticeably smaller than that of raw performance scores. One way to interpret such scores is to say that, on average, students in Colombia scored 20 points higher than expected, given their scores in reading, mathematics and science. Relative performance was significantly higher than the overall average in 11 countries and economies, while it was not statistically different from the average in 6 countries/economies and was below the average in 10 others. Canada, Colombia, Greece, Israel, Panama, Scotland (United Kingdom), Singapore and Spain showed the highest relative performance in global competence, while Albania, Brunei Darussalam, Kazakhstan, Korea and Russia showed the lowest relative performance.

There are notable differences between country comparisons of raw and relative scores in global competence. For instance, while Indonesia was significantly below the overall average raw performance, it was not significantly different from the relative average performance. Moreover, Malta's and Russia's raw performance was not significantly different from the overall average, while Malta's relative performance was three score points above the relative performance average, and Russia's relative performance was 20 score points below the mean. These differences may be explained by students in these countries being stronger/weaker in the unique aspects of global competence, after accounting for their performance in reading, mathematics and science.

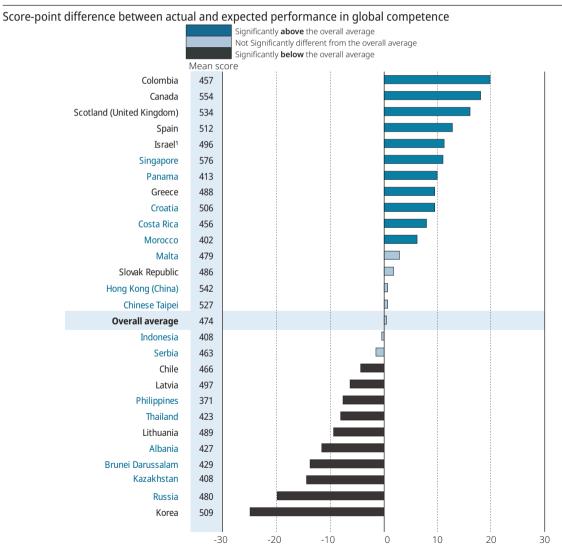
### HOW DOES PERFORMANCE ON THE COGNITIVE TEST VARY ACCORDING TO STUDENTS' CHARACTERISTICS?

How is performance in global competence related to gender, socio-economic status and immigrant background? This subsection examines students' performance on the global competence test considering students' socio-demographic characteristics.

#### Students' economic, social and cultural status

In line with differences in performance in reading, mathematics and science related to socio-economic status, students from advantaged backgrounds (those in the top quarter of the PISA index of economic, social and cultural status) tended to outperform their disadvantaged peers (those in the bottom quarter of the PISA index of economic, social and cultural status) in the cognitive global competence test. Differences were positive and statistically significant in all countries and economies (Table VI.B1.6.4).

Figure VI.6.6 Countries' and economies' relative performance in global competence



<sup>1.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details

Countries and economies are ranked in descending order of the relative performance in global competence.

Source: OECD, PISA 2018 Database, Table VI.B1.6.1.

On average across the 27 participating countries and economies, advantaged students outperformed their disadvantaged peers by 75 score points. The largest differences in favour of advantaged students (more than 80 score points) were observed in Brunei-Darussalam, Chile, Costa Rica, Israel, Lithuania, Malta, the Philippines, Scotland (United Kingdom), Singapore, the Slovak Republic and Chinese Taipei. The smallest differences (less than 60 score points) were observed in Albania, Hong Kong (China), Indonesia, Kazakhstan, Morocco and Thailand.

The differences between advantaged and disadvantaged students were largely attenuated when relative performance (after netting out performance in reading, mathematics and science) on the cognitive test was considered. Differences became statically non-significant in 17 countries and economies, but remained significant and positive in 10: Brunei Darussalam, Canada, Chile, Costa Rica, Croatia, Latvia, Lithuania, Russia, Singapore and Spain. On average across all countries and economies, advantaged students outperformed disadvantaged students by six score points in terms of relative performance (Figure VI.6.7).

#### Students' gender

Differences related to gender were also observed in performance on the global competence test. Girls outperformed boys in all countries and economies except Scotland (United Kingdom), where the difference was not statistically significant (Figure VI.6.8). On average across all countries and economies, girls outperformed boys by 26 score points. The largest gender differences in favour of girls were observed in Greece, Lithuania, Malta, Serbia and Thailand, while the smallest were observed in Chile, Colombia, Costa Rica, Panama and Russia. Differences between girls and boys in relative performance on the cognitive test were non-significant in 7 countries and economies, while girls outperformed boys in the other 20.

#### Students' immigrant background

Of the 15 countries and economies where at least 5% of students have an immigrant background, differences in performance in global competence between immigrant and native-born students were statically non-significant in 7 (Table VI.B1.6.4). Immigrant students outperformed their native-born peers in Brunei Darussalam, Panama and Singapore, while the reverse was observed in Costa Rica, Croatia, Greece, Israel and Spain.

Differences in relative performance between immigrant and native-born students were mostly non-significant, with few exceptions (Figure VI.6.9). Immigrant students outperformed their native-born peers in Brunei Darussalam, Hong Kong (China) and Singapore, while the reverse was observed in Croatia and Israel. Thus, there is no clear pattern regarding the performance of immigrant and native-born students when it comes to relative performance on the global competence test.

Comparisons between differences in raw and relative performance on the cognitive test reveal that there were fewer differences between socio-economically advantaged and disadvantaged students, between girls and boys, and between immigrant and native-born students in the cognitive skills that are specific to global competence. In other words, a large proportion of demographic differences in raw performance can be attributed to differentials in performance in reading, mathematics and science and less so to performance in global competence.

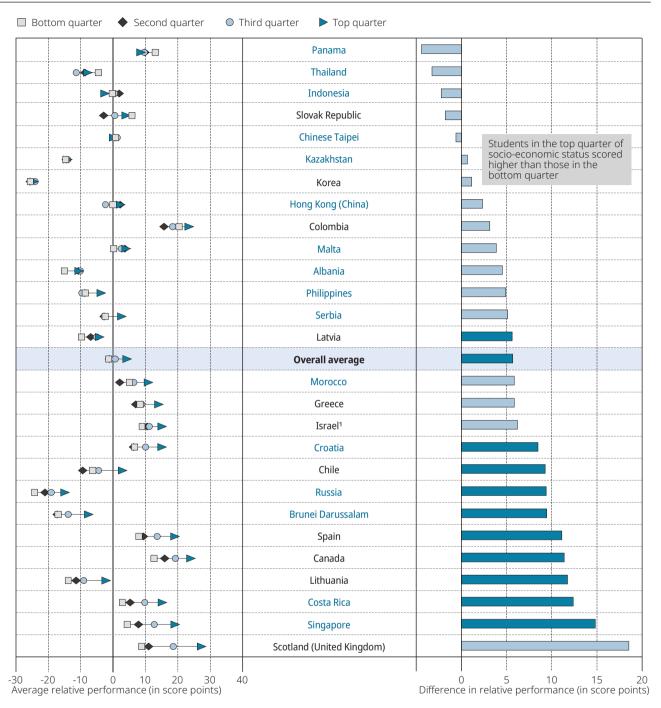
## ASSOCIATIONS BETWEEN PERFORMANCE ON THE COGNITIVE TEST AND STUDENTS' ATTITUDES AND DISPOSITIONS

Positive intercultural attitudes and dispositions combined with knowledge of global issues are likely to translate into greater cognitive skills and a heightened capacity to take action for collective well-being and sustainable development. Students' attitudes towards a given task will influence their performance on that task, the effort they put into learning and the level of motivation they have for developing a particular skill. The reverse is also true, as highly developed global and intercultural understanding could translate into more positive attitudes and dispositions. This subsection examines the association between students' self-reported knowledge, attitudes, skills and dispositions and their performance on the cognitive test.

In general, the findings show positive associations between students' attitudes and dispositions and their performance on the cognitive test (Table VI.B1.6.5). This association is attenuated after accounting for students' and schools' socio-economic profile, but it remains positive and significant in almost all countries and economies.

Figure VI.6.10 shows the average change in performance on the cognitive test associated with an increase of one unit in the nine indices of students' attitudes and dispositions. Across all countries and economies with valid data, a rise of one unit in the index of respect for people from other cultures was associated with an improvement of 19 score points on the cognitive test, after accounting for students' and schools' socio-economic profile. A one-unit increase in the index of students' attitudes towards immigrants was associated with an improvement of 17 score points, as was a one-unit rise in the index of cognitive adaptability. An increase of one unit in the index of self-efficacy regarding global issues was associated with an improvement of 16 score points on the cognitive test; and a one-unit increase in the index of awareness of global issues was associated with an improvement of 12 score points on the test.

Figure VI.6.7 Differences in relative performance in global competence, by socio-economic status



<sup>1.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Note : Statistically significant values are shown in darker tones in the figure on the right.

Countries and economies are ranked in descending order of the score-point difference in global competence performance between top and bottom quarters on the index of students' socio-economic status.

Source: OECD, PISA 2018 Database, Table VI.B1.6.4.

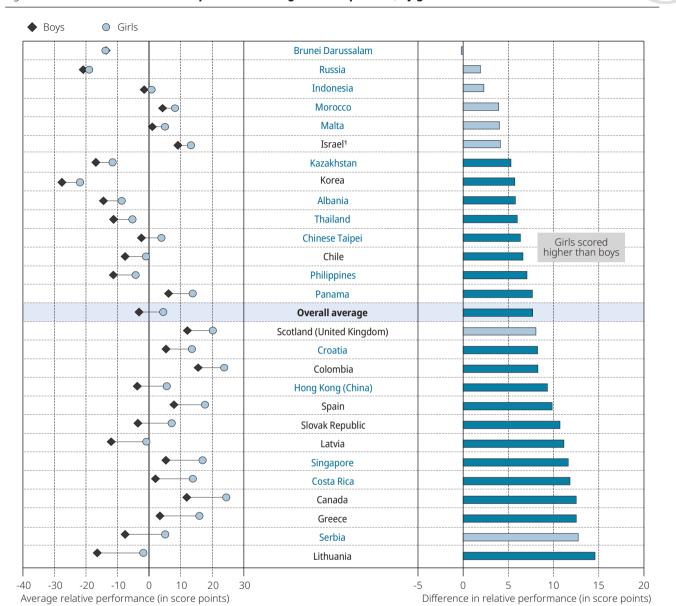


Figure VI.6.8 Differences in relative performance in global competence, by gender

1. The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

**Note**: Statistically significant values are shown in darker tones in the figure on the right

Countries and economies are ranked in descending order of the score-point difference in global competence performance between girls and boys.

Source: OECD, PISA 2018 Database, Table VI.B1.6.4.

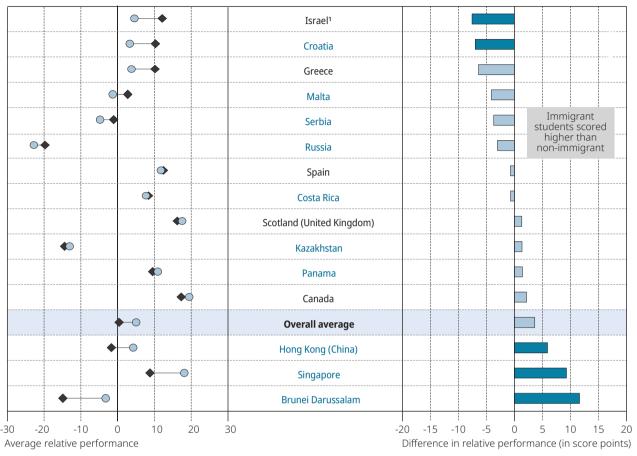
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Weaker associations were observed for the remaining indices (perspective taking, interest in learning about other cultures, awareness of intercultural communication, and agency regarding global issues). On average across the 27 countries and economies that participated in the global competence test, an increase of one unit in those indices was associated with an improvement of between 6 and 11 score points on the cognitive test. The positive associations between self-reported knowledge, skills and attitudes and performance on the cognitive test were also matched by large differences in performance between the top and bottom quarters on the indices measuring students' self-reported knowledge, skills, attitudes and dispositions.

The strongest associations were observed between the index of respect for people from other cultures and students' performance on the cognitive test. In Canada, Korea, Latvia, Malta, Scotland (United Kingdom) and Spain, a rise of one unit in the index of respect for people from other cultures was associated with an improvement of 23 to 27 score points on the assessment. The weakest associations, with performance improvements (ranging between 10 and 15 score points) were observed in Costa Rica, Indonesia and Kazakhstan (Figure VI.6.11).

Figure VI.6.9 Differences in relative performance in global competence, by immigrant background

- ◆ Non-immigrant students
- Immigrant students



<sup>1</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Note: Statistically significant values are shown in darker tones in the figure on the right.

Differences between immigrant and non-immigrant students are presented only for countries/economies where more than 5% of students have an immigrant background.

Countries and economies are ranked in descending order of the score-point difference in global competence performance between immigrant and non-immigrant students.

Source: OECD, PISA 2018 Database, Table VI.B1.6.4.

StatLink https://doi.org/10.1787/888934170412

These findings confirm the expectation that students who express respect towards people from different backgrounds and who are aware of and feel confident when confronting intercultural and global issues tend to perform better on the global competence cognitive test. This indicates that positive attitudes, in general, could translate into stronger cognitive abilities.

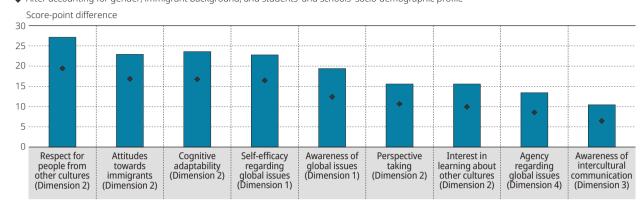
#### ATTITUDES, DISPOSITIONS AND SKILLS, AND STUDENTS' SURROUNDING CIRCUMSTANCES

Most social theories addressing the question of social change foresee the fragmentation of societies where traditional institutions play a small role in holding society together (Green and Janmaat,  $2011_{[4]}$ ). Multiple explanations have been advanced about the erosion of social bonds. One theory focuses on the decline of national identities due to social and cultural diversification associated with migration and a globalised economy. Those phenomena gave a greater voice to the individual, removed barriers to global interactions and changed our perception of place (Touraine,  $2000_{[5]}$ ; Castells,  $2009_{[6]}$ ). As a result, new complex identifies emerged as individuals ceased to identify with the national collective and embraced supra-national identities or more localised ones based on ethnicity, region, religion and lifestyle. This phenomenon is compounded by the rise of structural inequalities in most developed countries. Those inequalities were linked to a multitude of social problems, including higher crime, lower public health, lower levels of well-being and declining social cohesion (Wilkinson and Pickett,  $2009_{[7]}$ ).

#### Figure VI.6.10 Students' attitudes and dispositions, and performance in global competence

Score-point difference associated with a one-unit increase in the indices of students' attitudes and dispositions, Overall average

■ Before accounting for gender, immigrant background, and students' and schools' socio-demographic profile¹
◆ After accounting for gender, immigrant background, and students' and schools' socio-demographic profile



1. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

**Note**: All associations are statistically significant. **Source**: OECD, PISA 2018 Database, Table VI.B1.6.5.

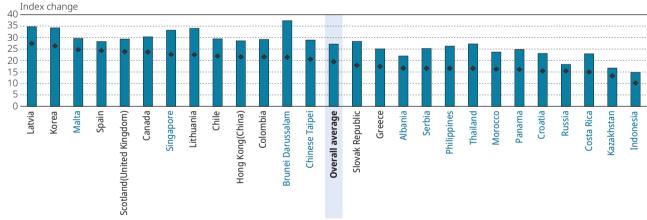
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Figure VI.6.11 Students' respect for people from other cultures and performance in global competence

Score-point difference in performance on the global competence test associated with a one-unit increase in the index of students' respect for people from other cultures

■ Before accounting for gender, immigrant background, students' and schools' socio-demographic profile¹

After accounting for gender, immigrant background, students' and schools' socio-demographic profile



1. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Note: All associations are statistically significant.

Countries and economies are ranked in descending order of regression coefficient, after accounting for gender, immigrant background, and students' and schools' socio-economic profile.

Source: OECD, PISA 2018 Database, Table VI.B1.6.5.

StatLink https://doi.org/10.1787/888934170450

In this subsection, students' attitudes and performance on the cognitive test are explored in the light of key system-level characteristics (Table VI.B1.6.6). Those characteristics include per capita GDP, employment rate, immigrant stock in 2015 (the proportion of immigrants in a country/economy), and average income Gini coefficient over the period of 2010 to 2018.<sup>6</sup> The working assumption is that students living in countries enjoying greater economic prosperity and lower inequalities and where jobs are abundant are more likely to exhibit positive attitudes and dispositions.

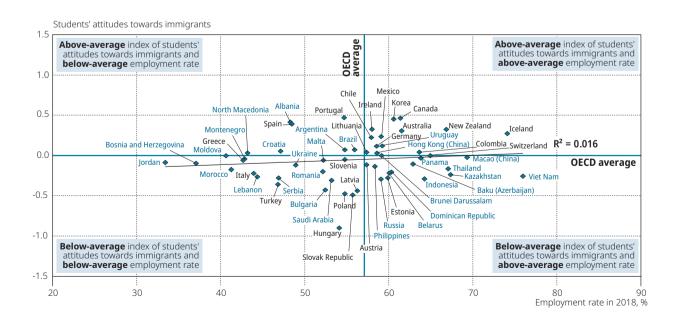
Findings show a positive albeit weak association between students' average attitudes towards immigrants at the country or economy level and a country/economy's per capita GDP and employment rate (Figure VI.6.12). In other words, students living in prosperous countries tended to exhibit more positive attitudes towards immigrants. This is not surprising since, in this context, immigrants are less likely to be seen as competitors for scarce jobs and opportunities, but rather as valuable assets to the economy. Countries/economies with high per capita GDP where students reported more positive attitudes towards immigrants include Australia, Iceland and Ireland. Countries/economies with high employment rates and more positive attitudes towards immigrants include Australia, Iceland and New Zealand.

No associations were observed between attitudes towards immigrants and the proportion of immigrants in a country or the income Gini coefficient. Countries/economies with a large proportion of immigrants and more positive attitudes towards immigrants include Australia, Canada and New Zealand. Countries/economies with less income inequality (i.e. lower Gini coefficient) and more positive attitudes towards immigrants include Albania, Ireland and Korea. By contrast, countries/economies with higher income inequality and less positive attitudes towards immigrants include Bulgaria, Indonesia and Turkey.

Students' attitudes towards immigrants Above-average index of students Above-average index of students' **OECD** average attitudes towards immigrants and **below-average** GDP per capita attitudes towards immigrants and **above-average** GDP per capita 1.0 North Macedonia Baku (Azerbaijan) Portugal Colombia Mexico Korea Argentina Canada 0.5 Kosovo Uruguay -Spain Australia Ireland Chile → Iceland  $R^2 = 0.046$ New Zealand Hong Kong (China) Panama Lithuar ♦ German Iordan ◆ Croatia 0.0 Greece QECD average Malta Philippines ◆ Italy Viet Nam Macao (China) Saudi Arabia Morocc - Estonia Romania -0.5 Kazakhstan Indonesia Monter Slovak Republic Latvia Bulgaria Bosnia and Herzegovin Hungary -1.0 Belarus Below-average index of students' Thailand Serbia ttitudes towards immigrants and above-average GDP per capita minican Republic Below-average index of students' attitudes towards immigrants and **below-average** GDP per capita 45.000 60.000 75.000 90,000 105.000 120.000

GDP per capita in 2018, PPP

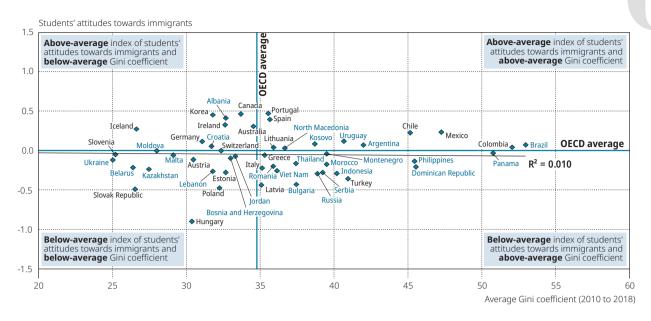
Figure VI.6.12 Students' attitudes towards immigrants and their surrounding circumstances

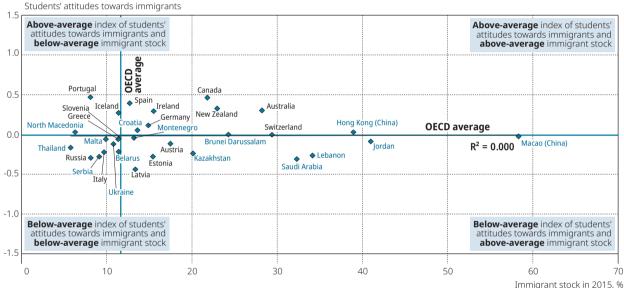


0

15.000

30,000





**Note**: The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Source: OECD, PISA 2018 Database, Table VI.B1.6.6.

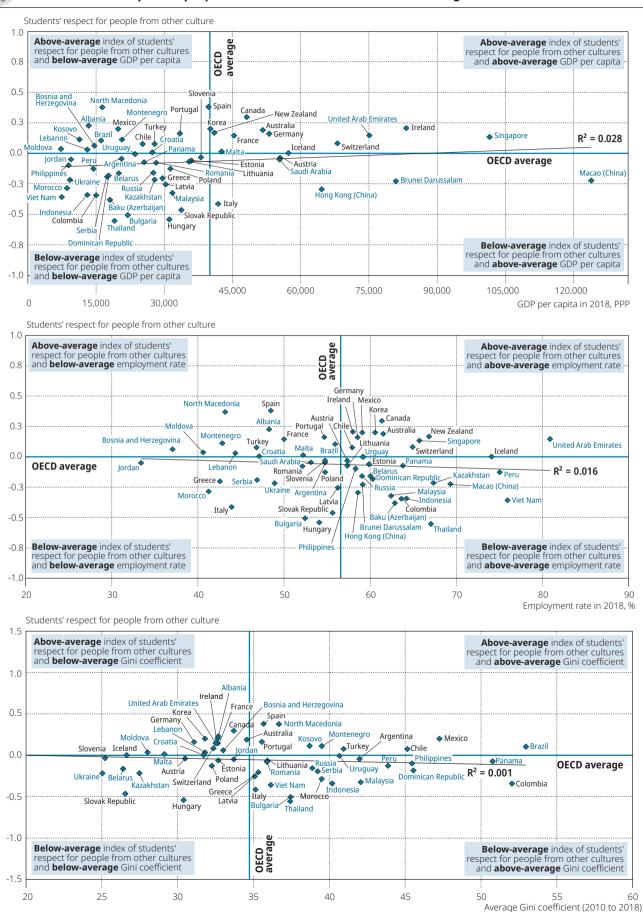
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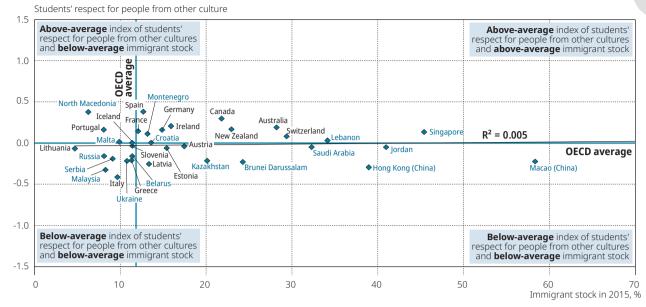
The absence of associations between students' attitudes and system-level variables reflects the fact that countries/economies on the opposite sides of the scatterplots are cancelling out each other's effects.

Figure VI.6.13 shows a positive but weak association between students' respect for people from other cultures and the GDP per capita in countries/economies. Countries/economies with high per capita GDP and high student-reported levels of respect for people from other cultures include Australia, Canada, Ireland and the United Arab Emirates. No associations were observed between employment rate, proportion of immigrants and income Gini coefficient and respect for people from other cultures.

Countries/economies with higher student-reported levels of respect for people from other cultures and a high employment rate include Australia, Canada, Korea, New Zealand and Singapore. Those with higher student-reported levels of respect for people from other cultures and a high proportion of immigrants include Australia, Canada, Ireland and New Zealand. Those with higher student-reported levels of respect for people from other cultures and low income inequalities include Albania, Germany, Ireland and Korea.

Figure VI.6.13 Students' respect for people from other cultures and their surrounding circumstances





**Note**: The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Source: OECD, PISA 2018 Database, Table VI.B1.6.6.

StatLink https://doi.org/10.1787/888934170488

Students' agency regarding global issues was not found to be correlated with GDP per capita and with the income Gini coefficient (Figure VI.6.14). Countries/economies with the highest levels of GDP per capita and whose students' exhibited strong agency regarding global issues include Korea, Singapore and Spain. Countries/economies with more income equality and students who report stronger agency regarding global issues include Albania, Korea, Malta and Jordan.

Similarly, no associations were observed between students' awareness and self-efficacy regarding global issues and a country's or economy's GDP per capita (Figure VI.6.15). Countries/economies with the highest levels of GDP per capita and whose students' reported the greatest awareness of global issues include Australia, Canada, Malta and the United Arab Emirates. Those whose students reported the highest levels of self-efficacy regarding global issues include Canada, Germany, Singapore and the United Arab Emirates.

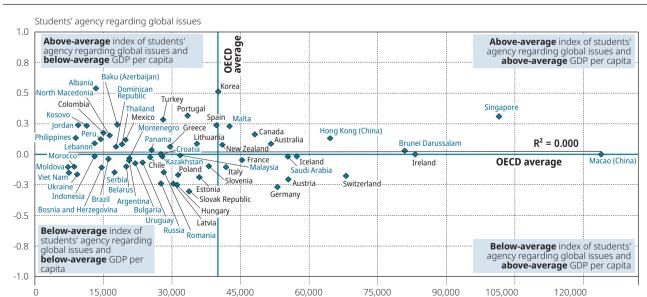
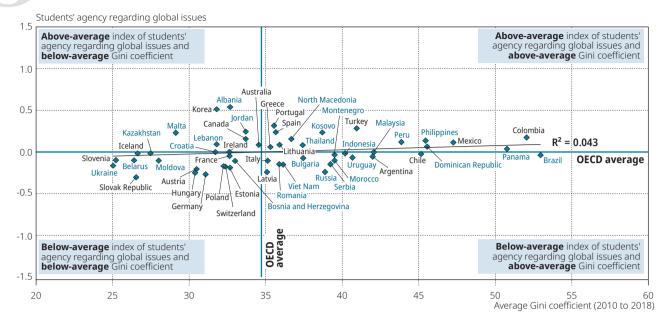


Figure VI.6.14 Students' agency regarding global issues and their surrounding circumstances

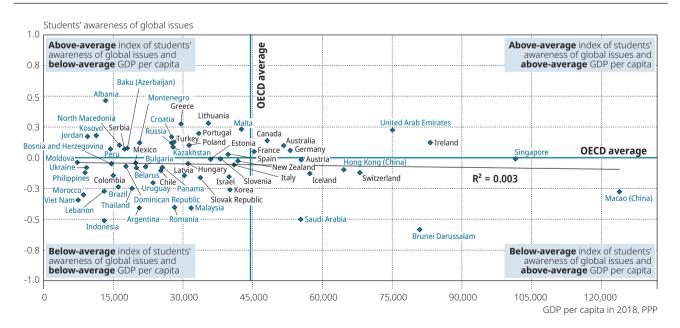
GDP per capita in 2018, PPP

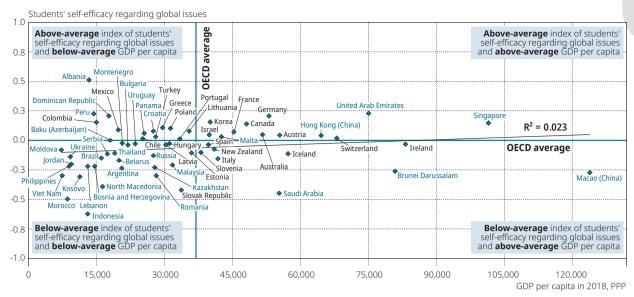


**Note**: The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Source: OECD, PISA 2018 Database, Table VI.B1.6.6.

Figure VI.6.15 Students' awareness of and self-efficacy regarding global issues and their surrounding circumstances





**Note**: The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

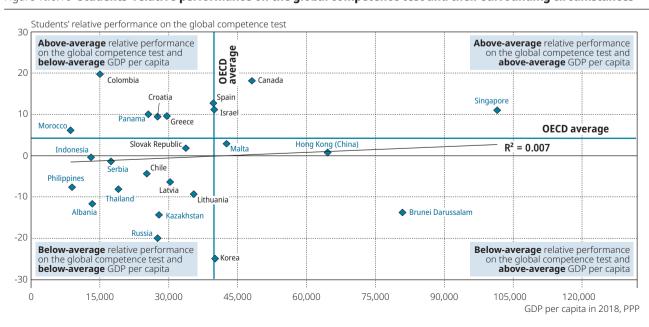
Source: OECD, PISA 2018 Database, Table VI.B1.6.6.

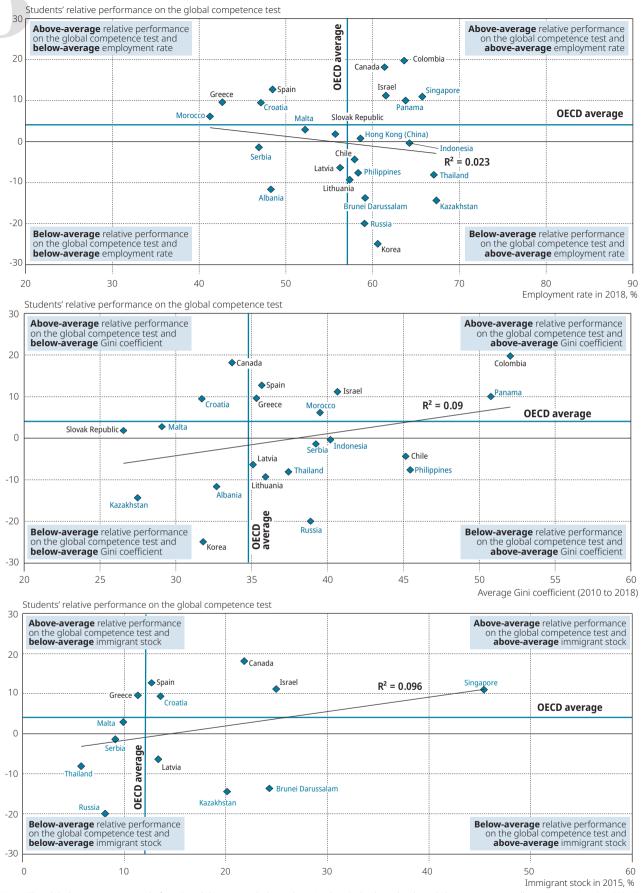
StatLink https://doi.org/10.1787/888934170526

Finally, Figure VI.6.16 shows the association between relative performance on the global competence cognitive test (after accounting for students' performance in reading, science and mathematics) and four system-level characteristics. A positive but modest association is observed between students' relative performance on the test on the one hand and the income Gini coefficient and immigrant stock in 2015 on the other. A negative but weak association was observed with employment rate, and no association was observed with per capita GDP.

Countries/economies with high per capita GDP and high students' relative performance on the global competence test include Canada, Israel, Singapore and Spain. The opposite is observed in Thailand and Albania. Colombia stands out as the only country with low per capita GDP but relatively high student performance on the test. In contrast, Brunei Darussalam and Korea have high per capita GDP but low relative performance on the test. Countries/economies with high levels of employment and high relative performance on the test include Canada, Colombia, Israel and Singapore, while countries/economies with a large proportion of immigrants (exceeding 20%) and a high relative performance on the test include Canada, Israel and Singapore. When it comes to income inequalities, Canada stands out as the country with lower inequalities and high relative performance on the test, while the Philippines and Russia show high income inequality and low relative performance.

Figure VI.6.16 Students' relative performance on the global competence test and their surrounding circumstances





**Note**: The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Source: OECD, PISA 2018 Database, Table VI.B1.6.6.

#### Note

- 1. The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.
- 2. Given that the test items can be reported on a unidimensional scale, results in this chapter are presented using the scaled plausible values on all global competence dimensions combined.
- 3. The PISA 2018 global competence performance scores were scaled to have an average of 500 score points across OECD countries and a standard deviation of 100 score points.
- 4. In addition to the five proficiency levels, some students scored below Level 1.
- 5. A linear ordinary least squares regression of performance in global competence over performance in reading, mathematics and science was performed. The student's relative performance was then defined as his or her actual performance in global competence minus his or her predicted performance in global competence or, in other words, the residual of the regression. One of the properties of the regression, to ensure that the predictions are not biased, is that the average residual (or relative performance) is equal to 0. Senate weights were adjusted so that all countries and economies contributed equally to the regression.
- 6. Data from the World Bank on Gini Coefficients were averaged over the period of 2010 to 2018, because some countries did not have data for some years. Averaging does not affect the validity of the data, as Gini coefficients and income inequalities do not change much over a short period of time.

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### **Education for living in an interconnected world**

This chapter examines how schools and teachers can cultivate students' ability to live in an interconnected world. Analyses explore data from the student, school and teacher questionnaires focusing on learning activities, the existence of relevant curricula and teachers' capacity to incorporate intercultural and global education into their lessons. The chapter also examines implications of the findings for the UN Sustainable Development Goals.

#### What the data tell us

- Across OECD countries, the most common activity related to global education is learning about different cultures at school: 76% of students reported that they engage in this activity. The second most common activity is learning how to solve conflicts with other people in the classroom (64%), followed by learning how people from different cultures can have different perspectives (62%).
- On average across OECD countries, students reported engaging in about five learning activities. Students in Albania, Baku (Azerbaijan), Colombia, the Dominican Republic, Indonesia, Jordan, Peru, the Philippines and Thailand reported engaging in more than seven activities, while students in France, Hungary, Israel<sup>1</sup>, Latvia, Russia, Scotland (United Kingdom) and Slovenia reported engaging in fewer than five.
- Students' attitudes and dispositions were positively and significantly associated with the number of learning activities in which they are engaged.
- Between 80% and 90% of students attended a school whose principal reported that intercultural learning activities are included in school lessons (e.g. learning about different cultures).
- About 45% of students attended a school whose teachers received training on teaching about equity and diversity. Proportions were particularly larger than the overall average in Albania and Malaysia.

The importance of education is undisputable in countering racial, ethnic and national prejudice and intolerance among children and adolescents (Kirkwood,  $2001_{[1]}$ ; Paluck and Green,  $2009_{[2]}$ ). Global and civic education often consists of a set of topics that teachers can include in their lessons. However, global competence, as defined in the PISA 2018 framework, extends well beyond knowledge to include skills and attitudes (OECD,  $2018_{[3]}$ ). Some schools offer lessons specifically on one or more elements of global competence. However, more commonly, teachers incorporate global issues into the existing curriculum by creating themes that overlap with existing subjects such as mathematics, science and reading. In this way, teachers avoid overloading the curriculum (Asia Society/OECD,  $2018_{[4]}$ ).

In this sense, teaching the skills for living in an interconnected world should not be seen as an activity that competes with teaching traditional subjects. Students still have to read and write, speak cogently, be scientifically and mathematically literate and have knowledge of the history of the world. In fact, many of the skills needed to live in an interconnected world, such as critical thinking, problem solving and media literacy, are the same as those needed to be proficient in traditional school subjects (Council of Europe, 2018<sub>[5]</sub>). Integrating global competence into existing curricula could be a way of limiting the pressure on students' time while adding a global perspective to existing courses.

Educators and schools differ in their willingness, interest and ability to integrate teaching for living in an interconnected world into their courses. Effective global education requires a consistent approach, because engaging in sporadic or one-off activities is unlikely to foster literacy over the long term. This, in turn, requires adapted curricula and teachers who are trained in global education and can integrate such topics creatively into their practices. Moreover, successful implementation requires a comprehensive approach that mobilises resources at the system, school, teacher and student levels (Huber et al.,  $2014_{161}$ ).

#### **ACTIVITIES THAT MAY PROMOTE GLOBAL COMPETENCE**

Three types of actions may promote global competence at school: actions based on intergroup contact, actions based on pedagogic approaches and actions based on institutional policies (Barrett,  $2018_{171}$ ).

#### **Actions based on intergroup contact**

As discussed in Chapter 4, contact with people from other countries is positively associated with a multitude of student dispositions. This finding is supported by a body of literature that shows that intercultural contact is an effective method of reducing prejudice and creating understanding (Allport,  $1954_{[8]}$ ; Pettigrew and Tropp,  $2006_{[9]}$ ). Four conditions need to be met in order to maximise this effect: 1) contact should take place between people who perceive themselves as equals (e.g. students, adolescents); 2) contact should take place regularly over an extended period of time; 3) contact should involve co-operation on joint activities or projects; and 4) providing occasions for such contact should be adopted as a systematic policy backed explicitly by authorities (e.g. schools, education authorities, social institutions).

Contact could also happen in alternative settings. For instance, students could encounter peers from different cultural backgrounds through **study-abroad programmes**. Several studies have shown that, when properly organised, such exchange programmes

could lead to greater intercultural competence, less anxiety when dealing with unfamiliar situations and more friendships with people from other cultures (Hammer, 2004<sub>[10]</sub>).

**Virtual contact** has also gained importance in recent years with the expansion of the Internet and the rise of myriad communications software. These new technologies bring intercultural interactions to every home and reduce their costs. Even the most culturally homogenous school or the most economically disadvantaged student can benefit from intercultural contact without the need to travel abroad (Huber et al.,  $2014_{161}$ ; Fisher, Evans and Esch,  $2004_{111}$ ).

**Partnerships** between schools and organisations, individuals and their local communities could also be used to create opportunities for contact between students and members of other cultural groups (Christou and Puigvert, 2011<sub>[12]</sub>). Individuals from other cultural groups could be invited to the school to work with students. Students could visit community organisations or places of worship in their neighbourhood. They could be asked to take note of and reflect critically on their experiences.

# **Actions based on pedagogic approaches**

One effective method of fostering global competence is **co-operative learning** (Johnson,  $2009_{[13]}$ ; Johnson and Johnson,  $1999_{[14]}$ ). This approach involves students working together in pairs or in groups on tasks that involve global issues. Such tasks might focus on environmental issues, gender equality, poverty, hunger and malnutrition, intercultural contact or any other topic. For this activity to be effective, students need to understand that success depends on co-operation and teamwork. Students' work should be assessed individually and collectively. Students should help and encourage each other to complete the task. Students need to be taught the social skills required to support this activity. Group members also need to reflect periodically on how well the group is functioning (Johnson and Johnson,  $2009_{[15]}$ ).

Another pedagogic approach is **project-based learning**, in which students have to deal with real-world situations (Trilling and Fadel,  $2009_{[16]}$ ). Such activities allow students to engage with global issues by planning, designing and investigating a particular topic, and through decision making and problem solving. Those skills extend beyond knowledge of global issues into the practical aspects of managing a project. Projects could be short or lengthy and could involve co-operation or be carried out independently by individual students (Bell,  $2010_{[17]}$ ; Harper,  $2015_{[18]}$ ).

Other pedagogical activities that students could engage in are those that emphasise multiple perspectives, role playing and simulations, where students experience what it is like to be different, marginalised or excluded. They could also analyse texts, films and plays that focus on particular themes of significance (Huber et al.,  $2014_{[6]}$ ).

All of these pedagogical activities could overlap with existing subjects and lessons, such as mathematics, science, reading and history. Teachers could adapt the content of their lessons by integrating global issues and choosing the most suitable pedagogy while keeping in mind the overarching learning goals.

## **Actions based on institutional policies**

Developing a **culturally sensitive and inclusive curriculum** is an effective way of promoting intercultural and global education (Barrett,  $2018_{[19]}$ ). School curricula often focus on national histories and cultures of the majority group while neglecting those of minority groups. A culturally inclusive curriculum treats the cultural affiliation of minorities as an asset that enriches the learning experience of all students. The curriculum should cover the histories, beliefs, cultures and contributions of minority groups in a way that reflects the diversity present in the classroom (Nieto,  $2000_{[20]}$ ; Cammarota,  $2007_{[21]}$ ; Sleeter,  $2011_{[22]}$ ).

Diversity and intercultural understanding could be integrated into every aspect of school life through a **whole-school approach** (Huber et al.,  $2014_{[6]}$ ). This approach ensures that all aspects of learning are geared towards achieving this goal, not only curriculum content but also school leadership, management, teacher-student relations, governance and decision making, extracurricular activities and codes of conduct (Billot, Goddard and Cranston,  $2007_{[23]}$ ).

The PISA 2018 student and school questionnaires covered a wide range of activities focusing on intercultural learning through individual and co-operative practices, in addition to the promotion of communication with people from other cultures and exchange programmes with schools in other countries. Moreover, the questionnaires covered aspects of institutional policies, such as teachers' multicultural and egalitarian beliefs and students' perceptions of discrimination at school.

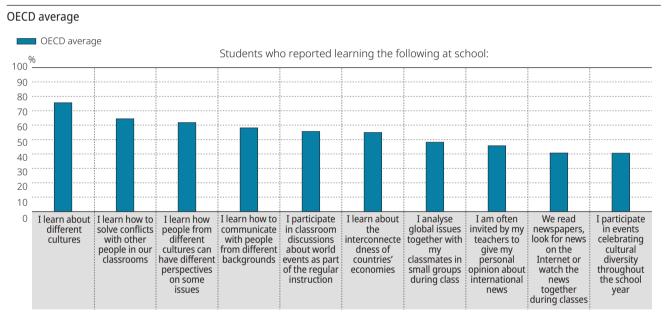
This chapter presents findings from the PISA 2018 student, school and teacher questionnaires. It covers learning activities students are exposed to, the availability of relevant curricula and teachers' capacity to integrate intercultural learning into their lessons. The chapter also explores associations between some of these factors and students' outcomes. It concludes with a discussion about what the findings imply for the UN Sustainable Development Goals (SDGs).

#### INTERCULTURAL AND GLOBAL LEARNING ACTIVITIES

# **Availability of learning activities**

Students who participated in PISA 2018 were asked ten questions about different learning activities to which they are exposed. The most common activity across OECD countries was learning about different cultures at school: 76% of students reported that they engage in this activity at school (Figure VI.7.1). Some 64% of students reported that they learn how to solve conflicts with other people in the classroom; 62% reported that they learn how people from different cultures can have different perspectives on some issues; 58% reported that they learn how to communicate with people from different backgrounds; 56% reported that they participate in classroom discussions about world events; 55% reported that they learn about the interconnectedness of countries' economies; 48% reported that they analyse global issues together with classmates in small groups during class; 46% reported that they give and discuss personal opinions about international news; 41% reported that they read newspapers, look for news on the Internet or watch the news together during classes; and 41% reported that they participate in events celebrating cultural diversity throughout the school year. The most common activities students engage in are those that involve instruction and learning, rather than those that involve active discussion or participation. This could indicate that current teaching practices rely on teacher-directed instruction rather than participative activities.

Figure VI.7.1 Students engaged in learning opportunities at school



Items are ranked in descending order of the proportion of students who responded "yes".

Source: OECD, PISA 2018 Database, Table VI.B1.7.1.

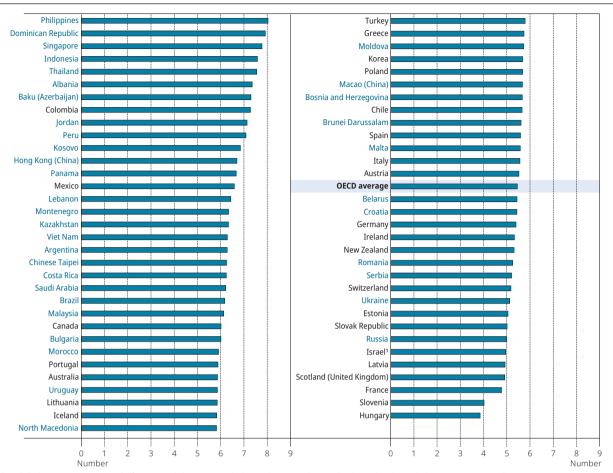
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The total number of learning activities students are exposed to at school was constructed by summing students' answers to all ten questions. Values in this indicator range between 0 and 10 and give an indication of how systemically these activities are covered at schools. On average across OECD countries, students reported engaging in about five of these learning activities, although this number varies substantially between countries. Across all countries and economies, students in Albania, Baku (Azerbaijan), Colombia, the Dominican Republic, Indonesia, Jordan, Peru, the Philippines, Singapore and Thailand reported engaging in more than seven activities, while students in France, Hungary, Israel, Latvia, the Russian Federation (hereafter "Russia"), Scotland (United Kingdom) and Slovenia reported engaging in fewer than five (Figure VI.7.2). Across all countries and economies, students reported that they engage in at least four learning activities focusing on attitudes and skills for living in an interconnected world. Hence, even in the countries where resources are limited, the number of learning activities available to students is not negligible.

# Number of learning activities and students' attitudes

Students' attitudes and dispositions are positively and significantly associated with the number of learning activities in which they are engaged (Table VI.B1.7.11). Those associations remain positive and are not attenuated after accounting for students' and schools' socio-economic profile. The strongest associations were with self-efficacy regarding global issues, awareness of global issues, interest in learning about other cultures and agency regarding global issues (Figure VI.7.3).

Figure VI.7.2 Number of learning activities students engage in at school



<sup>1.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Countries and economies are listed in descending order of the number of learning activities students engage in at school.

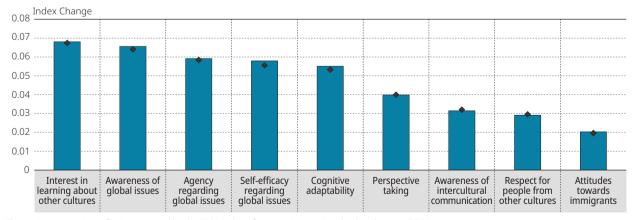
Source: OECD, PISA 2018 Database, Table VI.B1.7.1.

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Figure VI.7.3 Number of learning activities and students' attitudes

## OECD average

Before accounting for gender, immigrant background, students' and schools' socio-economic profile¹
 After accounting for gender, immigrant background, students' and schools' socio-economic profile¹



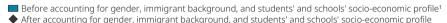
1. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

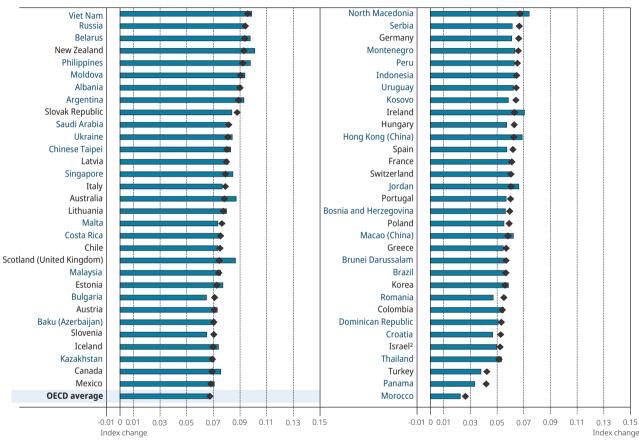
Note: All associations are statistically significant.

Source: OECD, PISA 2018 Database, Table VI.B1.7.11.

The strongest, albeit weak, association observed was between the number of learning activities in which students are engaged and students' interest in learning about other cultures. One additional activity in which the student is engaged is associated with a rise of 0.07 of a unit in this index, after accounting for students' and schools' socio-economic profile. This weak association shows that engagement in one learning activity is not enough to improve students' attitudes. Therefore, schools and educators should integrate several activities into their practice, with the aim of creating a comprehensive learning approach that covers various aspects of intercultural understanding. Those practices should also be reviewed and updated as necessary. Associations are strongest in Belarus, the Republic of Moldova (hereafter "Moldova"), New Zealand, Russia, the Philippines and Viet Nam, and weakest in Colombia, Croatia, the Dominican Republic, Israel, Morocco, Panama, Thailand and Turkey (Figure VI.7.4).

Figure VI.7.4 Interest in learning about other cultures and learning activities





- 1. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).
- 2. The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

 $\textbf{Note} \hbox{: All associations are statistically significant.}$ 

Countries and economies are ranked in descending order of the strength of the association, after accounting for gender, immigrant background and students' and schools' socio-economic profile.

Source: OECD, PISA 2018 Database, Table VI.B1.7.11.

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# Associations between students' attitudes and opportunities to learn

In general, students who reported that they engage in learning opportunities that focus on living in an interconnected world tended to exhibit more positive attitudes than those who did not so report. However, the strength and statistical significance of the associations between students' attitudes and their engagement in learning activities vary between countries/economies and according to which learning activities or attitudes are being considered. The following section examines students' attitudes in relation to their engagement in the ten learning activities.

# Self-efficacy regarding global issues

Students who engage in learning activities focusing on intercultural understanding and on living in an interconnected world reported greater self-efficacy regarding global issues (Table VI.B1.7.2). Those positive differences were observed in almost every country/economy.

On average across OECD countries, the largest differences in reported self-efficacy regarding global issues between students who engage in learning activities and those who do not were found in relation to participating in classroom discussions about world events (difference of 0.31 of a unit in the index of self-efficacy regarding global issues) and learning how people from different cultures can have different perspectives on some issues (difference of 0.28 of a unit in that index). Differences in reported self-efficacy regarding global issues between the two groups of students amounted to 0.24 of a unit in the index in favour of students who engage in learning activities about the interconnectedness of countries' economies, learning about different cultures and analysing global issues with classmates. Differences were narrower for all other learning activities.

This finding shows that students report greater self-efficacy about global issues when they learn about them at school. Other activities focusing on interpersonal skills, such as communication, conflict resolution and participation in intercultural activities, are associated with smaller differences in self-efficacy regarding global issues.

# Awareness of global issues

Positive and relatively large differences in awareness of global issues were observed among students who learn about other cultures, participate in classroom discussions about world events and learn how people from different cultures can have different perspectives (Table VI.B1.7.3). Differences were narrower between students who engage in the other learning activities, especially those focusing on following or watching the news during classes and on celebrating cultural diversity at school. Differences were positive in almost all countries and economies and on average across OECD countries.

# Understanding the perspectives of others

Small differences in students' capacity to understand the perspectives of others were observed between those who engage in learning activities at school and those who do not (Table VI.B1.7.4). As expected, on average across OECD countries, the largest difference (0.22 of a unit in the index of perspective taking) was observed between students who reported that they learn that people from different cultures could have different perspectives and worldviews compared to those who do not engage in such activities. This is followed by differences between those who learn how to resolve conflicts (0.2 of a unit in the index), those who learn about other cultures (0.19 of a unit in the index) and those who learn how to communicate with people from other cultures (0.18 of a unit in the index).

This finding shows that students were more likely to report that they understand the perspectives of others when they learn about other cultures and when they develop certain interpersonal skills, such as communication and conflict resolution.

# Interest in learning about other cultures

Large differences in students' interest in learning about other cultures (exceeding 0.3 of a unit in the index, on average across OECD countries) were observed between students who engage in the following activities and those who do not: learning about other cultures at school; learning that people from different backgrounds can have different perspectives; and participating in classroom discussions about world events (Table VI.B1.7.5). Differences were smaller for the other learning activities, but were positive and significant in almost all countries/economies.

# Respect for people from other cultures

Two learning activities are associated with differences in students' respect for people from other cultures: learning about other cultures and learning how people from different backgrounds can have different perspectives on some issues. All other learning activities are associated with minor differences in this index, with some differences that are statistically non-significant (Table VI.B1.7.6). Unlike other attitudes, respect for people from different backgrounds is not positively related to all teaching activities, but only to those focused on intercultural knowledge and competence. This indicates that respect may be more difficult to teach and that developing this attitude may depend on factors beyond the school environment.

#### **Attitudes towards immigrants**

Similar results were observed for students' attitudes toward immigrants. Positive and significant differences were only found between students who learn about other cultures and learn that different people can have different perspectives and students who do not engage in these learning activities. Other learning opportunities are either not associated with differences in attitudes towards immigrants or are associated with minor differences. This is another indication that some learning opportunities may be more effective in developing certain skills or attitudes than others (Table VI.B1.7.7).

# Cognitive adaptability

Students who engage in learning activities that focus on communication with people from other cultures and on understanding the perspective of others and who participate in classroom discussions of world events reported greater cognitive adaptability (Table VI.B1.7.9). Positive but smaller differences were observed for the other learning opportunities considered.

# Awareness of intercultural communication

Students reported greater awareness of intercultural communication when they engage in learning opportunities that focus on understanding the perspective of others and on communicating across different cultures, when they participate in classroom activities focusing on world events and when they learn about other cultures (Table VI.B1.7.8). Minor differences in this index were observed when students engage in the other learning activities considered.

# Agency regarding global issues

Agency regarding global issues is positively associated with most learning activities at school (Table VI.B1.7.10). On average across OECD countries, the largest differences in this index were observed for engaging in the following learning activities: classroom discussions of world events; analysing global issues with classmates; and learning how people from different cultures can have different perspectives on some issues. It is clear that agency regarding global issues is associated with exposure to these issues at school. Students who learn about these topics are likely to develop more positive attitudes about them.

In summary, the results show that positive attitudes and dispositions are positively related to the use of a multitude of learning activities at school. Activities focusing on knowledge of global issues and on the interconnectedness of the world are likely to boost students' awareness and self-efficacy regarding global issues. Activities focusing on fostering interpersonal skills, such as communication and conflict resolution, are likely to boost students' ability to understand different perspectives and to communicate with others. Hence, a complementary set of learning activities should be used to develop a comprehensive set of skills that students need to live in an interconnected world.

Two attitudes, respect for people from other cultures and attitudes towards immigrants, are weakly associated with learning activities at school. This could indicate that those two attitudes are more influenced by the wider environment than by what happens at school. Among other factors, the wider environment includes the home and exposure to the media and the Internet.

Two activities, learning about other cultures and learning that different people can have different perspectives about some issues, stand out as two of the most common learning activities reported by students and the two activities positively associated with all attitudes. These two activities encompass elements of knowledge about other cultures as well as certain skills, such as critical and analytical thinking. In this sense, it is important that schools equip students not only with conceptual knowledge about other cultures, but also with skills that they could adapt and use under various circumstances.

## Box VI.7.1. Reading and students' global and intercultural knowledge, skills attitudes.

Existing research shows that reading is a powerful strategy to improve out-group attitudes including tolerance, perspective taking and empathy towards marginalised groups such as immigrants and refugees (Bal and Veltkamp,  $2013_{[24]}$ ). Those findings are supported by both experimental and non-experimental evidence (Vezzali et al.,  $2014_{[25]}$ ). Results from the PISA 2018 survey also support these findings. Students who enjoy reading and who perform well on the reading test report more positive attitudes and dispositions and a heightened awareness about global and intercultural issues. The examined indices are: awareness of global issues; self-efficacy regarding global issues; interest in learning about other cultures; respect towards people from other cultures; attitudes towards immigrants; perspective taking; cognitive adaptability; awareness of intercultural communication; and agency regarding global issues.

Associations between the index of students' enjoyment of reading and all nine indices covering students' knowledge, attitudes and dispositions were positive across all countries and economies. The associations were moderate in magnitude but were not attenuated when students' and schools' socio-economic profiles were accounted for (Table VI.B1.7.18). Moreover, students who perform well on the reading test reported more positive attitudes and dispositions. The associations between performance on the reading test and students' attitudes and dispositions were positive and statistically significant across most countries and economies, but weak in magnitude (Table VI.B1.7.19).

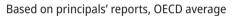
## **MULTICULTURAL LEARNING AT SCHOOL**

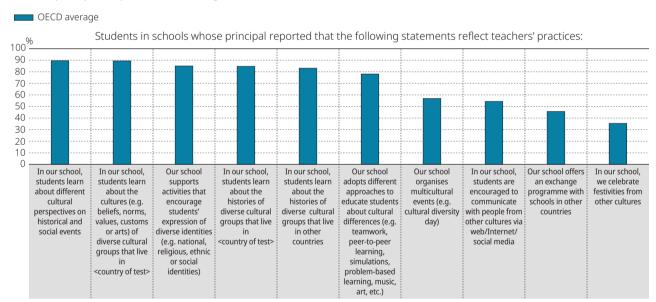
# Learning opportunities at school

School principals were asked ten questions about whether particular intercultural learning activities are included in lessons and activities at their school. These activities covered: 1) learning about the histories of diverse cultural groups that live in the country where students sat the PISA test (hereafter "the country of assessment"); 2) learning about the histories of diverse cultural groups that live in other countries; 3) learning about the beliefs, norms, values, customs and arts of diverse cultural groups that live in the country of assessment; 4) learning about different cultural perspectives on historical and social events; 5) supporting activities that encourage students' expression of diverse identities; 6) offering an exchange programme with schools in other countries; 7) organising multicultural events; 8) celebrating festivities from other cultures; 9) encouraging students to communicate with people from other cultures via web/Internet/social media; and 10) educating students about cultural differences through teamwork, peer-to-peer learning, simulations, problem-based learning, music and art.

The questions cover different learning activities that could help develop students' intercultural understanding. The findings show that, on average across OECD countries, the most common activities reported by school principals were those that took place in a classroom, such as learning about the histories and cultures of diverse groups living inside and outside of the country of assessment. In 2018, between 80% and 90% of students, depending on the activity considered, attended a school whose principal reported that these activities are included in school lessons (Figure VI.7.5). The least common activities were participative activities, such as celebrating festivities from other cultures (35% of students attended a school whose principal reported that this is done in the school), activities involving student exchanges (46%) and activities involving interactions with students in other countries using the Internet or social media (54%).

Figure VI.7.5 Multicultural learning at school





Items are ranked in descending order of the proportion of students in schools whose principal reported that the statements reflect teachers' practices in their school. **Source**: OECD, PISA 2018 Database, Table VI.B1.7.12.

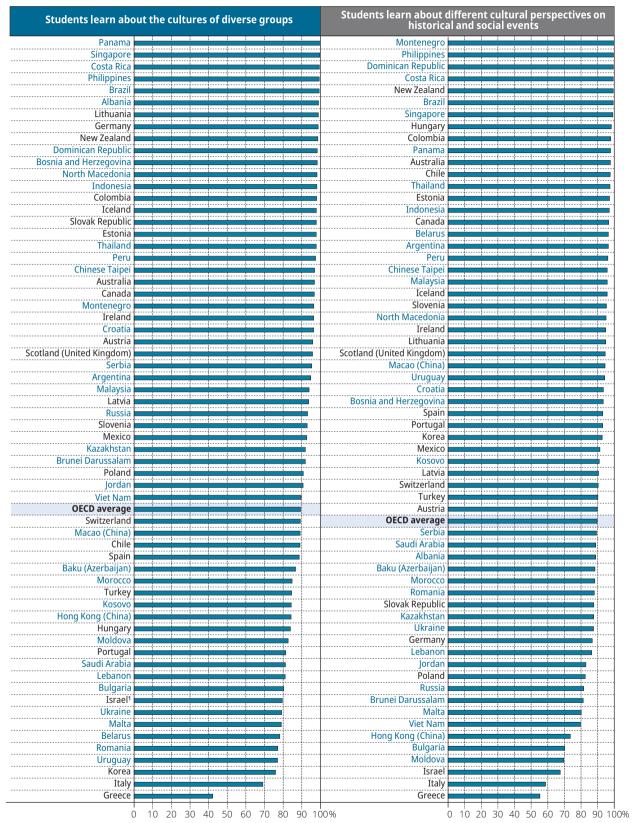
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The most common activities were learning about the beliefs, norms, values, customs and arts of diverse cultural groups that live in the country of assessment and learning about different cultural perspectives on historical and social events. About 90% of students attended a school whose principal reported that those two activities take place in their school. However, there were some variations across participating countries and economies (Figure VI.7.6). Learning about the beliefs, norms, values, customs and arts of diverse cultural groups was most prevalent in Albania, Brazil, Costa Rica, Panama, the Philippines and Singapore, with 99% of students attending a school whose principal reported that this activity is included in lessons. This could indicate that these activities are mandated in national curricula. This activity was least common in Greece and Italy.

Another common school practice is learning about different cultural perspectives on historical and social events. At least 98% of students in Brazil, Costa Rica, the Dominican Republic, Hungary, Montenegro, New Zealand, the Philippines and Singapore are exposed to this activity in school. This activity was least common in Greece, Israel, Italy and Moldova.

# Figure VI.7.6 Learning about different cultural groups

#### Based on principals' reports



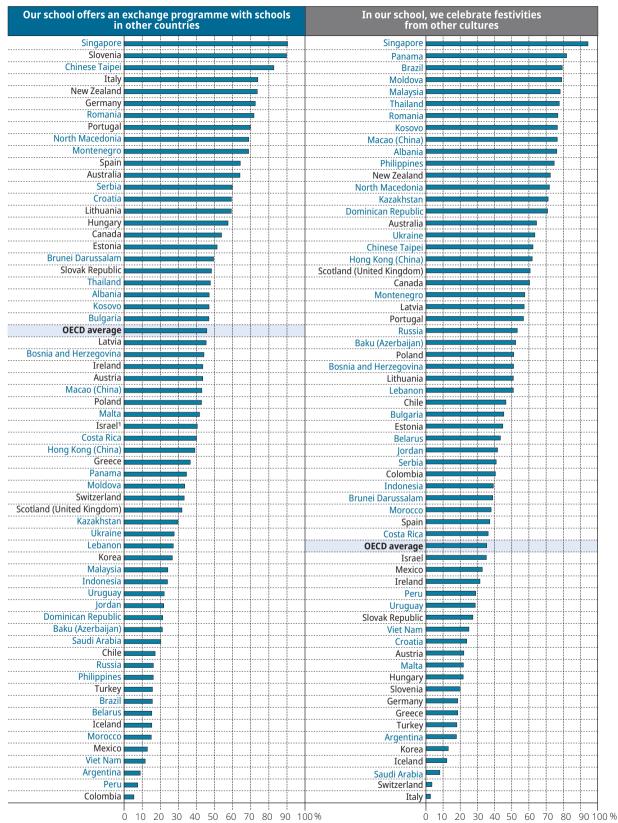
<sup>1.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Countries and economies are ranked in descending order of the percentage of students in schools whose principal reported that this activity takes place in their school. **Source**: OECD, PISA 2018 Database, Table VI.B1.7.12.

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Figure VI.7.7 Student exchanges and celebrations of cultural festivities

## Based on principals' reports



<sup>1.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Countries and economies are ranked in descending order of the percentage of students in schools whose principal reported that this activity takes place in their school. **Source**: OECD, PISA 2018 Database, Table VI.B1.7.12.

## Education for living in an interconnected world

The least common activities are celebrations of festivities of other cultures and student exchanges with schools from other countries. On average across OECD countries in 2018, only 35% of students attended a school whose principal reported that the school celebrates the festivities of other cultures. However, the proportion was much larger (exceeding 75%) in Albania, Brazil, Kosovo, Macao (China), Malaysia, Moldova, Panama, Romania, Singapore and Thailand. In Singapore, 94% of students attended such a school, while less than 10% of students in Italy, Saudi Arabia and Switzerland attended such a school (Figure VI.7.7).

Some 46% of students attended a school whose principal reported that the school organises student exchanges with schools abroad. Around 90% of students in Singapore and more than 70% of students in Germany, Italy, New Zealand, Romania, Slovenia and Chinese Taipei attended such a school. This activity was least common in Argentina, Colombia and Peru. Some of these variations could reflect the high financial cost of student exchange programmes and the logistical difficulty associated with organising them.

## The school curriculum

School principals were asked two sets of questions about the inclusion of global issues and of intercultural knowledge and skills in their school's curriculum. The first set of questions focused on the same global issues that students were asked about: climate change and global warming; global health (e.g. epidemics); migration (movement of people); international conflicts; hunger or malnutrition in different parts of the world; causes of poverty; and equality between men and women in different parts of the world.

The second set of questions asked school principals whether intercultural learning is covered in the curriculum. The questions focused on the same dispositions that students were asked about: communication with people from different cultures; knowledge of different cultures; openness to intercultural experiences; respect for cultural diversity; learning foreign languages; and critical-thinking skills.

The following section explores the content of school curricula and the associations between the availability of learning opportunities and students' knowledge and attitudes.

#### Global issues

PISA 2018 results show that global issues are commonly included in school curricula (Figure VI.7.8). The most common topic was global warming and climate change, with 88% of students attending a school whose principal reported that the subject is covered in the curriculum. Some 81% of students attended a school whose principal reported that the curriculum covers migration, international conflicts and causes of poverty; 80% attended a school whose principal reported that the curriculum covers hunger and malnutrition; and 79% attended a school whose principal reported that the curriculum covers public health issues, such as pandemics.

Figure VI.7.8 Global issues covered in the curriculum

#### Based on principals' reports, OECD average OECD average Principals who reported that there is a formal curriculum for the following topics: 100 80 60 50 40 30 20 10 Climate change Equality between International Causes of poverty Global health Migration Hunger or men and women and global conflicts (movement of malnutrition in (e.g. epidemics) warming in different parts people) different parts of of the world the world

Issues are ranked in descending order of the proportion of students in schools whose principal reported that the topic is covered in the curriculum.

Source: OECD, PISA 2018 Database, Table VI.B1.7.13.

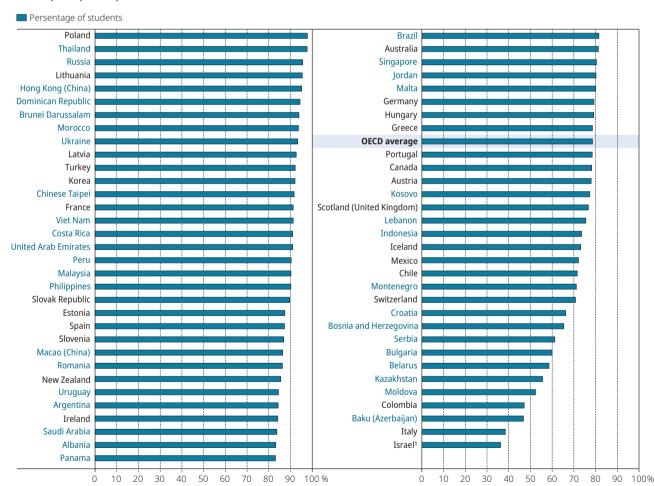
Variations were observed across countries/economies (Table VI.B1.7.13). For instance, global warming and climate change were almost universally included in the curriculum in schools in Hong Kong (China), Korea, Lithuania, Macao (China), Peru, Poland and Thailand. In these countries/economies, more than 98% of students attended a school whose principal reported that climate change is included in the curriculum. In Baku (Azerbaijan), Israel, Italy, Kazakhstan and Moldova, less than 60% of students attended such schools.

Public health issues, such as pandemics, are covered in the curriculum in most schools. More than 95% of students in Hong Kong (China), Lithuania, Poland, Russia and Thailand were exposed to these issues at school, while these subjects were infrequently covered in schools in Baku (Azerbaijan), Colombia, Israel and Italy (Figure VI.7.9).

More than 95% of students in the Dominican Republic, Latvia, Lithuania, Poland, Russia and Ukraine attended a school whose principal reported that the curriculum includes migration and the movement of people, while less than 50% of students in Baku (Azerbaijan), Israel and Italy attended such schools. In the Dominican Republic, New Zealand and Poland, more than 95% of students attended a school whose principal reported that the curriculum covers international conflicts. That proportion was much smaller and did not exceed 50% in Baku (Azerbaijan), Bulgaria, Italy, Kazakhstan and Moldova.

Figure VI.7.9 Public health issues covered in the curriculum

Percentage of students in schools whose principal reported that public health issues are covered in the curriculum, based on principals' reports



<sup>1.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Countries and economies are shown in descending order of the percentage of students in schools whose principal reported that public health issues are covered in the curriculum.

Source: OECD, PISA 2018 Database, Table VI.B1.7.13.

## Education for living in an interconnected world

More than 90% of students in Brunei Darussalam, the Dominican Republic, Ireland, Korea, Latvia, Lithuania, Morocco, Poland, Russia and Thailand attended a school whose principal reported that the curriculum covers hunger and malnutrition. This proportion did not exceed 45% in Israel, Italy, Kazakhstan and Moldova. Moreover, more than 95% of students in the Dominican Republic, Ireland, Poland and Thailand attended a school whose principal reported that the causes of poverty are examined as part of the school curriculum, while less than 50% of students in Belarus, Bulgaria, Israel, Italy, Kazakhstan, Moldova and Serbia attended such schools.

In Costa Rica, the Dominican Republic, France, Iceland, Korea, Lithuania, Peru, Poland, Russia, Spain, Chinese Taipei, Thailand and Uruguay, more than 90% of students attended a school whose principal reported that the curriculum covers gender equality. By contrast, in Belarus, Bulgaria, Israel, Italy, Kazakhstan, Moldova, Saudi Arabia and Serbia, less than 60% of students attended such schools.

In a few countries and economies, covering global issues in the school curriculum was positively associated with students' awareness of those issues, after accounting for students' and schools' socio-economic profile. These positive associations were not influenced by response style, because coverage of the issues in the curriculum was reported by school principals, while awareness of the issues was reported by students. Hence, positive associations indicate that exposure to learning activities at school could improve students' knowledge. However, those associations held in a small number of countries and economies.

The strongest associations were found between coverage of climate change and global warming in the curriculum and students' awareness of this issue. On average across OECD countries, students who attended schools that cover climate change in the curriculum were 12% more likely to be aware of this issue than those who attended schools where the topic is not covered. The next strongest associations between topics covered in the curriculum and students' awareness about an issue were: 1) migration and movement of people; and 2) causes of poverty. Students whose school curriculum covers these topics were 8% more likely to be aware of these issues.

However, there were substantial variations across countries in the strength of the associations. Figure VI.7.10 shows whether the associations were positive, negative or non-significant. Results are based on logistic regressions after accounting for students' and schools' socio-economic profile. Associations between covering climate change in the curriculum and students' awareness of that issue were positive in seven countries/economies and negative in four, while associations related to migration and movement of people were positive in seven countries/economies, and those related to international conflicts were positive in ten.

Moreover, in seven countries/economies, students' awareness of hunger and malnutrition was positively associated with this topic being included in the curriculum. In six countries/economies, a similarly positive association was observed between students' awareness of the causes of poverty and covering this topic in the curriculum.

## Intercultural learning

In many countries/economies, intercultural learning skills are covered by school curricula (Figure VI.7.11). The most common topic covered by the curriculum is respect for cultural diversity: 87% of students attended a school whose principal reported that the curriculum includes this topic. Some 85% of students attended a school whose principal reported that the curriculum includes critical thinking skills; 81% attended a school whose principal reported that the curriculum includes knowledge of different cultures; 70% attended a school whose principal reported that the curriculum includes openness to intercultural experience; and 50% of students attended a school whose principal reported that the curriculum includes communicating with people from other cultures.

The prevalence of these activities varied substantially across countries and economies (Table VI.B1.7.14). More than 80% of students in the Dominican Republic, Poland, Russia and Thailand attended a school whose principal reported that the curriculum includes communication skills. The proportions were much smaller and did not exceed 30% in Bulgaria, Colombia, Ireland, Scotland (United Kingdom) and Serbia. At least 90% of students in Costa Rica, the Dominican Republic, France, Germany, Latvia, Lithuania, Poland, Russia, the Slovak Republic, Slovenia, Spain, Thailand and Ukraine attended a school whose principal reported that the curriculum includes knowledge of other cultures. Less than 50% of students in Bulgaria, Italy and Serbia attended such schools.

In the Dominican Republic, Poland, Russia, Thailand and Ukraine, more than 90% of students attended a school that has a formal curriculum on openness to other cultures. In Belarus, Bulgaria, Colombia, Moldova, Montenegro and Serbia, less than 50% of students attended such schools.

Respect for cultural diversity is the topic most widely covered in school curricula: more than 90% of students in 31 countries and economies attended a school where this topic is included in the curriculum. In no country or economy was the proportion of students who attended such schools below 50%.

Critical thinking skills are included in the school curriculum in 23 countries and economies with more than 90% of students attended such schools. More than 98% of students in Austria, the Dominican Republic, Macao (China), Poland and Thailand attended a school whose principal reported that the curriculum includes critical thinking skills, while less than 50% of students in Belarus and Serbia attended such schools.

Figure VI.7.10 Coverage in the curriculum and students' awareness of global issues

Positive difference	Negative	e differen	ice	Differe	nce is not	significa	nt	Missing values								
Change in students' awarer	ness of t	he topi	c associ	ated wi	th this t	opic bei	ng inclu	ded in the school curriculum								
A Climate change and globa	l warmin	g <b>B</b>	Global	health (e	.g. pande	emics)	c Mig	ration (movement of people) D Inte	rnational	conflicts						
E Hunger or malnutrition in	different	parts of t	■ the world	F	Causes o	f poverty	G F	quality between men and women in differ	ent parts	of the wo	orld					
Tranger of maintainaon in	directoric	parts or	are worre	•	caases	. poreity		quality secretariner and women in amer	circ parts	or tire w	J. 1.G					
	A <sup>1</sup>	rriculun B	n at scho	ol focus  D	ing on g	lobal iss	G			Curriculum at school focusing on global is  A <sup>1</sup> B C D E F						
OECD average	A.	ь		D	-	-	ų ,	Estonia	A.	Б	·	U U		· ·	G	
Chile								Latvia								
Montenegro								Switzerland								
Mexico								Singapore								
Kazakhstan								Korea								
Hungary								Spain								
France								Moldova								
Canada								New Zealand								
Serbia								Hong Kong (China)								
Macao (China)								Colombia								
Jordan								Turkey								
Argentina								Lithuania								
Viet Nam								Bosnia and Herzegovina								
Malaysia								Thailand								
Lebanon								Baku (Azerbaijan)								
Morocco								Romania								
Ireland								Poland								
Ukraine								Kosovo								
Brunei Darussalam								Portugal								
Slovenia								Brazil								
Israel <sup>2</sup>								Costa Rica								
Italy								United Arab Emirates								
Australia								Slovak Republic								
Peru								Uruguay								
Croatia								Indonesia								
Germany								Chinese Taipei								
Panama								Saudi Arabia								
Malta								Greece								
Dominican Republic								Philippines								

Countries and economies are listed in alphabetical order.

Source: OECD, PISA 2018 Database, Table VI.B1.7.13.

Austria

Russia

Albania Iceland

Bulgaria

StatLink https://doi.org/10.1787/888934170735

10

52

62

4 0

Belarus

Countries/economies with no difference

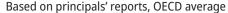
Countries/economies with a negative difference

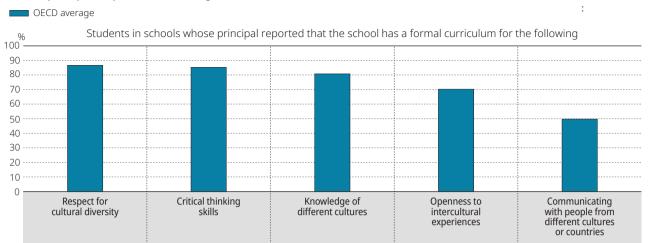
Scotland (United Kingdom)

<sup>1.</sup> After accounting for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

<sup>2.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

# Figure VI.7.11 Intercultural learning covered in the curriculum





Items are ranked in descending order of the percentage of students in schools whose principal reported that the issues are covered in the curriculum.

Source: OECD, PISA 2018 Database, Table VI.B1.7.14.

StatLink https://doi.org/10.1787/888934170754

# Figure VI.7.12 [1/2] Curriculum coverage and students' intercultural attitudes

Positive difference										
Change in students' awarness of the topic associated with this topic being included in the school curriculum										
A Students' awareness of intercultural communication and learning communication skills	D Students' respect for people from other cultures and learning respect for cultural diversity									
B Students' interest in learning about other cultures and learning about different cultures	E Students' perspective taking and learning critical thinking skills									
c Students' interest in learning about other cultures and learning about openness to other cultures	F Students' cognitive adaptability and learning critical thinking skills									

	Based on students' and principals' reports  A¹ B C D E F										
	A <sup>1</sup>	В	С	D	E	F					
OECD average											
Chile											
Montenegro											
Mexico											
Kazakhstan											
Hungary											
France											
Canada											
Serbia											
Macao (China)											
Jordan											
Argentina											
Viet Nam											
Malaysia											
Lebanon											
Morocco											
Ireland											
Ukraine											
Brunei Darussalam											

	Ва	sed on st	udent	s' and	princi	oals' re	ports	
	A <sup>1</sup>	В	С		D	E		F
Slovenia								
Israel <sup>2</sup>								
Italy								
Australia								
Peru								
Croatia								
Germany								
Panama								
Malta								
<b>Dominican Republic</b>								
Austria								
Russia								
Albania								
Iceland								
Bulgaria								
Countries/economies with a p	ositive di	fference	5	3	4	2	5	4
Countries/economies v	vith no di	fference	54	56	57	56	56	55

Countries/economies with a negative difference

Countries and economies are listed in alphabetical order.

Source: OECD, PISA 2018 Database, Table VI.B1.7.14.

<sup>1.</sup> After accounting for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

<sup>2.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

# Figure VI.7.12 [2/2] Curriculum coverage and students' intercultural attitudes

	Positive difference Negative difference Difference is not significant Missing	g valı	ues
Char	nge in students' awarness of the topic associated with this topic being included in t	he s	chool curriculum
Α	Students' awareness of intercultural communication and learning communication skills	D	Students' respect for people from other cultures and learning respect for cultural diversity
В	Students' interest in learning about other cultures and learning about different cultures	E	Students' perspective taking and learning critical thinking skills
С	Students' interest in learning about other cultures and learning about openness to other cultures	F	Students' cognitive adaptability and learning critical thinking skills

	Ва	ased on st	udents' a	nd princi	oals' repo	rts
	A <sup>1</sup>	В	С	D	E	F
Estonia						
Latvia						
Switzerland						
Singapore						
Korea						
Spain						
Moldova						
New Zealand						
Hong Kong (China)						
Colombia						
Turkey						
Lithuania						
Bosnia and Herzegovina						
Thailand						
Baku (Azerbaijan)						
Romania						
Poland						
Kosovo						

	Ва	sed on st	udents' a	nd princi <sub>l</sub>	oals' repo	rts
	A <sup>1</sup>	В	С	D	E	F
Portugal						
Brazil						
Costa Rica						
<b>United Arab Emirates</b>						
Slovak Republic						
Uruguay						
Indonesia						
North Macedonia						
Chinese Taipei						
Saudi Arabia						
Greece						
Philippines						
Belarus						
Scotland (United Kingdom)						

Countries/economies with a positive difference	5	3	4	2	5	4
Countries/economies with no difference	54	56	57	56	56	55
Countries/economies with a negative difference	5	1	1	1	0	2

<sup>1.</sup> After accounting for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Countries and economies are listed in alphabetical order.

Source: OECD, PISA 2018 Database, Table VI.B1.7.14.

StatLink https://doi.org/10.1787/888934170773

Incorporating intercultural learning topics in the curriculum was correlated with students' attitudes in only a few countries. The associations were mostly weak and sometimes of an unexpected negative sign. For instance, associations between students' awareness of intercultural communication and including communication skills in the curriculum were positive in five countries or economies and negative in another five. Associations between students' interest in learning about other cultures and including knowledge about other cultures in the curriculum were positive in three countries/economies, while the association between students' interest in learning about other cultures and including openness to other cultures in the curriculum were positive in four countries/economies. Associations between students' capacity to understand the perspectives of others and including critical thinking skills in the curriculum were positive in five countries/economies (Figure VI.7.12).

The findings based on data reported by school principals show that, in most countries/economies, global issues and intercultural learning are covered by school curricula, but in varying degrees. In some countries/economies, these topics are almost universally covered by schools, but including them in the curriculum was not positively associated with the corresponding attitudes among students. A possible explanation is that the effectiveness of the intended curriculum depends on teachers' capacity to successfully integrate these topics into their lessons.

## ARE TEACHERS PREPARED TO TEACH GLOBAL COMPETENCE?

Teachers participating in PISA 2018 were asked three sets of questions about their readiness to teach their students the skills needed to live in an interconnected world. The questions focused on teachers' professional development needs, opportunities to promote intercultural skills in lessons and their sense of self-efficacy in teaching those topics. Teachers in 18 countries and economies completed the teacher questionnaire.

<sup>2.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

# Education for living in an interconnected world

As noted in Chapter 2, teachers were sampled as part of one of two populations: language teachers and non-language teachers. Moreover, students and teachers were sampled randomly and independently within each school. In other words, it was not possible to determine whether an individual teacher was teaching a particular student. In order to analyse student and teacher data jointly, teacher-reported data were aggregated at the school level. Therefore, any teacher-level variable should be interpreted as a school average of what the teachers within each school reported. For a detailed description of the sampling procedures and the aggregation procedure, see (Mostafa and Pál, 2018<sub>[26]</sub>).

# **Teachers' professional development**

A pressing concern for many education systems is to ensure that students acquire the skills and competencies they need to live in a complex and changing world. Against this backdrop, teachers must continuously update and adapt their skills to the needs of their students. Education systems have sought to support their teachers by designing, implementing and promoting diverse forms of continuous professional development. This topic was covered in detail by the OECD Teaching and Learning International Survey (TALIS) in its two most recent reports (OECD, 2019<sub>[27]</sub>; OECD, 2020<sub>[28]</sub>). In this section, the focus is on the intercultural aspects of teacher training and preparedness.

Teachers were asked four yes-or-no questions about whether they received training in teaching in multicultural or multilingual settings, second-language teaching, teaching intercultural communication skills, and teaching about equity and diversity. The questions covered training in teachers' development programmes and in-service training during the 12 months prior to the PISA 2018 assessment.

Findings show that few teachers had attended those activities in their professional development programmes, and even fewer had done so in the previous 12 months. On average across all countries/economies, about 30% of students attended a school whose teachers received professional development on teaching in multicultural or multilingual settings, second-language teaching or teaching intercultural communication skills in their teacher development programmes, while about 45% of students attended a school whose teachers received training on teaching about equity and diversity. Proportions were particularly larger than the overall average in Albania and Malaysia. The proportions were smaller for training activities attended in the previous 12 months. Only around 20% of students attended a school whose teachers had participated in training activities in the first three areas, and 30% of students attended a school whose teachers reported that they had participated in training on equity and diversity in the previous 12 months (Table VI.B1.7.15).

Teachers were asked five other questions about whether they received professional development for teaching in multicultural settings. The findings show that 30% to 60% of students attended a school whose teachers reported receiving training in the different areas (Figure VI.7.13). For instance: 59% of students attended a school whose teachers reported that they had received training on conflict resolution; 48% attended a school whose teachers reported that they had received training on the role of education in confronting discrimination; 37% attended a school whose teachers reported that they had received training on culturally-responsive teaching approaches; 34% attended a school whose teachers reported that they had received training on intercultural communication; and 33% attended a school whose teachers reported that they had received training in multicultural classrooms.

Teachers were also asked a set of four questions about their professional development needs. Their answers were given on a four-point scale: "No need at present", "low level of need", "moderate level of need" and "high level of need". The questions covered the need for training in teaching in a multicultural or multilingual setting, second-language teaching, teaching intercultural communication skills and teaching about equity and diversity.

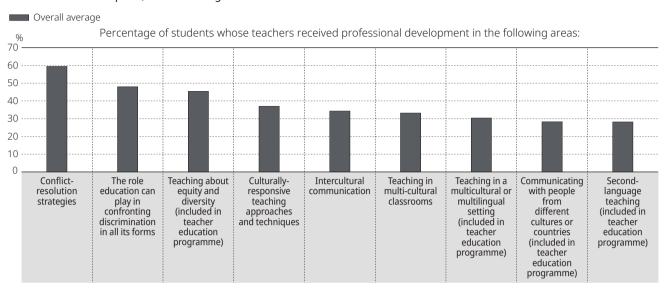
On average across the 18 countries and economies that distributed the teacher questionnaire, 54% of students attended a school whose teachers reported a moderate or high need for professional development in teaching in multicultural and multilingual settings; 46% attended a school whose teachers reported a moderate or high need for training in teaching intercultural communication; 45% of students attended a school whose teachers reported a moderate or high need for training in teaching second languages; and 42% attended a school whose teachers reported a moderate to high need for training in teaching about equity and diversity.

The results varied substantially between countries and economies. The greatest need for professional development in teaching in multicultural and multilingual settings was expressed by teachers in Brazil, Chile, the Dominican Republic, Korea, Malaysia, Morocco, Panama and Peru. The greatest need for training in teaching intercultural communication was reported by teachers in Brazil, Chile, the Dominican Republic, Korea, Malaysia, Morocco, Panama and Peru (Figure VI.7.14).

Teachers in Brazil, Chile, the Dominican Republic, Korea, Malaysia, Morocco, Panama and Peru expressed the greatest need for training in second-language teaching. Those in Korea, Macao (China) and Malaysia expressed the greatest need for training about equity and diversity (Figure VI.7.15).

Figure VI.7.13 Teachers' professional development in teaching in multicultural settings

## Based on teachers' reports, Overall average



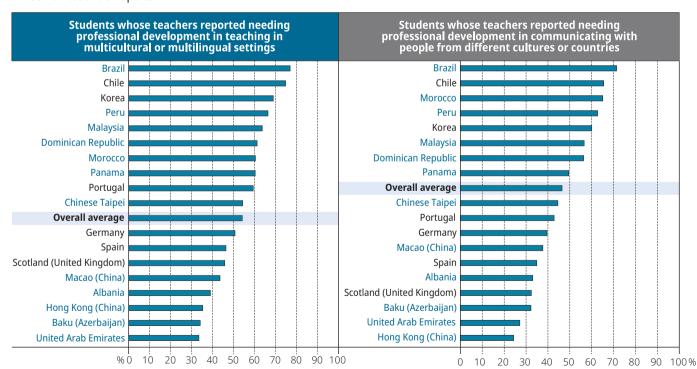
Items are ranked in descending order of the percentage of students whose teachers reported that they received professional development in those areas.

Source: OECD, PISA 2018 Database, Table VI.B1.7.15.

StatLink https://doi.org/10.1787/888934170792

Figure VI.7.14 Teachers' need for professional development in teaching culturally diverse students

Based on teachers' reports

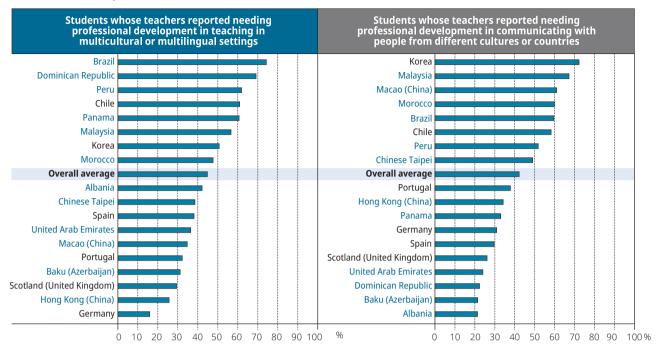


Countries and economies are listed in descending order of the percentage of students whose teachers reported needing professional development in these areas.

Source: OECD, PISA 2018 Database, Table VI.B1.7.15.

Figure VI.7.15 Teachers' need for professional development in teaching diverse classes

#### Based on teachers' reports



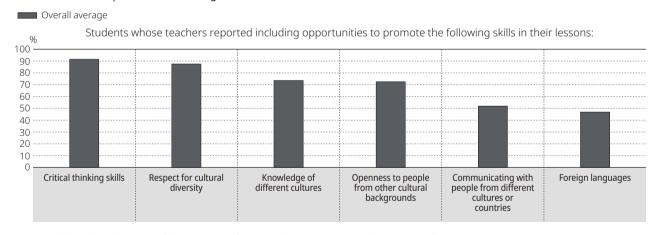
Countries and economies are listed in descending order of the percentage of students in schools whose teachers reported needing professional development in the area.

Source: OECD, PISA 2018 Database, Table VI.B1.7.15.

StatLink https://doi.org/10.1787/888934170830

Figure VI.7.16 Incorporating intercultural skills into school lessons

## Based on teachers' reports, overall average



Items are ranked in descending order of the percentage of students whose teachers reported that those skills are covered in lessons.

Source: OECD, PISA 2018 Database, Table VI.B1.7.16.

StatLink https://doi.org/10.1787/888934170849

# Opportunities to promote intercultural skills in lessons

Teachers were asked six yes-or-no questions about whether they include opportunities to promote intercultural skills in their lessons. These opportunities covered intercultural communication, openness and respect towards other cultures, foreign languages and critical thinking. On average across the 18 countries and economies that distributed the teacher questionnaire, 92% of students attended a school whose teachers included critical thinking in their lessons (Figure VI.7.16); 88% attended a school whose teachers included respect for cultural diversity; 74% attended a school whose teachers included knowledge of

other cultures; 73% attended a school whose teachers included openness to people from other cultures; 52% attended a school whose teachers included intercultural communication; and 47% attended a school whose teachers included foreign languages in their lessons.

Some variations were observed between countries and economies. Albania, the Dominican Republic, Malaysia and the United Arab Emirates showed the largest proportion of students in schools where teachers promoted all five intercultural skills.

# **Teachers' self-efficacy in multicultural environments**

Teachers' self-efficacy is found to be strongly associated with the quality of teaching practices and with teachers' job satisfaction and commitment (OECD, 2019<sub>[27]</sub>). In PISA 2018, teachers were asked to respond to five statements that indicate the extent to which they feel capable of teaching in multicultural settings: "I can cope with the challenges of a multicultural classroom"; "I can adapt my teaching to the cultural diversity of students"; "I can take care that students with and without migrant backgrounds work together"; "I can raise awareness for cultural differences amongst the students"; and "I can contribute to reducing ethnic stereotypes between the students". Responses were given on a four-point scale: "strongly agree", "agree", "disagree" and "strongly disagree". The responses were combined to create the index of teacher self-efficacy in multicultural environments.

More than 80% of students attended a school whose teachers reported a high degree of self-efficacy, as measured by the five statements (Table VI.B1.7.17). Figure VI.7.17 shows the average of the index of teacher self-efficacy in multicultural environments. Teachers in Albania, the Dominican Republic and Panama reported the greatest self-efficacy, while those in Hong Kong (China), Korea and Chinese Taipei reported the least self-efficacy in multicultural environments.

Based ou teacheriz, Leboutic

Albania

Albania

Peru
Albania

Peru
Chile
Baku (Azerbaijan)

Morocco
Morocco
Morocco
Malaysia

Brazil

Rorugal

Macao (China)

Macao (China)

Morocco
Chinese Taipei

Korea

Korea

Korea

Korea

Korea

Korea

Korea

Korea

Albania

Albania

Albania

Albania

Albania

Albania

Albania

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Figure VI.7.17 Teachers' self-efficacy in multicultural environments

Countries and economies are ranked in descending order of the index of teachers' self-efficacy in multicultural environments.

Source: OECD, PISA 2018 Database, Table VI.B1.7.17.

# Box VI.7.2. **Global competence, the Sustainable Development Goals and the future of education**

Education for living in an interconnected world should ultimately contribute to forming new generations of citizens who care about global issues and who are able to take action for sustainability and collective well-being. As stated in the UN Sustainable Development Goal for education (SDG 4.7), by 2030, all learners should acquire the knowledge and skills needed to promote sustainable development, including through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of culture's contribution to sustainable development (Education 2030, Incheon Declaration and Framework for Action).

Chapters 2 to 7 presented the findings from PISA 2018 covering nine indicators focusing on students' attitudes and dispositions for living in an interconnected world and students' performance on the cognitive global competence test. Those attitudes are directly related to aspects of SDG 4.7 such as gender equality, global citizenship and appreciation of cultural diversity, in addition to promotion of sustainable development and a culture of peace and non-violence.

In general, the findings show that there are large disparities between and within countries/economies in terms of the attitudes and cognitive skills of their students, with some being well behind in terms of achieving the goals of SDG 4.7. Moreover, the findings highlight the role of school-based learning activities and out-of-school experiences. These findings corroborate existing evidence on the role of education as a catalyst for many outcomes, such as public health, interpersonal trust and tolerance, peace, justice, environmental sustainability, in addition to economic outcomes such as innovation, employment and economic growth (UNESCO, 2016<sub>[29]</sub>; Borgonovi, 2012<sub>[30]</sub>)

In order to achieve the SDGs, concerted and comprehensive efforts should be made towards expanding the opportunities to develop global competence. Such opportunities could rely on school-based learning activities, but also on a multitude of out-of-school experiences. Students should be able to learn about global issues and how they affect the world around them, and they should be able to develop critical thinking skills and fact-based worldviews. In addition, opportunities that broaden students' horizons and develop their intercultural knowledge and skills should be encouraged, such as exchange programmes and contact with people from other countries in person or virtually. Such experiences would ultimately help students build a sense of value for diversity and encourage sensitivity, respect and appreciation of others.

However, the question remains of how education authorities would develop such learning opportunities.

**The OECD's Future of Education and Skills 2030** project responded to those challenges by developing the Learning Compass 2030, a tool that offers a broad vision of the types of competencies students need to thrive in 2030 and beyond (OECD, 2019<sub>[31]</sub>). The Learning Compass was developed to help students attain learning objectives and also to contribute to individual and collective well-being, including at the global level. The facets of well-being identified by the Learning Compass overlap largely with those of the SDGs.

The Learning Compass develops a common language and understanding that is globally relevant and informed, while providing space to adapt the framework to local contexts. The aim of the framework is to assist countries (including education authorities, academic researchers, teachers, students and other stakeholders) to reflect together and define what kind of competencies today's students need to thrive in an interconnected world, and to shape the future for better lives and for individual and collective well-being. Building on the commonly agreed taxonomy that a competency encompasses knowledge, skills, attitudes and values, the key components of the compass include student agency, core foundations, transformative competencies and a competency developmental cycle of anticipation, action and reflection as shown in Figure VI.6.18.



Figure VI.7.18 The OECD Learning Compass 2030

# **Student agency**

Student agency is defined as the belief that students have the will and the ability to positively influence their own lives and the world around them as well as the capacity to set a goal, reflect and act responsibly to effect change.

# **Knowledge**

Knowledge includes theoretical concepts and ideas in addition to practical understanding based on the experience of having performed certain tasks.

#### **Skills**

Skills are the ability and capacity to carry out processes and be able to use one's knowledge in a responsible way to achieve a goal. The OECD Learning Compass 2030 distinguishes three different types of skills: cognitive and metacognitive, social and emotional, practical and physical.

## **Attitudes and values**

Attitudes and values refer to the principles and beliefs that influence one's choices, judgements, behaviours and actions on the path towards individual, societal and environmental well-being. Strengthening and renewing trust in institutions and among communities require greater efforts to develop core-shared values of citizenship in order to build more inclusive, fair, and sustainable economies and societies.

#### **Core foundations**

Core foundations are the fundamental conditions and core skills, knowledge, and attitudes and values that are prerequisites for further learning across the entire curriculum. The core foundations provide a basis for developing student agency and transformative competencies.

# **Transformative competencies**

The Learning Compass identifies three transformative competencies that students need in order to contribute to and thrive in our world, and shape a better future: creating new value, reconciling tensions and dilemmas, and taking responsibility.

# **Anticipation-Action-Reflection cycle**

The Anticipation-Action-Reflection cycle is an iterative learning process whereby learners continuously improve their thinking and act intentionally and responsibly. In the anticipation phase, learners become informed by considering how actions taken today might have consequences for the future. In the action phase, learners have the will and capacity to take action towards well-being. In the reflection phase, learners improve their thinking, which leads to better actions towards individual, societal and environmental well-being.

Another important question to answer is how can such a vision of the future of education be translated into reality?

Given its aspirational and non-prescriptive nature, the framework can serve, for example, as a platform for flexibly designing learning environments that can nurture such competencies, including those related to global competence. As such, it can help education systems design future-oriented curricula that put student agency and wellbeing at the centre in ways that are adapted to local contexts. One example of how various countries have already incorporated some of these competencies into existing curricula comes from an international curriculum analysis that was largely informed by the Learning Compass 2030 named E2030 Curriculum Content Mapping or CCM. Countries participating in this exercise were able to rate to what extent a set of competencies – including global competence and literacy for sustainable development – are explicitly articulated in their official curriculum. Each CCM competency is mapped across standardised content items covering various learning areas of the lower secondary education curriculum. Results from this exercise will be published in November 2020 by the OECD.

## Note

1. The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

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# **Equity in providing learning opportunities for living together**

This chapter examines equity in students' access to learning opportunities at school and how access is curtailed by practices such as tracking, grade repetition and stratification. It explores the association between these practices and students' capacity to live in an interconnected world. The chapter also investigates how teachers' behaviours and intercultural attitudes are related to students' attitudes and dispositions.

# What the data tell us

- On average across OECD countries, boys were slightly more likely than girls to have access to intercultural and global learning opportunities. The largest differences in favour of boys were observed in Bosnia and Herzegovina, Croatia, Korea, Kosovo, Slovenia and Turkey, while the largest differences in favour of girls were observed in Belarus, Ireland, Jordan, Singapore, Thailand and Ukraine.
- Advantaged students have access to more learning opportunities than disadvantaged students. This finding holds true in 32 of the 64 participating countries and economies, with the largest differences observed in Australia, Canada, Hong Kong (China), Korea, Macao (China), New Zealand, Scotland (United Kingdom) and Chinese Taipei.
- Attending a disadvantaged school is associated with less positive intercultural and global attitudes among students compared to attending an advantaged school. However, this association is largely attenuated after accounting for students' socio-economic status.
- Students who had repeated a grade were likely to report less positive intercultural and global attitudes than their peers who had not repeated a grade. On average across OECD countries, repeating a grade was associated with a decline in students' self-efficacy regarding global issues (0.16 of a unit) and awareness of global issues (0.18 of a unit).
- Principals in Belarus, Iceland, Ireland, Poland, the Russian Federation, Scotland (United Kingdom), Singapore, Spain,
  Ukraine and the United Arab Emirates reported the greatest prevalence of positive multicultural beliefs among their
  teachers.
- Students in Baku (Azerbaijan), the Dominican Republic, Morocco, the Philippines, Saudi Arabia and Thailand reported the
  most perceived discrimination at school, while those in Costa Rica, Iceland, Ireland, Korea, Scotland (United Kingdom) and
  Viet Nam reported the least. On average across OECD countries, relatively few students (less than 15%) reported that they
  perceive discrimination by their teachers.

Two factors, access and acquisition, determine the effectiveness of any teaching or school practice (Hoskins and Janmaat,  $2019_{[1]}$ ). The findings from Chapter 7 show that certain activities are positively associated with students' attitudes and dispositions. However, not all students participate equally in learning activities. As seen in Chapters 2 through 5, students from socio-economically advantaged backgrounds and whose parents have more positive attitudes or are likely to take action for collective well-being exhibited more positive attitudes and higher levels of cognitive skills. This could indicate differential access to global education due to stratification or other school practices (Janmaat, Mostafa and Hoskins,  $2014_{(21)}$ ).

Schools can be a major contributor towards improving equity in access to learning opportunities, but in some cases they may act as barriers. This can happen in multiple ways. First, stratification and the fact that students do not stay in education for the same length of time mean that students will not benefit equally from learning opportunities. Stratification mechanisms include early selection and tracking into general and vocational streams and school segregation according to students' socio-economic status (e.g. between public and private schools) (Nie, Junn and Stehlik-Barry, 1996<sub>[3]</sub>; Hoskins, D'Hombres and Campbell, 2008<sub>[4]</sub>; Borgonovi, d'Hombres and Hoskins, 2010<sub>[5]</sub>). Second, even students who attend the same school may not benefit from exposure to learning opportunities in the same way. This is due to streaming and grouping practices within classrooms, grade repetition, teachers' choice of certain pedagogies, and teachers' attitudes, preparedness and willingness to integrate global education into their lessons. Such practices could be used even in the most comprehensive school system (Kahne and Middaugh, 2008<sub>[6]</sub>; McFarland and Starmanns, 2009<sub>[7]</sub>; Hoskins, Janmaat and Melis, 2017<sub>[8]</sub>).

Under these two scenarios, schools could either mitigate or exacerbate inequalities in skills and attitudes. For instance, schools could provide much needed learning opportunities that disadvantaged students may lack at home. In contrast, tracking students into differentiated streams based on their previous performance amounts to sorting them according to their socio-economic status. Students in the less demanding, often less prestigious tracks, may lack the opportunities that others enjoy. In this sense, tracking would only exacerbate pre-existing social differences in attitudes and engagement (Hallinan, 1994<sub>[9]</sub>; Loveless, 1999<sub>[10]</sub>; Hoskins and Janmaat, 2016<sub>[11]</sub>).

However, explanations focusing on the role of schools in reinforcing the social status quo often omit young people's agency and their ability to overcome socio-economic disadvantage (OECD,  $2018_{[12]}$ ; OECD,  $2019_{[13]}$ ). They also omit the role that teachers and schools play in empowering and engaging students from different backgrounds (Aldridge et al.,  $2016_{[14]}$ ). School climate, shaped by students' relationships with their teachers and peers, teachers' attitudes and beliefs, and the quality of teaching and learning

are likely to influence students' experiences, attitudes and overall resilience in the face of adversity (Weissbourd, Bouffard and Jones,  $2013_{[15]}$ ). A positive and inclusive school climate is a strong predictor of attitudes and behaviours (Roeser, Eccles and Sameroff,  $2000_{[16]}$ ; Loukas and Robinson,  $2004_{[17]}$ ; Wang et al.,  $2010_{[18]}$ ).

# **INEQUALITIES IN ACCESS TO LEARNING OPPORTUNITIES**

The analyses of PISA 2018 data show a mixed picture, with substantial differences between countries in access to learning opportunities, depending on the type of learning activity, student and school characteristics and the extent of stratification in the education system. For instance, depending on the design of the education system, vocational tracks may provide learning opportunities of equal quality to those in general tracks even though students might be disproportionately sorted into those tracks based on their characteristics and prior academic performance. The following sections examine access to learning opportunities associated with student and school characteristics. Learning activities in which students are involved are the same ten activities discussed and analysed in Chapter 7.

# Students' gender

On average across OECD countries, boys were slightly more likely than girls to have access to learning opportunities (Table VI.B1.8.1). The largest differences in favour of boys were observed in Bosnia and Herzegovina, Croatia, Korea, Kosovo, Slovenia and Turkey, while the largest differences in favour of girls were observed in Belarus, Ireland, Jordan, Singapore, Thailand and Ukraine (Figure VI.8.1).

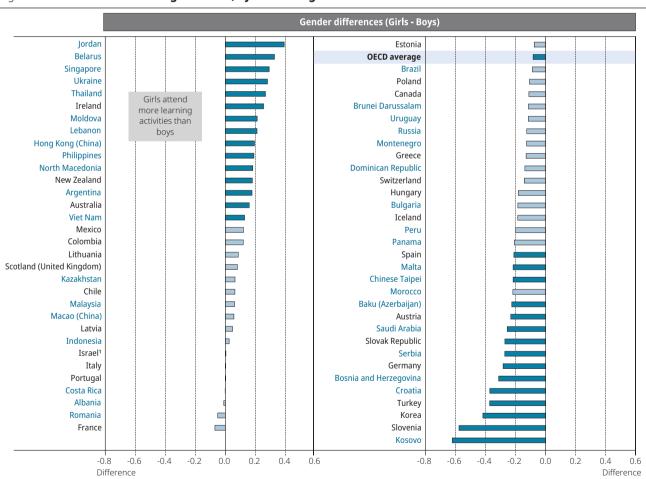


Figure VI.8.1 Number of learning activities, by students' gender

**Note**: Statistically significant values are shown in darker tones.

Countries and economies are ranked in descending order of the difference between girls and boys.

Source: OECD, PISA 2018 Database, Table VI.B1.8.1.

<sup>1.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

# Equity in providing learning opportunities for living together

More boys than girls (about 5 percentage points more) reported that they learn about the interconnectedness of countries' and economies, on average across OECD countries. Boys were also more likely than girls to read newspapers, look for news on the Internet or watch the news together during class (a difference of 3 percentage points), be invited by their teachers to give their personal opinion about international news (a difference of 4 percentage points), participate in classroom discussions about world events (a difference of 3 percentage points) and analyse global issues together with their classmates (a difference of 3 percentage points). In contrast, girls were more likely than boys to report that they learn how to solve conflicts with their peers in the classroom (a difference of 4 percentage points), learn about different cultures (a difference of 3 percentage points), and learn how people from different cultures can have different perspectives on some issues (a difference of 3 percentage points).

In general, boys were more likely than girls to participate in activities in which they are expected to give and discuss their views, while girls were more likely than boys to report participating in activities related to intercultural understanding and communication. Those differences might reflect how girls and boys are socialised in the classroom and how their teachers encourage their engagement in the different activities. They could also reflect differences between boys and girls in interests and in self-efficacy. These differences provide evidence in favour of empowering girls to take an active role in the more participatory learning activities and for boys to engage with activities focusing on intercultural understanding and communication. These differences are consistent across countries and economies, but some are statistically non-significant.

# Students' and schools' socio-economic profile

Another source of differences in access to learning activities is the socio-economic profile of students and their school. The findings show that advantaged students (those in the top quarter of the PISA index of economic, social and cultural status) have access to more learning opportunities than disadvantaged students. This finding holds true in 32 of 64 participating countries and economies, with the largest differences observed in Australia, Canada, Hong Kong (China), Korea, Macao (China), New Zealand, Scotland (United Kingdom) and Chinese Taipei (Figure VI.8.2).

When each learning activity is considered separately, larger differences, in favour of advantaged students, were observed for the following activities: learning about different cultures; participating in classroom discussions about world events; analysing global issues together with classmates in small groups; and learning how people from different cultures can have different perspectives on some issues. Fewer significant differences were observed for: learning how to solve conflicts with other people in the classrooms; reading newspapers, looking for news on the Internet or watching the news together during class; giving personal opinions about international news; and participating in events celebrating cultural diversity throughout the school year.

This direct association with students' socio-economic status could be compounded by differences in favour of students who attend socio-economically advantaged schools (those in the top quarter of schools average PISA index of economic, social and cultural status) compared with disadvantaged schools (those in the bottom quarter). However, evidence shows the opposite in many countries/economies, where students attending disadvantaged schools were more likely to report greater exposure to learning opportunities. This is the case in 36 of the 64 participating countries and economies. The largest differences in favour of students in disadvantaged schools were found in Bulgaria, Chile, Croatia, Israel², the Republic of Moldova, Montenegro, Panama, Peru, Portugal, Romania, the Russian Federation (hereafter "Russia"), Serbia and Switzerland. The opposite was true only in Australia, Canada, Iceland, Macao (China) and Scotland (United Kingdom) (Figure VI.8.3). This finding was corroborated by evidence when each learning opportunity was analysed separately.

However, students enrolled in advantaged schools tended to enjoy more opportunities than those enrolled in disadvantaged schools to participate in three of the ten learning activities assessed: learning about different cultures; participating in classroom discussions about world events; and learning how people from different cultures can have different perspectives on some issues (Table VI.B1.8.6).

In summary, disadvantaged students were likely to be exposed to fewer learning opportunities at school. However, inequity related to socio-economic status was not reflected at the school level, as students in disadvantaged schools were more likely than students in advantaged schools to enjoy greater access to seven learning activities. This finding could reflect a disproportionate provision of certain activities in disadvantaged schools that compensate for socio-economic disadvantage at home and a lack of social stratification in some education systems (i.e. socio-economic disadvantage at home does not translate into enrolment in disadvantaged schools). This finding also raises the issue of take-up among disadvantaged students, as the results suggest that even though disadvantaged schools may be providing those learning activities, students from disadvantaged backgrounds may not be equally attending them.

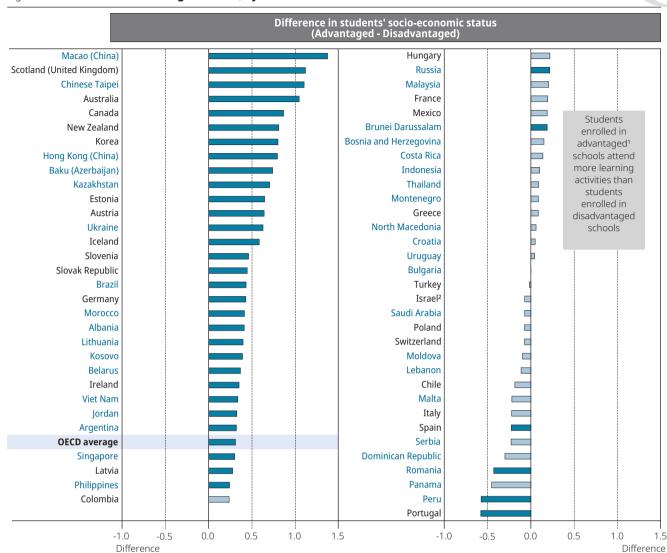


Figure VI.8.2 Number of learning activities, by socio-economic status

**Note**: Statistically significant values are shown in darker tones.

Countries and economies are ranked in descending order of the difference between advantaged and disadvantaged students.

Source: OECD, PISA 2018 Database, Table VI.B1.8.2.

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# **Grade repetition**

In countries and economies with a high prevalence of grade repetition (i.e. more than 5% of students had repeated a grade), students who had repeated a grade reported attendance at more learning activities (Table VI.B1.8.3). This was true in 15 of the 36 countries and economies with high grade repetition, while the reverse was observed only in Hong Kong (China), Jordan and the Philippines. Differences in favour of those who had repeated a grade were observed in all but two learning activities: 1) learning about different cultures (where difference in attendance was in favour of students who had not repeated a grade); and 2) learning how people from different cultures can have different perspectives on some issues (where differences were not significant).

This finding shows that grade repetition is not a main source of inequity in access to learning activities. Students who had repeated a grade would still be exposed to those activities in their classes, given that such activities are provided to all students in the class and maybe because such activities are more prevalent in lower grades. However, grade repetition might still be negatively associated with other attitudes and dispositions.

<sup>1.</sup> A socio-economically disadvantaged (advantaged) school is a school whose socio-economic profile (i.e. the average socio-economic status of the students in the school) is in the bottom (top) quarter of the PISA index of economic, social and cultural status amongst all schools in the relevant country/economy.

<sup>2.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Difference in schools' socio-economic profile (Advantaged - Disadvantaged) Macao (China) Morocco North Macedonia Scotland (United Kingdom) Lehanon Australia Students Canada enrolled in Latvia advantaged1 Iceland Belarus schools attend Malaysia Korea more learning Bosnia and Herzegovina Hong Kong (China) activities than Italy Estonia students Saudi Arabia Chinese Taipei enrolled in disadvantaged France Austria schools Slovak Republic Colombia Viet Nam Brunei Darussalam Turkey New Zealand Poland Singapore Indonesia Hungary Brazil Spain Costa Rica Uruguay Dominican Republic Albania **Philippines** Kosovo Lithuania **Argentina** Baku (Azerbaijan) Russia Thailand Switzerland Ireland Serbia Jordan Portugal Kazakhstan Chile **OECD** average Moldova Montenegro Germany Ukraine Croatia Bulgaria Malta Slovenia Romania Peru Mexico Greece Panama Israel<sup>2</sup> -1.5 -1.0 -0.5 0.5 1.0 1.5 -1.5 -1.0 0.5 1.0 -20 -20 -0.5 1.5

Figure VI.8.3 Number of learning activities, by schools' socio-economic profile<sup>1</sup>

Difference

Note: Statistically significant values are shown in darker tones.

Difference

Countries and economies are ranked in descending order of the difference between students enrolled in advantaged schools and students enrolled in disadvantaged schools.

Source: OECD, PISA 2018 Database, Table VI.B1.8.6.

StatLink https://doi.org/10.1787/888934170925

## **Programme orientation**

The orientation of the programme in which a student is enrolled (vocational or general education) is associated with differences in access to learning opportunities. However, these differences are not consistent across all countries/economies where more than 5% of students are enrolled in vocational programmes. In Austria, Belarus, Costa Rica, Korea, Kosovo, Mexico, Switzerland, Chinese Taipei and Uruguay, students enrolled in general or modular programmes were more exposed to learning activities focusing on intercultural understanding and on global issues than students enrolled in vocational programmes. The reverse was observed in Brunei Darussalam, Bulgaria, Croatia, Hungary, Italy, Portugal, Romania, Serbia and Turkey (Figure VI.8.4). Differences were non-significant in 19 countries and economies and on average across OECD countries. Some countries provide similar learning opportunities to all students, regardless of the type of programme in which they are enrolled.

On average across OECD countries, 7% more students in general programmes than in vocational programmes reported learning about different cultures, while 7% fewer reported that they read newspapers, look for news on the Internet or watch the news

<sup>1.</sup> A socio-economically disadvantaged (advantaged) school is a school whose socio-economic profile (i.e. the average socio-economic status of the students in the school) is in the bottom (top) quarter of the PISA index of economic, social and cultural status amongst all schools in the relevant country/economy.

<sup>2.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

during class. Moreover, 4% fewer students in general programmes than in vocational programmes reported participating in events celebrating cultural diversity throughout the school year. These results indicate that the conceptual aspects of intercultural learning might be more frequently taught in general programmes, while the practical aspects might be more commonly covered in vocational programmes.

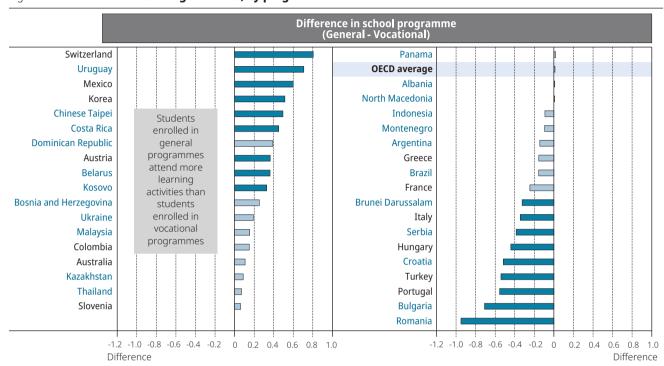


Figure VI.8.4 Number of learning activities, by programme orientation

Note: Statistically significant values are shown in darker tones.

Countries and economies are ranked in descending order of the difference between students enrolled in general programmes and students enrolled in vocational programmes.

Source: OECD, PISA 2018 Database, Table VI.B1.8.4.

StatLink https://doi.org/10.1787/888934170944

#### School type

School type is associated with differences in access to learning opportunities. In 9 countries and economies out of 51 with non-missing results, students enrolled in private schools were exposed to more learning opportunities than their peers in public schools (Table VI.B1.8.5). Those countries are Albania, Australia, Austria, Costa Rica, Greece, Mexico, New Zealand, North Macedonia (hereafter "North Macedonia") and Switzerland. Nonetheless, there are eight countries where students enrolled in public schools were exposed to more learning activities than their peers in private schools. Those countries are: Brunei Darussalam, Chile, Dominican Republic, Malaysia, Malta, Panama, Peru and Singapore. Moreover, on average across OECD countries, 4% more students in private schools than in public schools reported participating in classroom discussions about world events as part of regular instruction, while another 4% more reported that they are often invited by their teachers to give their personal opinion about international news. Moreover, 3% more students in private schools than in public schools reported that they learn about different cultures, and another 3% more reported that they learn how people from different cultures can have different perspectives on some issues. All other differences were either too small or statistically non-significant.

## **VARIATIONS IN STUDENTS' ATTITUDES, AND SCHOOL CHARACTERISTICS AND PRACTICES**

This section focuses on the association between the characteristics of students and schools and students' attitudes and dispositions towards living in an interconnected world.<sup>3</sup> The attitudes examined are: 1) self-efficacy regarding global issues; 2) awareness of global issues; 3) interest in learning about other cultures; 4) respect for people from other cultures; 5) perspective taking; 6) attitudes towards immigrants; 7) cognitive adaptability; 8) awareness of intercultural communication; and 9) engagement with global issues. In general, students who had not repeated a grade, were enrolled in a general education track or attended a socio-economically advantaged school (a school in the top quarter of schools' average PISA index of economic, social and cultural status) were likely to have more positive attitudes and dispositions than their peers who had repeated a grade, were enrolled in a vocational track or attended a disadvantaged school.

# **Advantaged and disadvantaged schools**

In a highly stratified education system, disadvantaged students are likely to attend schools with children of similar socio-economic status. Stratification results from tracking and student-allocation policies, but it could also arise naturally through parental choice of particular schools (e.g. faith schools), through the choice of a residence area or due to selection of students based on their academic performance. Those schools might also lack certain educational resources and qualified teachers and might suffer from disciplinary problems, such as truancy and bullying (OECD, 2019<sub>[19]</sub>). Under those circumstances, the disadvantage students may face at home is compounded by disadvantage that they face at school. Ultimately, if no action is taken to counter those trends, students may feel disengaged and disempowered.

In general, attending a disadvantaged school (a school in the bottom quarter of the schools' average PISA index of economic, social and cultural status) is associated with less positive attitudes among students compared to attending an advantaged school (a school in the top quarter of the schools' average PISA index of economic, social and cultural status). However, this association is largely attenuated after accounting for students' socio-economic status. This indicates that a student's socio-economic background plays a central role in sorting students into different schools.

On average across OECD countries, attending an advantaged school was associated with an increase in these indices: self-efficacy regarding global issues (0.16 of a unit); awareness of global issues (0.12 of a unit); perspective taking (0.07 of a unit); interest in learning about other cultures (0.12 of a unit); respect for people from other cultures (0.26 of a unit); attitudes towards immigrants (0.14 of a unit); cognitive adaptability (0.04 of a unit); awareness of intercultural communication (0.2 of a unit); and agency regarding global issues (0.07 of a unit).

The associations between attending an advantaged school and students' attitudes were positive and significant after accounting for students' and schools' socio-economic profiles when considering: self-efficacy regarding global issues (in 35 countries and economies); awareness of global issues (in 37 countries/economies); perspective taking and interest in learning about other cultures (23 countries/economies); respect for people from other cultures (47 countries/economies); attitudes towards immigrants (33 countries/economies); cognitive adaptability (13 countries/economies); awareness of intercultural communication (45 countries/economies); and agency regarding global issues (17 countries/economies) (Figure VI.8.5).

Figure VI.8.5 [1/2] Students' attitudes and schools' socio-economic profile Positive difference Negative difference Difference is not significant Missing values Change in the index associated with attending an advantaged school Students' interest in learning about other cultures Students' self-efficacy regarding global issues Students' cognitive adaptability Students' awareness of global issues E Students' respect for people from other cultures Students' awareness of intercultural communication Students' perspective taking F Students' attitudes towards immigrants Students' agency regarding global issues Students' attitudes and schools' Students' attitudes and schools' В н D | **OECD** average Jordan Chile Argentina Montenegro **Viet Nam** Mexico Malaysia Kazakhstan Lebanon Morocco Hungary **Ireland** France Ukraine Canada Serbia **Brunei Darussalam** Macao (China) Slovenia В D E | F G 35 37 23 23 47 33 13 45 17 17 19 Countries/economies with no difference 48 7 Countries/economies with a negative difference 3 0 1 4 0 2

1. After accounting for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Source: OECD, PISA 2018 Database, Table VI.B1.8.10

<sup>2.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Figure VI.8.5 [2/2] Students' attitudes and schools' socio-economic profile Positive difference Negative difference Difference is not significant Change in the index associated with attending an advantaged school A Students' self-efficacy regarding global issues D Students' interest in learning about other cultures G Students' cognitive adaptability B Students' awareness of global issues Students' respect for people from other cultures H Students' awareness of intercultural communication c Students' perspective taking Students' agency regarding global issues Students' attitudes towards immigrants Students' attitudes and schools' Israel<sup>2</sup> Colombia Italy Turkey Australia Lithuania Bosnia and Herzegovina Peru Croatia Thailand Germany Baku (Azerbaijan) **Panama** Romania Malta Poland **Dominican Republic** Kosovo Austria Portugal Russia Brazil Albania Costa Rica **Iceland United Arab Emirates** Bulgaria Slovak Republic Estonia Uruguay Latvia Indonesia Switzerland North Macedonia Singapore **Chinese Taipei** Korea Saudi Arabia Spain Greece Moldova **Philippines New Zealand** Belarus Hong Kong (China) Scotland (United Kingdom) 35 37 23 23 47 33 13 45 17 27 39 33 17 25 48 19 Countries/economies with no difference

Countries/economies with a negative difference

0 2

4

Source: OECD, PISA 2018 Database, Table VI.B1.8.10

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#### **Grade repetition**

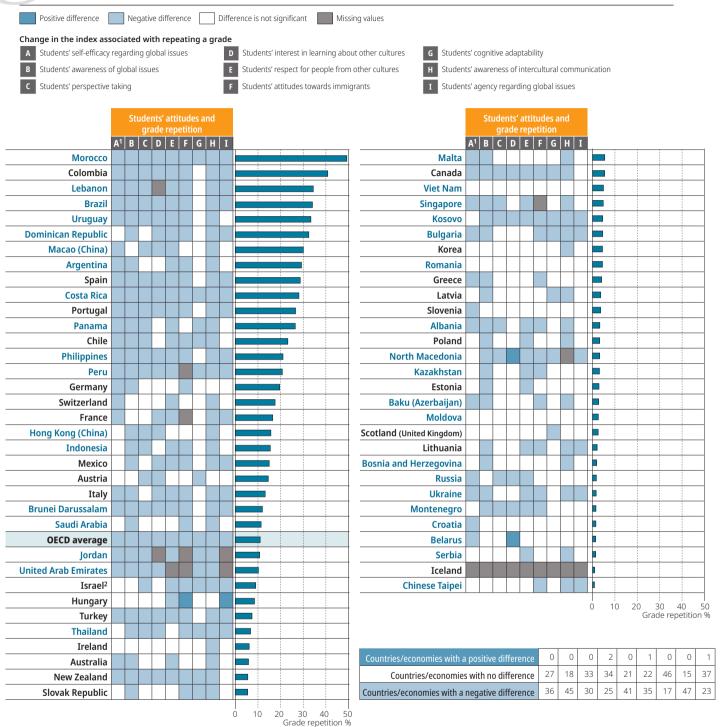
Although grade repetition, which is used to manage students' heterogeneity, is on the decline in many countries, it remains widely used in Argentina, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Lebanon, Macao (China), Morocco, Panama, Peru, the Philippines, Portugal, Spain and Uruguay, where at least one in five students had repeated a grade by the time they sat the PISA test (Table VI.B1.8.7).

Students who had repeated a grade were likely to report less positive attitudes than their peers who had not repeated a grade. The associations held even though they were attenuated after accounting for students' and schools' socio-economic profile. On average across OECD countries, repeating a grade was associated with a decline in: students' self-efficacy regarding global issues (0.16 of a unit); awareness of global issues (0.18 of a unit); perspective taking, interest in learning about other cultures and cognitive adaptability (0.08 of a unit); respect for people from other cultures (0.17 of a unit); attitudes towards immigrants (0.13 of a unit); awareness of intercultural communication (0.2 of a unit); and agency regarding global issues (0.10 of a unit).

<sup>1.</sup> After accounting for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

<sup>2.</sup> The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Figure VI.8.6 Grade repetition and students' attitudes



- 1. After accounting for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).
- 2. The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Countries and economies are ranked in descending order of the proportion of students who had repeated a grade.

Source: OECD, PISA 2018 Database, Tables VI.B1.8.7.

StatLink https://doi.org/10.1787/888934170982

Out of 64 countries and economies taking the global competence questionnaire, the associations between having repeated a grade and certain students' attitudes were negative and significant when considering: self-efficacy regarding global issues (in 36 countries/economies); awareness of global issues (45 countries/economies); perspective taking (30 countries/economies); interest in learning about other cultures (25 countries/economies); respect for people from other cultures (41 countries and

economies); attitudes towards immigrants (35 countries/economies); cognitive adaptability (17 countries/economies); awareness of intercultural communication (47 countries/economies); and agency regarding global issues (23 countries/economies).

In general, grade repetition seems to predict less positive attitudes and predispositions among 15-year-olds, even after accounting for students' socio-economic status. This finding corroborates existing evidence that grade repetition penalises students who are already struggling at school. This could happen by stigmatising low performers and by discouraging hard work among students with low motivation to study, even though grade repetition is not a predictor of lack of access to learning opportunities (Ikeda and García, 2014<sub>[20]</sub>). These results show that the effects of grade repetition extend beyond performance in traditional subjects to general attitudes about how people can live together in an interconnected world (Figure VI.8.6). However, the association between grade repetition and students' academic and attitudinal outcomes is not necessarily causal and is likely to be influenced by confounders such as the lack of motivation or discipline.

## **General and vocational tracks**

Enrolment in vocational programmes could be a predictor of low performance and attitudes. However, this is not necessarily true everywhere and for all attitudes. On average across OECD countries in 2018, 14% of students were enrolled in vocational programmes. The countries with more than 50% of students enrolled in vocational programmes were Albania, Austria, Bosnia and Herzegovina, Croatia, Montenegro, North Macedonia, Serbia and Slovenia.

In general, the results show a positive difference in attitudes in favour of students enrolled in general or modular programmes as opposed to those enrolled in vocational programmes (Table VI.B1.8.8). On average across OECD countries, and after accounting for students' and schools' socio-economic profile, enrolment in a general education track was associated with an increase in these indices: students' self-efficacy regarding global issues (0.14 of a unit); awareness of global issues (0.18 of a unit); interest in learning about other cultures (0.06 of a unit); respect for people from other cultures (0.12 of a unit); attitudes towards immigrants (0.11 of a unit); awareness of intercultural communication (0.11 of a unit); agency regarding global issues (0.07 of a unit); and cognitive adaptability (0.04 of a unit).

Those associations are weak and largely attenuated after accounting for students' and schools' socio-economic profile. This shows that the possible negative effect of enrolment in a vocational programme is mostly the result of socio-economic stratification into those programmes. Socio-economic status acts indirectly through its effect on academic performance and parental preferences, which are key factors affecting sorting into vocational programmes.

Moreover, these associations held in fewer countries and economies than those related to grade repetition. Among countries and economies with more than 5% of students enrolled in a vocational programme, the associations between enrolment in a vocational programme and students' attitudes were negative and significant when considering: self-efficacy regarding global issues (in 18 countries/economies); awareness of global issues (21 countries/economies); perspective taking (11 countries/economies); interest in learning about other cultures (15 countries/economies); respect for people from other cultures (18 countries/economies); attitudes towards immigrants (18 countries/economies); cognitive adaptability (9 countries/economies); awareness of intercultural communication (15 countries/economies); and agency regarding global issues (10 countries/economies) (Figure VI.8.7).

These negative associations could indicate a lack of certain learning opportunities in some countries/economies. However, as results from the previous section showed, few differences in participation in learning activities were observed in favour of students in general or modular programmes. This observation warrants more in-depth analysis of the negative association between enrolment in vocational programmes and students' attitudes. Factors unrelated to pedagogy, such as school management and students' expectations of future salaries and job opportunities, could play a role.

# **School type**

Enrolment in private or public schools could be a predictor of students' attitudes and dispositions. However, this association is likely to be highly influenced by students' socio-economic background and parental preferences (e.g. preferences for parochial schools). On average across OECD countries, 17% of students attended private schools, with the highest proportions (exceeding 40%) being observed in Australia, Chile, Hong Kong (China), Indonesia, Lebanon, Macao (China), Malta, Scotland (United Kingdom) and the United Arab Emirates (Table VI.B1.8.9).

The results show a positive difference in attitudes in favour of students enrolled in private schools, before accounting for students' and schools' socio-demographic profiles. These differences hold true, on average across OECD countries, for all nine attitudes and dispositions. However, once students' and schools' profiles are taken into account, seven of the differences become statistically non-significant and two change sign. This is a clear indication that differences in attitudes between students enrolled in private and public schools are mostly due to socio-economic variations between the two groups. For two indices, students' respect for people from other cultures and attitudes towards immigrants, students attending public schools exhibited slightly more positive attitudes than their peers in private schools, once students' and schools' socio-demographic profiles are accounted for. Results vary substantially between countries/economies depending on which attitudes are being considered. The associations are negative in some and positive in others. All results are presented in Table VI.B1.8.9.

# Equity in providing learning opportunities for living together

# Figure VI.8.7 **Vocational education and students' attitudes**

ange in the index associa Students' self-efficacy regar				Students' inte	rest in learni	ng about oth	er cultures	<b>G</b> St	udents' cogn	itive adaptabili	zy			
Students' awareness of glob	oal issues		E	Students' resp	ect for peop	le from other	cultures	<b>H</b> St	udents' awar	eness of interc	ultural co	mmunica	ion	
Students' perspective taking	9		F	Students' attit	udes toward	s immigrants		I St	udents' agen	cy regarding g	obal issue	es		
_														
			i	Students' a n vocational										
	A <sup>1</sup>	В	С	D	E	F	G	Н	I					
Serbia													-	
Croatia											-			
Austria														
snia and Herzegovina														
Montenegro														
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Korea														
Hungary														
Argentina												+ +	_	
Belarus														
OECD average														
Greece														
Dominican Republic														
Costa Rica												+ +	_	
Romania												+ +		
Switzerland												+ +	-	
Malaysia														
Australia														
Brazil														
Uruguay														
Brunei Darussalam											1 1			

	<b>A</b> <sup>1</sup>	В	С	D	E	F	G	Н	I
Countries/economies with a positive difference	18	21	11	15	18	18	9	15	10
Countries/economies with no difference	12	13	22	18	14	14	24	15	24
Countries/economies with a negative difference	6	2	3	3	4	2	3	5	2

<sup>1.</sup> After accounting for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Countries and economies are ranked in ascending order of the percentage of students who are enrolled in general programmes.

**Source**: OECD, PISA 2018 Database, Tables VI.B1.8.8.

#### **SCHOOL CLIMATE AND STUDENTS' ATTITUDES**

#### Principals' views on teachers' multicultural beliefs

A major goal of many teacher development programmes is to prepare teachers not only to teach a particular subject, but also to work with diverse student populations (Garmon,  $2004_{[21]}$ ; Bodur,  $2012_{[22]}$ ). Raising awareness about cultural sensitivity in schools has become a common feature of teacher preparation, although there is no agreement on what teacher development programmes should address. Some courses address diversity by broadly focusing on issues such as race, culture, gender, ethnicity, language diversity and sexual orientation, while others are more specific. However, teacher training courses cannot be developed without taking stock of teachers' beliefs and attitudes.

PISA 2018 asked school principals to report their views on their teachers' multicultural beliefs. Principals were asked to consider four statements and report whether these beliefs are widely shared among the teachers in their school. The statements were: "It is important for students to learn that people from other cultures can have different values"; "Respecting other cultures is something that students should learn as early as possible"; "In the classroom, it is important that students of different origins recognise the similarities that exist between them"; and "When there are conflicts between students of different origins, they should be encouraged to resolve the argument by finding common ground". Principals were given a choice of responses indicating how many of the teachers in their school shared these beliefs: "none or almost none", "some", "many", or "all or almost all". The responses to these statements were used to construct an index of principals' views on teachers' multicultural beliefs. Positive values indicate greater multicultural and egalitarian beliefs.

Principals in Belarus, Iceland, Ireland, Poland, Russia, Scotland (United Kingdom), Singapore, Spain, Ukraine and the United Arab Emirates reported the greatest prevalence of positive multicultural beliefs among their teachers, while those in Baku (Azerbaijan), Hong Kong (China), Jordan, Korea, Lebanon, Morocco, Peru, Saudi Arabia, Chinese Taipei and Viet Nam reported the least prevalence of these beliefs (Figure VI.8.8). On average across OECD countries, around 93% of school principals reported that many or all teachers shared positive multicultural beliefs. In most countries, results were similar across all four statements.

Teachers' multicultural beliefs, as reported by school principals, were weakly associated with students' attitudes. Associations were positive but weak and non-significant in most countries (Table VI.B1.8.12).

# Students' perception of discrimination at school

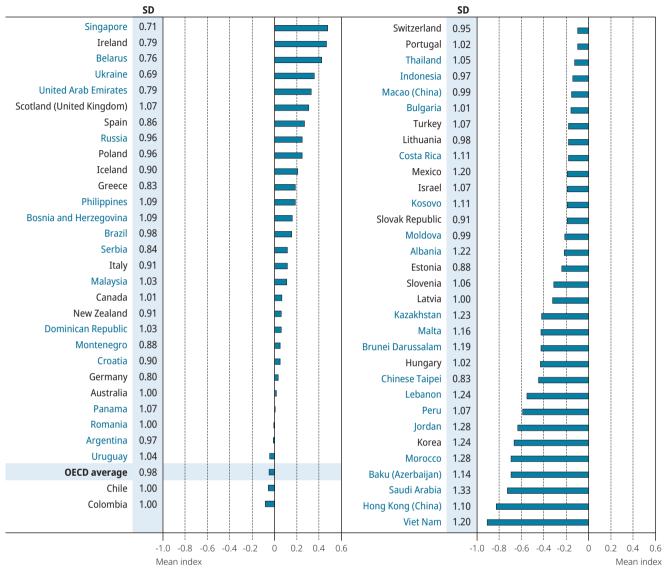
The definition of discrimination has changed over time as researchers have documented its nature and the forms it takes. Existing definitions distinguish between symbolic, traditional, institutional and individual discrimination (Rosenbloom and Way,  $2004_{[23]}$ ). The term symbolic is used to distinguish certain types of discrimination from traditional and more blatant forms, such as racism. Traditional discrimination is a shared negative attitude towards a group of people based on stereotypes and generalisations, while symbolic discrimination is more subtle. Individual discrimination can be described as an act taken by one individual, while institutional discrimination is systemic and entrenched.

PISA 2018 asked students about their perception of their teachers' attitudes towards people from other cultural groups. The index of perception of discrimination at school was constructed by combining students' responses to the following four statements: "They have misconceptions about the history of some cultural groups"; "They say negative things about people of some cultural groups"; "They blame people of some cultural groups for problems faced by [the country of test]"; and "They have lower academic expectations for students of some cultural groups". Responses were given on a four-point scale: "none or almost none of them", "some of them", "most of them", and "all or almost all of them". Positive values in this index indicate a more discriminatory school climate.

The PISA measure of discrimination at school could be seen as both individual and institutional, as discrimination can be the act of one teacher or a reflection of a more institutional problem. Moreover, the statements focus on traditional forms of discrimination rather than subtle ones, as they reflect generalised attitudes about a group of people or a particular culture.

Figure VI.8.8 Principals' views on teachers' multicultural beliefs





**Note**: The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

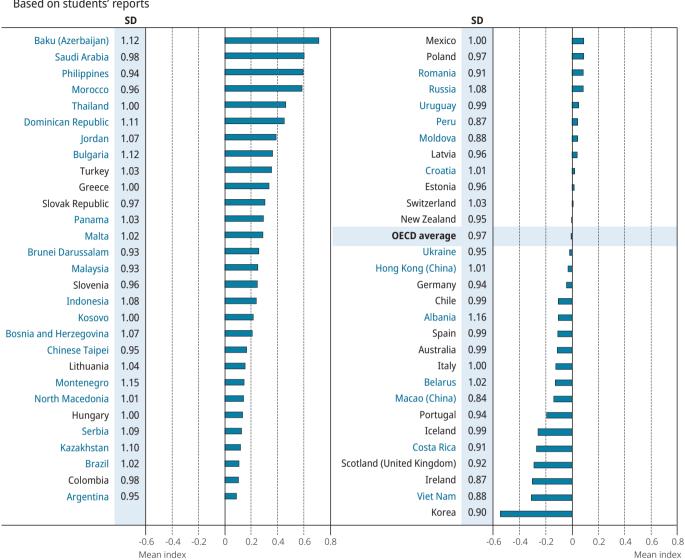
Countries and economies are ranked in descending order of principals' views on teachers' multicultural beliefs.

Source: OECD, PISA 2018 Database, Table VI.B1.8.11.

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Students in Baku (Azerbaijan), the Dominican Republic, Morocco, the Philippines, Saudi Arabia and Thailand reported the most perceived discrimination at school, while those in Costa Rica, Iceland, Ireland, Korea, Scotland (United Kingdom) and Viet Nam reported the least (Figure VI.8.9). On average across OECD countries, relatively few students reported that they perceive discrimination by their teachers (the two categories "most of them" and "all or almost all of them" combined). On average, 12% of students reported that their teachers have misconceptions about the history of some cultural groups or that they say negative things about people of some cultural groups. About 14% of students reported that their teachers blame people of some cultural groups for problems faced by their country, and about 15% reported that their teachers have lower academic expectations for students from some cultural groups. Even though those percentages are low, they are not negligible. The perception of discrimination at school could be a sign of absence of clear guidance on how teachers should behave in order to create an inclusive environment for all students.

Figure VI.8.9 **Students' perception of discrimination at school**Based on students' reports



**Note**: The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Countries and economies are ranked in descending order of students' perception of discrimination in their schools.

Source: OECD, PISA 2018 Database, Table VI.B1.8.13.

StatLink https://doi.org/10.1787/888934171039

In all countries and economies, girls perceived less discrimination at school than boys. The largest gender gaps were observed in Albania, Hong Kong (China), Kosovo and Turkey and the smallest in Argentina, Estonia, Korea and Scotland (United Kingdom). Students from disadvantaged backgrounds were more likely to perceive discrimination at school than their advantaged peers. This was the case in 35 countries and economies of the 59 that took the global competence questionnaire. The largest differences between advantaged and disadvantaged students were observed in Australia, the Dominican Republic, Hungary, Iceland and Switzerland, while the smallest differences were in Bosnia and Herzegovina and Estonia. Moreover, immigrant students perceived greater discrimination at school in 10 countries and economies of the 28 with more than 5% immigrant students. The largest differences were observed in Germany, Iceland and Italy and the smallest in Brunei Darussalam and Macao (China).

Students' perception of discrimination at school was associated with the nine students' attitudes considered. However, some of the associations were not consistent, such as those with the indices of awareness of and self-efficacy regarding global issues, interest in learning about other cultures, cognitive adaptability and agency regarding global issues. These associations were mostly non-significant, weak and varied in their signs (Table VI.B1.8.14). However, negative and consistent associations were observed between students' perceptions of discrimination in their school and the indices of perspective taking, respect for people from other cultures, attitudes towards immigrants and awareness of intercultural communication. Interestingly, the perception

#### Equity in providing learning opportunities for living together

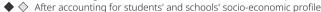
of discrimination was less correlated with the knowledge aspects of students' dispositions and more with intercultural attitudes towards people from other backgrounds. Students who perceive discrimination by their teachers towards particular groups, such as immigrants and people from other cultural backgrounds, exhibited similar negative attitudes.

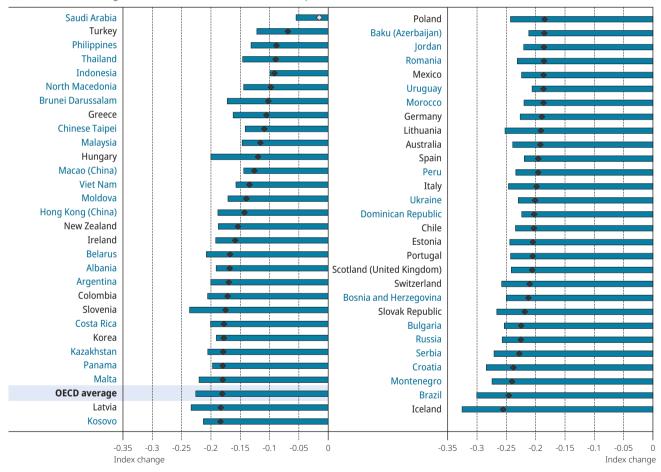
Figure VI.8.10 shows the negative association between students' perception of discrimination in their school and their level of respect for people from other cultures. On average across OECD countries, a rise of one unit in the index of perceived discrimination at school was associated with a decline of 0.18 of a unit in the index of respect for people from other cultures. This finding highlights the role of teachers in fighting discrimination by acting as role models, or perpetuating it by making discrimination routine. The associations were strongest in Bosnia and Herzegovina, Brazil, Bulgaria, Croatia, Iceland, Montenegro, Russia, Serbia, the Slovak Republic and Switzerland, weakest in Indonesia, North Macedonia, the Philippines, Thailand and Turkey. The associations with the other attitudes were also negative but weak and non-significant in Saudi Arabia.

Figure VI.8.10 Perception of discrimination at school and students' respect for people from other cultures

Change in the index of students' respect for people from other cultures associated with a one-unit increase in the index of discriminatory school climate

■ Before accounting for students' and schools' socio-economic profile¹





<sup>1.</sup> The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

**Notes:** Statistically significant values are shown in darker tones.

The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.

Countries and economies are ranked in descending order of the strength of the association, after accounting for gender, immigrant background, and students' and schools' socio-economic profile.

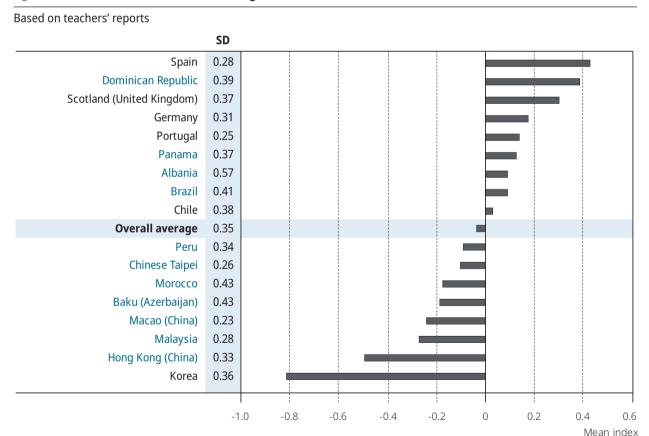
Source: OECD, PISA 2018 Database, Table VI.B1.8.14.

# Box VI.8.1. Teachers' multicultural and egalitarian beliefs

Teachers were asked about their multicultural and egalitarian beliefs using four statements in the teacher questionnaire: "It is important for students to learn that people from other cultures can have different values"; "Respecting other cultures is something that students should learn as early as possible"; "In the classroom, it is important that students of different origins recognise the similarities that exist between them"; and "When there are conflicts between students of different origins, they should be encouraged to resolve the argument by finding common ground". Teachers reported whether these attitudes are: "shared amongst none or almost none of the teachers", "shared amongst some of the teachers", "shared amongst many of the teachers" and "shared amongst all or almost all of the teachers." Responses were used to construct an index with positive values indicating stronger multicultural and egalitarian beliefs.

Across the 18 countries and economies that distributed the teacher questionnaire, teachers in the Dominican Republic, Scotland (United Kingdom) and Spain showed the most prevalent multicultural and egalitarian beliefs, while those in Hong Kong (China), Korea, Macao (China) and Malaysia exhibited the least (Figure VI.8.11). In general, a large proportion of teachers reported that those beliefs are shared among many or all teachers. For instance, 74% of teachers reported that most or all of their colleagues share the belief that it is important for students to learn that people from other cultures can have different values. Some 78% of teachers reported that most or all of their colleagues share the belief that it is important that students of different origins recognise the similarities that exist between them; 80% reported that most or all of their colleagues share the belief that respecting other cultures is something that students should learn as early as possible; and 79% reported that most or all of their colleagues share the belief that when there are conflicts between students of different origins, they should be encouraged to resolve the argument by finding common ground.

Figure VI.8.11 Teachers' multicultural and egalitarian beliefs



Countries and economies are ranked in descending order of teachers' multicultural and egalitarian beliefs.

Source: OECD, PISA 2018 Database, Table VI.B1.8.15.

# Equity in providing learning opportunities for living together

# Note

- 1. Analyses based on schools' socio-economic profile were restricted to the modal grade in which students were enrolled.
- 2. The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming) for details.
- 3. The comparability of scaled indices across countries and economies is examined in Annex A5. The annex presents the findings of in-depth measurement invariance analyses for every index used in PISA 2018, Volume VI.

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# Equity in providing learning opportunities for living together

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# Learning to live in an interconnected world: What schools, teachers and parents can do

This chapter provides a synthesis of the results of the PISA 2018 global competence assessment. It describes how the concerted efforts of schools, teachers and parents can promote global knowledge, skills and positive attitudes among adolescents. The chapter highlights the holistic nature of global competence and the need for a comprehensive education policy in this field.

#### Learning to live in an interconnected world: What schools, teachers and parents can do

The backdrop to 21st-century education is our endangered environment. Growing populations, resource depletion and climate change compel all of us to think about sustainability and the needs of future generations. At the same time, the interaction between technology and globalisation has created new challenges and new opportunities. Digitalisation is connecting people, cities, countries and continents in ways that vastly increase our individual and collective potential. However, the same forces have also made the world volatile, complex and uncertain.

In the social and economic sphere, the questions turn to equity and inclusion. People are born with what political scientist Robert Putnam calls "bonding social capital" – a sense of belonging to our family or other people with shared experiences, cultural norms, common purposes or pursuits. But it requires deliberate and continuous efforts to create the kind of "bridging social capital" through which we can share experiences, ideas and innovation, and build a shared understanding among groups with diverse experiences and interests, thus increasing our radius of trust to strangers and institutions. Societies that value bridging social capital and pluralism often tend to be more creative, as they can draw on the best talent from anywhere, build on multiple perspectives, and nurture creativity and innovation. Yet there is growing disenchantment with the values of pluralism and diversity, as is visible in shifting political landscapes, including the rise of inward-looking populist parties.

Algorithms behind social media are sorting us into groups of like-minded individuals. They create virtual bubbles that amplify our views and leave us insulated from divergent perspectives; they homogenise opinions while polarising our societies. Tomorrow's schools will need to help students to think for themselves and join others, with empathy, in work and citizenship. They will need to help students develop a strong sense of right and wrong, a sensitivity to the claims that others make about us, and a grasp of the limits on individual and collective action. At work, at home and in the community, people will need a deep understanding of how others live, in different cultures and traditions, and how others think, whether as scientists or artists. Whatever tasks machines may be taking over from humans at work, the demands on our knowledge and skills to contribute meaningfully to social and civic life will keep rising.

While digital technologies and globalisation, not to speak of pandemics, can have disruptive implications for our economic and social structure, those implications are not predetermined. It is the nature of our collective responses to these disruptions that determines their outcomes – the continuous interplay between the technological frontier and the cultural, social, institutional and economic contexts and agents that we mobilise in response.

In this environment, the Sustainable Development Goals, set by the global community for 2030, describe a course of action to end poverty, protect the planet and ensure prosperity for all. These goals are a shared vision of humanity that provides the missing piece of the globalisation puzzle, the glue that can counter the centrifugal forces in the age of accelerations. The extent to which those goals will be realised will depend in no small part on what happens in today's classrooms. Education will be key to reconciling the needs and interests of individuals, communities and nations within an equitable framework based on open borders and a sustainable future, and it will be key to ensuring that the underlying principles of Sustainable Development Goals become a real social contract with citizens.

Schools need to help students learn to be autonomous in their thinking and develop an identity that is aware of the pluralism of modern living. At work, at home and in the community, people will need a broad comprehension of how others live, in different cultures and traditions, and how others think, as scientists, mathematicians, social scientists and artists. Not least, the ability to read and understand diversity, and to recognise the core liberal values of our societies, such as tolerance and empathy, may also be one of the most powerful responses to extremism and radicalisation.

These considerations have led PISA to include global competence in its assessment. To do well on this assessment, PISA expects that students can combine knowledge about the world with critical reasoning. PISA also examines to what extent students understand and appreciate the perspectives and worldviews of others, and surveys students' disposition to adapt their behaviour and communication in order to interact effectively with individuals from different traditions and cultures.

The PISA 2018 assessment provides a comprehensive picture of the knowledge, skills and attitudes that 15-year-old students need to live in an interconnected and complex world. The results highlight the multidimensional nature of global competence and the need for a comprehensive approach to nurturing these skills. As the findings show, schools, teachers, parents and the wider environment all have a role to play. Any successful approach to promoting knowledge, skills and attitudes in this area will require the simultaneous development of competencies under each of the four dimensions of global competence, at school, at home and well beyond.

One of the most interesting findings in this report is that certain activities, such as learning at school, contact with people from other cultures and learning other languages, are positively associated with a variety of skills, including the ability to examine local and global issues, perspective taking, intercultural communication and, ultimately, the ability to take action for the betterment of the societies we live in. Moreover, all of these skills and attitudes are positively correlated with each other. Hence, the context that educators set for the development of one skill or dimension might positively shape the development of other skills or dimensions.

This chapter offers a synthesis of the findings, focusing on policies that have the potential to promote the acquisition of global skills, knowledge and positive attitudes. In particular, it sheds light on the roles of teaching and learning at school, the home environment, contact with people from different backgrounds, and inclusive and fair school environments, and on the need for a curriculum and a whole-school approach geared towards achieving those goals.

#### ARE STUDENTS LEARNING ABOUT GLOBAL ISSUES AND INTERCULTURAL RELATIONS AT SCHOOL?

Findings from the analyses of PISA 2018 data (as reported by students) show the existence of large differences across countries and economies in participation in global and intercultural learning activities. On average across OECD countries, students reported engaging in about five learning activities at school (the maximum being ten). This number varies substantially between countries and economies. Students in Albania, Baku (Azerbaijan), Colombia, the Dominican Republic, Indonesia, Jordan, Peru, the Philippines, Singapore and Thailand reported engaging in more than seven activities, while students in France, Hungary, Israel, Latvia, the Russian Federation (hereafter "Russia"), Scotland (United Kingdom) and Slovenia reported engaging in fewer than five. The most common activities students engage in are those that involve direct learning and instruction at school (as opposed to activities that involve teamwork), discussion, participation in cultural events and following the news on the Internet or by reading newspapers. Students' reports were confirmed by those of their school principals. According to school principals, the most common learning activities were learning about the beliefs, norms, values, customs and arts of diverse cultural groups and learning about different cultural perspectives on historical and social events. The least common activities were celebrations of festivities of other cultures and student exchanges with schools from other countries.

The findings also show that, across many countries/economies, students' attitudes and dispositions are positively associated with the number of learning activities in which they are engaged (as reported by students). Students engaged in a larger number of global-competence-related learning activities tend to report more positive attitudes and dispositions than students who are engaged in fewer activities. Therefore, integrating a range of activities into learning environments can help foster intercultural understanding.

School principals were also asked whether global issues (public health, climate change, poverty, migration and conflicts) and intercultural understanding (communication with people from different cultures, openness to intercultural experiences and respect for cultural diversity) are covered in the curriculum. Findings show large differences in coverage of such topics between countries/economies. Those where global issues are commonly covered in the curriculum include Korea, Latvia, Lithuania, Poland and Russia. By contrast, countries and economies where such topics are rarely covered according to school principals, include Baku (Azerbaijan), Bulgaria, Israel, Italy, Kazakhstan and Moldova.

Coverage of global issues in the curriculum was positively associated with related students' dispositions. For instance, the strongest associations were between coverage of climate change and global warming in the curriculum and students' awareness of this issue. The next strongest associations were between: 1) coverage of causes of poverty in the curriculum and awareness of the topic; and 2) coverage of migration and the movement of people and awareness of the topic.

Moreover, school principals reported that intercultural understanding was covered in school curricula, with Latvia, Lithuania, Poland, Russia, Thailand and Ukraine among the countries with the largest proportion of students attending schools where those topics are included. The most common topics covered are respect for cultural diversity, critical thinking and knowledge of different cultures. Incorporating intercultural learning topics in the curriculum was correlated with students' attitudes in only a few countries/economies, and the associations were mostly weak. This indicates that inclusion of global and intercultural topics in the curriculum is not enough. Inclusion in the curriculum should translate into effective learning activities in the classroom.

In general, the findings show a positive relationship between exposure to global and intercultural learning at school (as reported by students) and students' attitudes and dispositions. However, substantial variations between countries/economies exist in participation in these activities. In some countries/economies, global and intercultural topics are not in the curriculum or covered by learning activities. To foster positive dispositions, schools could develop a comprehensive approach to global and intercultural learning through which students are systematically exposed to the relevant learning activities. This in turn requires the development of an adapted curriculum, teaching materials and practices, and the provision of professional development opportunities for teachers focusing on teaching for global competence.

# DO ALL STUDENTS HAVE EQUAL OPPORTUNITIES TO LEARN GLOBAL AND INTERCULTURAL SKILLS AT SCHOOL?

An important question is whether students are equally disposed to benefit from those policies within each education system. Promoting an educational policy or practice can exacerbate inequalities if students' exposure to this practice is curtailed by factors beyond their control, such as gender, socio-economic background or immigrant status.

#### Learning to live in an interconnected world: What schools, teachers and parents can do

The analyses in this report confirm the presence of important inequalities in access to learning opportunities and hence in students' global and intercultural skills, attitudes and dispositions. Findings show that, on average across OECD countries, boys were more likely than girls to report participating in activities in which they are expected to express and discuss their views, while girls were more likely than boys to report participating in activities related to intercultural understanding and communication. For instance, boys were more likely to learn about the interconnectedness of countries' economies, look for news on the Internet or watch the news together during class. They were also more likely to be invited by their teachers to give their personal opinion about international news, to participate in classroom discussions about world events and to analyse global issues together with their classmates. In contrast, girls were more likely than boys to report that they learn how to solve conflicts with their peers in the classroom, learn about different cultures and learn how people from different cultures can have different perspectives on some issues. These gender differences could reflect personal interests and self-efficacy, but they could also reflect how girls and boys are socialised at home and at school.

The findings also show that advantaged students have access to more opportunities to learn global and intercultural skills than disadvantaged students. This finding holds true in half of the participating countries and economies, with large differences observed in Australia, Canada, Hong Kong (China), Korea, Macao (China), New Zealand, Scotland (United Kingdom) and Chinese Taipei. Moreover, large socio-economic gaps were observed in participation in certain learning activities: 1) learning about different cultures; 2) participation in classroom discussions about world events; 3) analysing global issues together with classmates in small groups; and 4) learning how people from different cultures can have different perspectives on some issues. However, contrary to expectations, in many countries/economies, disadvantaged schools were more likely to offer such learning opportunities, but within those schools, advantaged students seem to take greater advantage of those opportunities.

When it comes to students' skills, attitudes and dispositions, the findings show clear socio-economic gaps in favour of advantaged students. These gaps hold true in most countries/economies for all nine attitudes and for performance on the cognitive test. Furthermore, in most countries and economies, girls were found to have higher awareness of global issues, greater ability to understand different perspectives, greater interest in learning about other cultures, greater respect for people from other cultures, more positive attitudes towards immigrants, greater awareness of intercultural communication, and greater agency regarding global issues. On the other hand, in a majority of countries and economies, boys were more likely to show higher cognitive adaptability than girls.

Fewer gaps in outcomes were observed between immigrant and native-born students in countries/economies with more than 5% immigrant students. In some countries and economies, immigrant students reported higher awareness of global issues than their native-born peers, greater self-efficacy regarding global issues, greater ability to understand different perspectives, higher interest in learning about other cultures, greater respect for people from other cultures, higher cognitive adaptability and more positive attitudes towards immigrants. This finding suggests that a more multicultural background may be more conducive to global and intercultural understanding.

Similarly, more multicultural classrooms could create a culturally rich environment that helps both immigrant and native-born students learn about one another. Some of the results align with this hypothesis. In some countries, having more than 10% immigrant students in a school is associated with more positive attitudes towards immigrants. However, this was true only in long-standing immigrant destinations, suggesting that the positive association may be conditional on successful integration policies.

In general, the analyses show the presence of different sources of inequity in access to learning opportunities and in students' outcomes. The most prominent source remains inequity related to students' socio-economic status. Disadvantaged students are less exposed to global and intercultural learning activities and report less positive attitudes than their advantaged peers. However, students attending disadvantaged schools are more likely to be exposed to those learning opportunities. At first glance, this may seem like a paradox. However, what it means is that lack of access to learning opportunities does not result from lack of opportunities in disadvantaged schools, but rather from within-school mechanisms that result in lower engagement among disadvantaged students. Thus, when school curricula, educational practices and materials are developed, educators should keep in mind that not all students are predisposed for global and intercultural learning. Those who come from disadvantaged backgrounds may be facing particular challenges and may require that content or teaching approaches be better adapted to their needs.

Furthermore, girls reported more positive attitudes than boys in most countries and economies, while they participated less in learning activities requiring expressing and discussing their views and more in activities requiring interpersonal skills, such as resolving conflicts. While achieving equal participation among boys and girls in all learning activities is of some concern, fostering positive attitudes among boys and bridging the gender gap seem more important issues.

# ARE SCHOOLS AND TEACHERS READY TO TEACH THE SKILLS FOR LIVING IN AN INTERCONNECTED WORLD?

Successful integration of global and intercultural learning into school curricula and lessons requires teachers who are committed and well prepared to create a school culture that supports global and intercultural learning. Teachers in 18 countries and economies participating in PISA 2018 responded to three sets of questions focusing on opportunities to promote global and intercultural learning at school, teacher preparedness and teacher confidence in teaching these topics.

The findings show that global and intercultural topics are included in lessons to a varying degree. For instance, teachers commonly include critical thinking, respect for cultural diversity, knowledge of other cultures and openness to people from other cultures in their lessons. By contrast, intercultural communication and foreign languages are not as commonly integrated into lessons. Variations were also observed among participating countries and economies. Albania, the Dominican Republic, Malaysia and the United Arab Emirates showed the largest proportion of students enrolled in schools where teachers promote all five intercultural skills. The ability of teachers to choose and promote particular topics in their lessons depends on the intended curriculum but also on how much autonomy teachers enjoy in implementing the curriculum.

Although teachers do tend to integrate some intercultural topics in their lessons, few of them had attended relevant professional development activities in their teacher development programmes, and even fewer had done so in the previous 12 months. Across all 18 participating countries and economies, the most common activities were training on conflict resolution strategies, the role of education in confronting discrimination and teaching about equity and diversity. By contrast, fewer teachers received professional development on teaching in multicultural or multilingual settings, second-language teaching, or teaching intercultural communication skills, and even fewer participated in such training activities in the previous 12 months.

The lack of professional development on teaching in multicultural settings is reflected to some extent by teachers' self-reported need for training in certain areas, such as teaching in multicultural and multilingual settings, teaching intercultural communication, teaching second languages and teaching about equity and diversity. Across the 18 countries/economies taking the teacher questionnaire, the greatest need for professional development was expressed by teachers in Brazil, Chile, the Dominican Republic, Korea, Malaysia, Morocco, Panama and Peru.

However, most teachers reported that they are confident in their ability to teach in multicultural settings. In fact, more than 80% of students attended a school whose teachers reported a high degree of self-efficacy, as measured by five statements: "I can cope with the challenges of a multicultural classroom"; "I can adapt my teaching to the cultural diversity of students"; "I can take care that students with and without migrant backgrounds work together"; "I can raise awareness for cultural differences amongst the students"; and "I can contribute to reducing ethnic stereotypes between the students". Teachers in Albania, the Dominican Republic and Panama reported the highest levels of self-efficacy regarding teaching in multicultural settings.

Teachers play an important role in promoting and integrating intercultural understating into their practices and classroom lessons. Analyses of PISA data do not show a lack of confidence in teachers' ability to do so or an unwillingness to promote these topics. The main challenge seems to be the lack of adequate professional development opportunities in this field. Just as students need to acquire intercultural skills, so do their teachers, and professional development should seek an appropriate balance between a focus on the core curriculum and these broader issues.

Furthermore, professional development for teaching in multicultural classrooms does not have to be conceived as a separate activity or an additional burden for teachers. This could be integrated into existing training opportunities by updating the scope and content of professional development programmes.

# WHAT IS THE ROLE OF THE SCHOOL IN PROMOTING AN INCLUSIVE LEARNING ENVIRONMENT?

A positive school climate can make a great difference in students' lives. When asked about the most important criteria they consider when choosing a school for their children, parents cite safety, a good reputation and a pleasant environment. Schools with safe, respectful and caring learning environments protect students from engaging in maladaptive behaviours, such as truancy, smoking, drinking, drug use, and other risky behaviours (Gase et al.,  $2017_{[3]}$ ). A positive climate can even mitigate the pervasive and strong link between socio-economic status and academic achievement (Berkowitz et al.,  $2016_{[2]}$ ). PISA 2018, Volume III examined a number of factors related to school environment, such as students' sense of belonging, disciplinary climate, bullying and truancy. This volume examines perceptions of discrimination at school and teachers' egalitarian beliefs in association with students' intercultural skills knowledge and attitudes.

#### Learning to live in an interconnected world: What schools, teachers and parents can do

In PISA 2018, school principals were asked about their teachers' attitudes regarding multiculturalism and fairness. A very high proportion of students (more than 90%) attended schools where principals reported positive multicultural beliefs among their teachers on all four statements included in the questionnaire. On the scaled index, principals in Belarus, Iceland, Ireland, Poland, Russia, Scotland (United Kingdom), Singapore, Spain, Ukraine and the United Arab Emirates reported the highest levels of positive multicultural beliefs among their teachers, while those in Baku (Azerbaijan), Hong Kong (China), Jordan, Korea, Lebanon, Morocco, Peru, Saudi Arabia, Chinese Taipei and Viet Nam reported the lowest levels of these beliefs.

Another set of questions asked students about their perception of discrimination by teachers at school. Those questions focused on teachers' attitudes towards people from other cultural groups. The PISA measure of discrimination at school could be seen as both individual and institutional, as discrimination can be the act of one teacher or a reflection of a more institutional problem. Moreover, the statements focus on traditional forms of discrimination as they reflect generalised attitudes about a group of people or a particular culture.

Students in Baku (Azerbaijan), the Dominican Republic, Morocco, the Philippines, Saudi Arabia and Thailand reported the most perceived discrimination at school, while those in Costa Rica, Iceland, Ireland, Korea, Scotland (United Kingdom) and Viet Nam reported the least. Across OECD countries, the proportion of students who reported that their teachers have negative attitudes towards particular groups of people varied between 12% and 15%.

Negative and consistent associations were observed between students' perceptions of discrimination in their school and students' perspective taking, respect for people from other cultures, attitudes towards immigrants and awareness of intercultural communication. Interestingly, perception of discrimination at school was less correlated with the knowledge aspects of students' dispositions (i.e. awareness of and self-efficacy regarding global issues) and more with intercultural attitudes towards people from other backgrounds. Students who perceive discrimination by their teachers towards particular groups, such as immigrants and people from other cultural backgrounds, exhibited similar negative attitudes.

This finding highlights the role of teachers and school principals and perhaps the broader school climate in countering or perpetuating discrimination by acting as role models. Students are likely to emulate the behaviour of their teachers. If teachers normalise discrimination and if discrimination becomes an institutional problem, then students may develop discriminatory attitudes towards those who are different from them. By contrast, when teachers do not exhibit discriminatory attitudes and set clear rules about intercultural relations, then students may become aware of what constitutes discriminatory behaviour. Teacher support could also act as a protective factor for students who are at risk of being victims of discrimination. In general, even if one or a few teachers do have discriminatory attitudes, if the majority of teachers and school principals take action against discrimination and if school regulations are clear on the matter, then discrimination would not go beyond being an individual contained issue.

# HOW CAN PARENTS PROMOTE GLOBAL KNOWLEDGE, SKILLS AND ATTITUDES?

Parents play an important role in their children's lives. Through socialisation and enculturation, they shape their children's outlook on life, their attitudes and belief systems. Global and intercultural attitudes are no different. Parents who are tolerant are likely to raise children who are tolerant as well. Those hypotheses are supported by PISA 2018 results.

In PISA 2018, parents in 14 countries and economies were asked questions that mirrored those in the student questionnaire. One set of questions focused on awareness of global issues, another on interest in learning about other cultures and a third on parents' attitudes towards immigrants.

The findings show that the parents of students in Croatia, Germany, Ireland and Italy were more aware of global issues than the parents of students in Brazil, Chile, Hong Kong (China), Korea, Macao (China), Mexico and Panama. Students' awareness of global issues was also found to be positively associated with levels of awareness of global issues among parents across all participating countries and economies, even after accounting for students' and schools' socio-economic profile.

As for interest in learning about other cultures, parents in Croatia, the Dominican Republic and Germany reported the greatest interest, while parents in Hong Kong (China), Italy and Macao (China) reported the least interest. In all countries except Panama, students' interest in learning about other cultures was positively associated with their parents' interest in doing so. Furthermore, a positive association was found between parents' attitudes towards immigrants and those of their children across all 14 countries and economies that collected data from the parents' guestionnaire.

In general, analyses of data from the parent questionnaire confirm the importance of parenting and the home environment in promoting global and intercultural interests, awareness and skills. Parents and teachers can play important and complementary roles in developing a positive intercultural and global outlook among adolescents. Parents can transmit knowledge about global issues and also act as role models in defining their children's behaviour. Parents who show interest in other people's culture,

tolerance towards those who are different from them and awareness of global issues that affect us all are likely to raise children who share those attitudes. This, in turn, will help schools cultivate a climate that embraces those positive attitudes.

#### WHAT IS THE ROLE OF THE BROADER ENVIRONMENT BEYOND THE SCHOOL?

Contact with people from different cultures has the potential to stir curiosity, open minds and create understanding. Students in PISA 2018 were asked whether they have contact with people from other countries in different settings: at school, in their family, in their neighbourhood and in their circle of friends.

On average across OECD countries, 53% of students reported having contact with people from other countries in their school, 54% in their family, 38% in their neighbourhood and 63% in their circle of friends. There were substantial variations in those proportions between countries. The proportion of students who reported having contact with people from other countries at school ranged from 70% to 78% in Albania, Germany, Greece, Italy, New Zealand, Panama, Singapore, Switzerland, Chinese Taipei and the United Arab Emirates, while it ranged from 20% to 30% in Argentina, Brazil, Mexico, Turkey and Viet Nam. Those results reflect several factors, such as the proportion of first-generation immigrants in a country/economy, student mobility and the degree of interconnectedness between that country and the rest of the world. Those results were mirrored by findings for other settings where contact with people from other countries takes place, such as the family, the neighbourhood and the circle of friends.

Furthermore, contact with people from different countries has the potential to create understanding about those countries, their cultures and traditions. This hypothesis is aligned with the results from PISA 2018. In general, having contact with people from other countries at school (and in the family, neighbourhood and circle of friends) is positively, weakly to moderately, associated with students' intercultural skills and attitudes towards living with others. The most notable associations were found between having contact with people from other countries at school and students' self-efficacy regarding global issues, cognitive adaptability, interest in learning about other cultures, respect for people from other cultures, ability to understand different perspectives and understanding of intercultural communication.

Those positive associations may suggest that contact between people of different origins and cultures could foster understanding and mitigate prejudice. In multicultural societies, contact arises naturally at school and beyond. However, in less diverse countries or in education systems that are highly stratified, educators may have to make special efforts to ensure that their students benefit from cultural exposure. Examples for that are student-exchange or study-abroad programmes that offer an immersive experience of another culture. However, these programmes tend to be expensive, and their benefits are limited to those taking the programme. In the digital age, educators may overcome these limitations by partnering with foreign schools and using online platforms to organise collaborative activities based on the shared interests of their students. These activities could cover topics of global or intercultural relevance, but could also focus on introducing students to other cultures and traditions. Engagement with the local community is another method of introducing students to the diverse cultures existing within reach of their school. This may involve visiting a community centre, a place of worship or a local market.

#### HOW CAN MULTILINGUAL SKILLS PROMOTE INTERCULTURAL UNDERSTANDING?

Speaking multiple languages is a valuable skill that improves employability and fosters a range of abilities that extend beyond the realm of language proficiency. It has the potential to promote social cohesion and intercultural dialogue by opening the door to a range of content, including literature, music, theatre and cinema. By doing so, multilingualism brings down barriers and gives young people direct access to content that would otherwise be inaccessible.

Learning foreign languages has become a major goal for many education systems around the world. This is reflected in the PISA results when comparing the multilingual skills (i.e. the ability to speak more than one language) of students with those of their mothers and fathers. Students who reported that they speak two or more languages tended to have multilingual parents. However, in most countries, the proportion of multilingual parents was smaller than that of multilingual students. This shows some intergenerational transmission of multilingual skills from parents to children, but also a clear trend of rising multilingualism over time that goes beyond simple intergenerational transmission.

The largest proportions of students who speak several languages were observed in Croatia, Estonia, Hong Kong (China), Latvia, Macao (China), Malta and Singapore, where more than 90% of students reported that they speak two or more languages. Those countries and economies are mostly small but well connected to the rest of the world. By contrast, Australia, Brazil, Chile, Colombia, Korea, Mexico, Scotland (United Kingdom) and Viet Nam had the smallest proportion of multilingual students. If multilingualism is rare, it may be because of a lack of learning opportunities at school.

#### Learning to live in an interconnected world: What schools, teachers and parents can do

Furthermore, language-learning opportunities are widely available across the countries and economies that participated in PISA 2018. On average across OECD countries, 50% of students reported that they learn two or more languages at school, 38% reported that they learn one foreign language and only 12% reported that they do not learn any foreign language at school. The largest proportion of students (more than 20%) who reported that they do not learn any foreign language at school were observed in Australia, Brunei Darussalam, Malaysia, New Zealand, the Philippines, Saudi Arabia and Scotland (United Kingdom). By contrast, in 42 countries and economies, more than 90% of students reported that they learn at least one foreign language at school. The proportion exceeds 99% in Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Estonia, Hungary, Italy, Latvia, Lithuania, Montenegro, Poland, Romania, Serbia, the Slovak Republic, Slovenia and Ukraine, where foreign language learning is ubiquitous.

The associations between speaking two or more languages and students attitudes were positive in almost all countries and economies. This reflects the fact that language learning could contribute to improving attitudes, but also that students who have positive global and intercultural attitudes tend to engage in learning multiple languages. Speaking two or more languages was positively associated with awareness of global issues, self-efficacy regarding global issues, cognitive adaptability, interest in learning about other cultures, respect for people from other cultures, positive attitudes towards immigrants, awareness of intercultural communication and the ability to understand the perspectives of others.

Positive associations between speaking multiple languages and students' attitudes and dispositions were mirrored by positive associations between learning multiple languages at school and the same attitudes and dispositions. The associations held even when the sample was restricted to monolingual students who learn languages at school other than their mother tongue.

In conclusion, the findings support the hypothesis that learning multiple languages has the potential to broaden students' horizons and to improve their global and intercultural attitudes. Promoting language learning at school could be a tool that educators use to introduce their students to cultural content from around the world. While students are mastering a foreign language that they would eventually use in their professional lives, they could be exposed to different cultural content, such as literature, poetry, music and cinema that will improve their intercultural understanding.

In conclusion, the countries and economies that are likely to be successful in fostering global knowledge, skills and attitudes among their students are those that combine a number of factors. These include learning opportunities for students, an adapted curriculum, teachers who are prepared for teaching global competence, availability of opportunities to learn foreign languages, availability of opportunities to have contact with people from other cultures and, finally, a positive and inclusive school environment.

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[1]



# **PISA 2018 technical background**

All figures and tables in Annex A are available on line

Annex A1: Construction of indices

**Annex A2**: The PISA target population, the PISA samples and the definition of schools https://doi.org/10.1787/888934171096

**Annex A3**: Technical notes on analyses in this volume https://doi.org/10.1787/888934171115

Annex A4: Quality assurance

#### **ANNEX A1**

#### **Construction of indices**

#### **EXPLANATION OF THE INDICES**

This section explains the indices derived from the PISA 2018 parent, student, school and teacher questionnaires used in this volume.

Several PISA measures reflect indices that summarise responses from students, their parents, teachers or school representatives (typically principals) to a series of related questions. The questions were selected from a larger pool on the basis of theoretical considerations and previous research. The *PISA 2018 Assessment and Analytical Framework* (OECD, 2019<sub>[1]</sub>) provides an in-depth description of this conceptual framework. Item response theory modelling was used to confirm the theoretically expected behaviour of the indices and to validate their comparability across countries. For this purpose a joint model across all countries was estimated. Item fit (root mean square deviation) was evaluated separately for each item and each group (country/economy by language). This procedure is in line with the PISA 2015 scaling approach. For a detailed description of other PISA indices and details on the methods, see the *PISA 2015 Technical Report* (OECD; 2017) and the *PISA 2018 Technical Report* (OECD, forthcoming<sub>[2]</sub>).

There are three types of indices: simple indices, new scale indices and trend scale indices.

**Simple indices** are the variables that are constructed through the arithmetic transformation or recoding of one or more items in exactly the same way across assessments. Here, item responses are used to calculate meaningful variables, such as recoding of the four-digit ISCO-08 codes into "highest parents' socio-economic index" (HISEI) or teacher-student ratio, based on information from the school questionnaire.

**Scale indices** are the variables constructed through the scaling of multiple items. Unless otherwise indicated, the index was scaled using a two-parameter item-response model (a generalised partial-credit model was used in the case of items with more than two categories) and values of the index correspond to Warm likelihood estimates (Warm, 1989<sub>[3]</sub>). For details on how each scale index was constructed, see the *PISA 2018 Technical Report* (OECD, forthcoming<sub>[2]</sub>). In general, the scaling was done in two stages. The item parameters were estimated based on all students from equally-weighted countries and economies. Only cases with a minimum number of three valid responses to items that are part of the index were included. In the case of **trend scale indices**, a common calibration linking procedure was used: countries/economies that participated in both PISA 2009 and PISA 2018 contributed both samples to the calibration of item parameters; each cycle and, within each cycle, each country/economy contributed equally to the estimation.

For **new scale indices**, the Warm likelihood estimates were then standardised so that the mean of the index value for the OECD student population was zero and the standard deviation was one (countries/economies were given equal weight in the standardisation process).

Sequential codes were assigned to the different response categories of the questions in the sequence in which the response categories appeared in the student, school or parent questionnaire. Where indicated in this section, these codes were inverted for the purpose of constructing indices or scales. Negative values for an index do not necessarily imply that students responded negatively to the underlying questions. A negative value merely indicates that the respondents answered less positively than all respondents on average across OECD countries. Likewise, a positive value in an index indicates that the respondents answered more favourably, or more positively than all respondents on average across OECD countries. Terms enclosed in brackets <> in the following descriptions were replaced in the national versions of the student, school and parent questionnaires by the appropriate national equivalent. For example, the term <qualification at ISCED level 5A> was translated in the United States into "Bachelor's degree, post-graduate certificate program, Master's degree program or first professional degree program". Similarly the term <classes in the language of assessment> in Luxembourg was translated into "German classes" or "French classes", depending on whether students received the German or French version of the assessment instruments.

In addition to the simple and scaled indices described in this annex, there are a number of variables from the questionnaires that were used in this volume and correspond to single items not used to construct indices. These non-recoded variables have the prefix of "ST" for the questionnaire items in the student questionnaire, "SC" for the items in the school questionnaire, "TC" for the items in the teacher questionnaire and "PA" for the items in the parent questionnaire. All the context questionnaires, and the PISA international database, including all variables, are available through <a href="https://www.oecd.org/pisa">www.oecd.org/pisa</a>.

#### STUDENT-LEVEL SIMPLE INDICES

#### **Immigrant background**

Information was also collected on the country of birth of students and their parents. Included in the database are three country-specific variables related to the country of birth of the student, and his or her mother and father (ST019). The variables are binary and indicate whether the student, mother and father were born in the country of assessment or elsewhere. The index on immigrant background (IMMIG) is calculated from these variables and has the following categories: 1) native students (those who had at least one parent born in the country); 2) second-generation students (those born in the country of assessment but whose parent[s] were born in another country); and 3) first-generation students (those born outside the country of assessment and whose parents were also born in another country). Students with missing responses for either the student or for both parents were given missing values for this variable.

#### Number of actions taken by students

PISA 2018 assessed students' willingness to take action using a series of eight yes-or-no statements (ST222). The statements covered topics related to environmental protection, gender equality and interest in international and social issues, such as poverty and human rights. The eight statements were: "I reduce the energy I use at home to protect the environment"; "I choose certain products for ethical or environmental reasons, even if they are a bit more expensive"; "I sign environmental or social petitions online"; "I keep myself informed about world events via Twitter or Facebook"; "I boycott products or companies for political, ethical or environmental reasons"; "I participate in activities promoting equality between men and women"; "I participate in activities in favour of environmental protection"; and "I regularly read websites on international social issues (e.g. poverty, human rights)". The total number of actions for collective well-being and sustainable development was constructed by summing answers on all eight questions.

#### Number of learning activities attended by students

Students who participated in PISA 2018 were asked ten questions about different learning activities to which they are exposed (ST221). The activities were: learning about different cultures at school; learning how to solve conflicts with other people in the classroom; learning how people from different cultures can have different perspectives on some issues; learning how to communicate with people from different backgrounds; participating in classroom discussions about world events; learning about the interconnectedness of countries' economies; analysing global issues together with classmates in small groups during class; giving and discussing personal opinions about international news; reading newspapers, looking for news on the Internet or watching the news together during classes; and participating in events celebrating cultural diversity throughout the school year. The total number of learning activities students are exposed to at school was constructed by summing students' answers to all ten questions.

#### STUDENT-LEVEL SCALE INDICES

#### Students' awareness of global issues

Students' awareness of global issues was assessed using one question in the PISA 2018 student questionnaire (ST197). Students were asked to report the extent to which they are aware of global issues. Answers were given on a four-point scale: "I have never heard of this"; "I have heard about this but I would not be able to explain what it is really about"; "I know something about this and could explain the general issue"; and "I am familiar with this and I would be able to explain this well". They responded to statements about seven issues: climate change and global warning; global health; migration; international conflicts; hunger or malnutrition in different parts of the world; causes of poverty; and equality between men and women in different parts of the world. Answers were used to construct the index of awareness of global issues (GCAWARE). Positive values in this index mean that students expressed a greater awareness about global issues than the average student across OECD countries.

#### Students' self-efficacy regarding global issues

Students in PISA 2018 were asked to report the extent to which they could do certain global competence-related tasks on their own (ST196). Answers were given on a four-point scale: "I could not do this"; "I would struggle to do this on my own"; "I could do this with a bit of effort"; and "I could do this easily". Students responded to the following prompts: "Explain how carbon-dioxide emissions affect global climate change"; "Establish a connection between prices of textiles and working conditions in the countries of production"; "Discuss the different reasons why people become refugees"; "Explain why some countries suffer from more global climate change than others"; and "Discuss the consequences of economic development on the environment". Answers were combined to create the index of self-efficacy regarding global competence (GCSELFEFF). Positive values in this index mean that students expressed greater self-efficacy than the average student across OECD countries.

#### Students' ability to understand the perspectives of others

PISA 2018 asked students to report on their ability to understand different perspectives by responding to five statements (ST215): "I try to look at everybody's side of a disagreement before I make a decision"; "I believe that there are two sides to every question and try to look at them both"; "I sometimes try to understand my friends better by imagining how things look from their perspective"; "Before criticising somebody, I try to imagine how I would feel if I were in their place"; and "When I'm upset at someone, I try to take the perspective of that person for a while". Responses were given on a five-point scale ("very much like me", "mostly like me", "somewhat like me", "not much like me" and "not at all like me") and were combined into an index of students' ability to understand the perspectives of others (PERSPECT). Positive values in this index indicate a greater ability to understand and take different perspectives than the average student across OECD countries.

# Students' interest in learning about other cultures

PISA 2018 asked students about their interest in learning about other cultures (ST214). An index of students' interest in learning about other cultures (INTCULT) was derived from responses to the following four statements: "I want to learn how people live in different countries"; "I want to learn more about the religions of the world"; "I am interested in how people from various cultures see the world"; and "I am interested in finding out about the traditions of other cultures". The five response categories were "very much like me", "mostly like me", "somewhat like me", "not much like me" and "not at all like me". Positive values in the index indicate that students exhibit a greater interest in learning about other cultures than the average student across OECD countries.

# Students' respect for people from other cultures

PISA 2018 asked students the extent to which they respect people from other countries (ST217). The five response categories were "very much like me", "mostly like me", "somewhat like me", "not much like me" and "not at all like me". The index of respect for people from other cultures (RESPECT) was derived from responses to the following statements: "I respect people from other cultures as equal human beings"; "I treat all people with respect regardless of their cultural background"; "I give space to people from other cultures to express themselves"; "I respect the values of people from different cultures"; and "I value the opinions of people from different cultures". Positive values in this index indicate that students reported greater respect for people from other cultures than the average student across OECD countries.

# Students' cognitive adaptability

PISA 2018 asked students about their ability to adapt to new situations (ST216). Students were asked to respond to six statements: "I can deal with unusual situations"; "I can change my behaviour to meet the needs of new situations"; "I can adapt to different situations even when under stress or pressure"; "I can adapt easily to a new culture"; "When encountering difficult situations with people, I can think of a way to resolve the situation"; and "I am capable of overcoming my difficulties in interacting with people from other cultures". Responses were given on a five-point scale: "very much like me", "mostly like me", "somewhat like me", "not much like me" and "not at all like me". Positive values in the index of cognitive adaptability (COGFLEX) indicate that students have a greater ability to adapt than the average student across OECD countries.

#### Students' attitudes towards immigrants

PISA 2018 asked students to report their overall attitude towards immigrants (ST204). An index of attitudes towards immigrants was derived from responses to the following statements: "Immigrant children should have the same opportunities for education that other children in the country have"; "Immigrants who live in a country for several years should have the opportunity to vote in elections"; "Immigrants should have the opportunity to continue their own customs and lifestyle"; and "Immigrants should have all the same rights that everyone else in the country has". Responses were provided on a four-point scale: "strongly disagree", "disagree", "agree" and "strongly agree". A positive value in the index of attitudes towards immigrants (ATTIMM) indicates that students have more positive attitudes towards immigrants than the average student across OECD countries.

#### Students' awareness of intercultural communication

PISA 2018 asked students to describe their awareness of intercultural communications (ST218). They were asked to respond to seven statements related to the following hypothetical scenario: "Imagine you are talking in your native language to people whose native language is different from yours." The statements were: "I carefully observe their reactions"; "I frequently check that we are understanding each other correctly"; "I listen carefully to what they say"; "I choose my words carefully"; "I give concrete examples to explain my ideas"; "I explain things very carefully"; and "If there is a problem with communication I find ways around it". Answers were given on a four-point scale ("strongly disagree", "disagree", "agree" or "strongly agree") and were combined into the index of awareness of intercultural communication (AWACOM). A positive value in this index indicates that students have a greater awareness of intercultural communication than the average student across OECD countries.

#### Students' agency regarding global issues

PISA 2018 asked students the extent to which they agree ("strongly disagree", "disagree", "agree", "strongly agree") with the following six statements (ST219): "I think of myself as a citizen of the world"; "When I see the poor conditions that some people live under, I feel a responsibility to do something about it"; "I think my behaviour can impact people in other countries"; "It is right to boycott companies that are known to provide poor workplace conditions for their employees"; "I can do something about the problems of the world"; and "Looking after the global environment is important to me". Responses to these statements were combined to create the index of agency regarding global issues (GLOBMIND). Positive values in this index indicate that students have a greater sense of global-mindedness than the average student across OECD countries.

#### **Enjoyment of reading**

The index of enjoyment of reading (JOYREAD) was constructed based on a trend question (ST160) from PISA 2009 asking students the extent to which they agree ("strongly disagree", "disagree", "agree", "strongly agree") with the following statements: "I read only if I have to"; "Reading is one of my favourite hobbies"; "I like talking about books with other people"; "For me, reading is a waste of time"; and "I read only to get information that I need". Positive values in this scale mean that students enjoy reading to a greater extent than the average student across OECD countries. Scores of the index of enjoyment of reading are directly comparable between PISA 2009 and PISA 2018.

#### Students' resilience

Resilience in PISA was assessed by asking students to report the extent to which they agree ("strongly disagree", "disagree", "agree", "strongly agree") with the following statements (ST188) about themselves: "I usually manage one way or another"; "I feel proud that I have accomplished things"; "I feel that I can handle many things at a time"; "My belief in myself gets me through hard times"; and "When I'm in a difficult situation, I can usually find my way out of it". These statements were combined to create the index of resilience (RESILIENCE). Positive values in this index mean that students reported a greater capacity to deal with adversity than the average student across OECD countries.

# Scaling of indices related to the PISA index of economic social and cultural status

As in previous cycles, the PISA index of economic, social and cultural status (ESCS) was derived from three variables related to family background: parents' highest level of education (PARED); parents' highest occupational status (HISEI); and home possessions (HOMEPOS), including books in the home. PARED and HISEI are simple indices, described above. HOMEPOS is a proxy measure for family wealth.

# **Household possessions**

In PISA 2018, students reported the availability of 16 household items at home (ST011), including three country-specific household items that were seen as appropriate measures of family wealth within the country's context. In addition, students reported the amount of possessions and books at home (ST012, ST013). HOMEPOS is a summary index of all household and possession items (ST011, ST012 and ST013).

#### **Computation of ESCS**

For the purpose of computing the PISA index of economic, social and cultural status, values for students with missing PARED, HISEI or HOMEPOS were imputed with predicted values plus a random component based on a regression on the other two variables. If there were missing data on more than one of the three variables, ESCS was not computed and a missing value was assigned for ESCS.

In previous cycles, the PISA index of economic, social and cultural status was derived from a principal component analysis of standardised variables (each variable has an OECD mean of 0 and a standard deviation of 1), taking the factor scores for the first principal component as measures of ESCS. In PISA 2018, ESCS was computed by attributing equal weight to the three standardised components. As in PISA 2015, the three components were standardised across all countries and economies (both OECD and partner countries/economies), with each country/economy contributing equally (in cycles prior to 2015, the standardisation and principal component analysis was based on OECD countries only). As in every previous cycle, the final ESCS variable was transformed, with 0 the score of an average OECD student and 1 the standard deviation across equally weighted OECD countries.

#### **SCHOOL-LEVEL SIMPLE INDICES**

#### Socio-economic profile of schools

Advantaged and disadvantaged schools are defined in terms of the socio-economic profile of schools. All schools in each education system participating in PISA are ranked according to their average ESCS and then divided into four groups with an approximately equal number of students (quarters). Schools in the bottom quarter are referred to as "socio-economically disadvantaged schools" and schools in the top quarter are referred to as "socio-economically advantaged schools".

# School type

Schools are classified as either public or private, according to whether a private entity or a public agency has the ultimate power to make decisions concerning its affairs (Question SC013). Public schools are managed directly or indirectly by a public education authority, government agency, or governing board appointed by government or elected by public franchise. Private schools are managed directly or indirectly by a non-government organisation, such as a church, trade union, business or other private institution. In some countries and economies, such as Ireland, the information from SC013 is combined with administrative data to determine whether the school is privately or publicly managed.

#### **SCHOOL-LEVEL SCALE INDICES**

#### Principals' views on teachers' multicultural beliefs

PISA 2018 asked school principals to report their views on their teachers' multicultural beliefs (SC166). Principals were asked to consider four statements and report whether these beliefs are widely shared among the teachers in their school. The statements were: "It is important for students to learn that people from other cultures can have different values"; "Respecting other cultures is something that students should learn as early as possible"; "In the classroom, it is important that students of different origins recognise the similarities that exist between them"; and "When there are conflicts between students of different origins, they should be encouraged to resolve the argument by finding common ground". Principals were given a choice of responses indicating how many of the teachers in their school shared these beliefs: "none or almost none", "some", "many" or "all or almost all". The responses to these statements were used to construct an index of principals' views on teachers' multicultural beliefs (SCMCEG). Positive values indicate greater multicultural and egalitarian beliefs than the average across OECD countries.

### **PARENT-LEVEL SCALE INDICES**

# Parents' awareness of global issues

In 14 countries/economies, parents were asked to fill out a questionnaire (PA170). One of the questions enquired about parents' awareness of global issues, using the same questions that were asked of their children. Parents had to respond to statements about: climate change and global warming; global health (e.g. epidemics); migration (movement of people); international conflicts; hunger or malnutrition in different parts of the world; causes of poverty; and equality between men and women in different parts of the world. Answers were given on a four-point scale: "I have never heard of this"; "I have heard about this but I would not be able to explain what it is really about"; "I know something about this and I could explain the general issue"; and "I am familiar with this and I would be able to explain this well". Answers to these statements were combined to construct the index of parents' awareness of global issues (GCAWAREP). Positive values in the index indicate that parents expressed a greater sense of awareness of global issues than the average parent across OECD countries.

#### Parents' interest in learning about other cultures

In 14 countries/economies, parents were asked to respond to the same four statements as their children about their interest in learning about other cultures (PA168). The five response categories were "very much like me", "mostly like me", "somewhat like me", "not much like me" and "not at all like me". The index of parents' interest in learning about other cultures was constructed by combining responses to those four statements using item response theory scaling (INTCULTP). A positive value in this index indicates that parents reported a greater interest in learning about other cultures than the average parent across OECD countries.

# Parents' attitudes towards immigrants

PISA 2018 asked parents to report their overall attitude towards immigrants (PA167). An index of parents' attitudes towards immigrants (ATTIMMP) was derived from responses to the following statements: "Immigrant children should have the same opportunities for education that other children in the country have"; "Immigrants who live in a country for several years should have the opportunity to vote in elections"; "Immigrants should have the opportunity to continue their own customs and lifestyle"; and "Immigrants should have all the same rights that everyone else in the country has". Responses were provided on a four-point scale: "strongly disagree", "disagree", "agree" and "strongly agree". A positive value in this index indicates that parents have more positive attitudes towards immigrants than the average parent across OECD countries (14 countries/economies distributed the parent questionnaire).

#### **TEACHER-LEVEL SIMPLE INDICES**

#### Participation in professional development activities

In the 19 countries and economies that distributed an optional questionnaire for teachers, teachers were asked (TC193) whether, during the previous 12 months, they had participated in one of the following professional development activities: "Courses and workshops (e.g. on subject matter or methods and/or other education-related topics)"; "Education conferences or seminars (where teachers and/or researchers present their research results and discuss educational issues)"; "Observation visits to other schools"; "Observation visits to business premises, public organisations, non-governmental organisations"; and "In-service training courses in business premises, public organisations, non-governmental organisations". Answers to this question were used to measure the proportion of teachers who had participated in professional development activities (any of these five items) during the previous 12 months.

#### **TEACHER-LEVEL SCALE INDICES**

#### Teachers' multicultural and egalitarian beliefs

Teachers were asked about their multicultural and egalitarian beliefs, using four statements in the teacher questionnaire (TC208): "It is important for students to learn that people from other cultures can have different values"; "Respecting other cultures is something that students should learn as early as possible"; "In the classroom, it is important that students of different origins recognise the similarities that exist between them"; and "When there are conflicts between students of different origins, they should be encouraged to resolve the argument by finding common ground". Teachers reported whether these attitudes are: "shared amongst none or almost none of the teachers"; "shared amongst some of the teachers"; "shared amongst many of the teachers"; or "shared amongst all or almost all of the teachers." Responses were used to construct an index with positive values indicating stronger multicultural and egalitarian beliefs (TCMCEG) than the average teacher across OECD countries.

# Teacher training on global competence

PISA 2018 asked teachers five yes-or-no questions about their professional development activities (TC206). The questions were: "Have you received training on intercultural communication?"; "Have you received training on conflict resolution strategies?"; "Have you received training on the role education can play in confronting discrimination in all its forms?"; "Have you studied culturally responsive teaching approaches and techniques?"; and "Have you received training on issues related to teaching in multicultural classrooms?". Responses were used to construct the index of teacher training on global competence (GCTRAIN), with positive values indicating higher levels of training than the average teacher across OECD countries.

# Teachers' self-efficacy in multicultural environments

Teachers were asked five statements about their self-efficacy in multicultural environments (TC209). An index of teachers' self-efficacy in multicultural environments (GCSELF) was derived from responses to the following statements: "I can cope with the challenges of a multicultural classroom"; "I can adapt my teaching to the cultural diversity of students"; "I take care that students with and without migrant background work together"; "I can raise awareness for cultural differences amongst the students"; and "I can contribute to reducing ethnic stereotypes between the students". Responses were provided on a four-point scale: "strongly disagree", "disagree", "agree" and "strongly agree". A positive value in the index indicates that teachers reported greater self-efficacy in multicultural environments than the average teacher across OECD countries.

# Teachers' attitudes towards immigrants

PISA 2018 asked teachers to report their overall attitude towards immigrants (TC196). An index of attitudes towards immigrants was derived from responses to the following statements: "Immigrant children should have the same opportunities for education that other children in the country have"; "Immigrants who live in a country for several years should have the opportunity to vote in elections"; "Immigrants should have the opportunity to continue their own customs and lifestyle"; and "Immigrants should have all the same rights that everyone else in the country has". Responses were provided on a four-point scale: "strongly disagree", "disagree", "agree" and "strongly agree". A positive value in the index of attitudes towards immigrants (TCATTIMM) indicates that teachers reported more positive attitudes towards immigrants than the average teacher across OECD countries.

#### **SYSTEM LEVEL DATA**

All system level data were obtained from the World Bank.

#### Annual percentage growth rate of GDP per capita

Annual percentage growth rate of per capita GDP is based on constant local currency. Aggregates are based on constant 2010 USD. Per capita GDP is gross domestic product divided by mid-year population. GDP at purchaser's prices is the sum of gross

value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.

#### Employment-to-population ratio

Employment-to-population ratio is the proportion of a country's population that is employed. Employment is defined as persons of working age who, during a short reference period, were engaged in any activity to produce goods or provide services for pay or profit, whether at work during the reference period (i.e. who worked in a job for at least one hour) or not at work due to temporary absence from a job or due to working-time arrangements. People of age 15 and older are generally considered the working-age population.

# International migrant stock (2010 and 2015)

International migrant stock is the number of people born in a country other than that in which they live. It also includes refugees. The data used to estimate the international migrant stock at a particular time are obtained mainly from population censuses. The estimates are derived from the data on foreign-born population (people who have residence in one country but were born in another country). When data on the foreign-born population are not available, data on foreign population (i.e. people who are citizens of a country other than the country in which they reside) are used as estimates. After the breakup of the Soviet Union in 1991, people living in one of the newly independent countries who were born in another were classified as international migrants. Estimates of migrant stock in the newly independent states from 1990 on are based on the 1989 census of the Soviet Union. For countries with information on the international migrant stock for at least two points in time, interpolation or extrapolation was used to estimate the international migrant stock on July 1 of the reference years. For countries with only one observation, estimates for the reference years were derived using rates of change in the migrant stock in the years preceding or following the single observation available. A model was used to estimate migrants for countries that had no data.

#### Per capita GDP 2018 - PPP adjusted

Per capita GDP based on purchasing power parity (PPP) is gross domestic product converted to international dollars using purchasing power parity rates. An international dollar has the same purchasing power over GDP as the US dollar has in the United States. GDP at purchaser's prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in current international dollars based on the 2011 ICP round.

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#### **ANNEX A2**

# PISA target population, the PISA samples and the definition of schools

The PISA target population, exclusions and coverage ratios

#### WHO IS THE PISA TARGET POPULATION?

PISA 2018 assessed the cumulative outcomes of education and learning at a point at which most young people are still enrolled in formal education – when they are 15 years old.

Any international survey of education must guarantee the comparability of its target population across nations. One way to do this is to assess students at the same grade level. However, differences between countries in the nature and extent of pre-primary education and care, the age at entry into formal schooling and the institutional structure of education systems do not allow for a definition of internationally comparable grade levels.

Other international assessments have defined their target population by the grade level that provides maximum coverage of a particular age cohort. However, this method is particularly sensitive to the distribution of students across age and grade levels. Small changes in this distribution can lead to the selection of different target grades, even within the same country/economy over different PISA cycles. There also may be differences across countries/economies in whether students who are older or younger than the desired age cohort are represented in the modal grade, further rendering such grade level-based samples difficult to compare.

To overcome these problems, PISA uses an age-based definition of its target population, one that is not tied to the institutional structures of national education systems. PISA assesses students who were aged between 15 years and 3 complete months and 16 years and 3 complete months<sup>1</sup> at the beginning of the assessment period, plus or minus an allowed 1-month variation, and who were enrolled in an educational institution<sup>2</sup> at Grade 7 or higher.<sup>3</sup> All students who met these criteria were eligible to sit the PISA assessment, regardless of the type of educational institution in which they were enrolled and whether they were enrolled in full-time or part-time education. This also allows PISA to evaluate students shortly before they are faced with major life choices, such as whether to continue with education or enter the workforce.

Hence, PISA makes statements about the knowledge and skills of a group of individuals who were born within a comparable reference period, but who may have undergone different educational experiences both in and outside of school. These students may be distributed over different ranges of grades (both in terms of the specific grade levels and the spread in grade levels) in different countries/economies, or in different tracks or streams within countries/economies. It is important to consider these differences when comparing PISA results across countries/economies. In addition, differences in performance observed when students are 15 may disappear later on if students' experiences in education converge over time.

If mean scores in reading, mathematics or science in a country/economy are significantly higher than those of another country or economy, it cannot automatically be inferred that schools or particular parts of the education system in the first are more effective than those in the second. However, one can legitimately conclude that it is the cumulative impact of learning experiences in the first country/economy, starting in early childhood and up to the age of 15, and including all experiences, at school, home or elsewhere, that have resulted in the better outcomes of the first country/economy in the subjects that PISA assesses.<sup>4</sup>

The PISA target population does not include residents of a country/economy who attend school in another country/economy. It does, however, include foreign nationals who attend school in the country of assessment.

To accommodate countries/economies that requested grade-based results for the purpose of national analyses, PISA 2018 provided a sampling option to supplement age-based sampling with grade-based sampling.

#### **HOW WERE STUDENTS CHOSEN?**

The accuracy of the results from any survey depends on the quality of the information drawn from those surveyed as well as on the sampling procedures. Quality standards, procedures, instruments and verification mechanisms were developed for PISA that ensured that national samples yielded comparable data and that the results could be compared across countries/economies with confidence. Experts from the PISA Consortium selected the samples for most participating countries/economies and monitored the sample-selection process closely in those countries/economies that selected their own samples.

Most PISA samples were designed as two-stage stratified samples.<sup>5</sup> The first stage sampled schools in which 15-year-old students may be enrolled. Schools were sampled systematically, with probabilities proportional to the estimated size of their (eligible) 15-year-old population. At least 150 schools<sup>6</sup> were selected in each country/economy, although the requirements for national analyses often demanded a larger sample. Replacement schools for each sampled school were simultaneously identified, in case an originally sampled school chose not to participate in PISA 2018.

The second stage of the selection process sampled students within sampled schools. Once schools were selected, a list of each sampled school's 15-year-old students was prepared. From this list, 42 students were then selected with equal probability (all 15-year-old students were selected if fewer than 42 were enrolled). The number of students who were to be sampled in a school could deviate from 42 but could not fall below 20.

Data-quality standards in PISA required minimum participation rates for schools and for students. These standards were established to minimise the potential for bias resulting from non-response. Indeed, it was likely that any bias resulting from non-response would be negligible (i.e. typically smaller than the sampling error) in countries/economies that met these standards.

At least 85% of the schools initially selected to take part in the PISA assessment were required to agree to conduct the test. Where the initial response rate of schools was between 65% and 85%, however, an acceptable school-response rate could still be achieved through the use of replacement schools. Inherent in this procedure was a risk of introducing bias, if replacement schools differed from initially sampled schools along dimensions other than those considered for sampling. Participating countries/economies were therefore encouraged to persuade as many of the schools in the original sample as possible to participate.

Schools with a student participation rate of between 25% and 50% were not considered to be participating schools, but data (from both the cognitive assessment and questionnaire) from these schools were included in the database and contributed to the various estimates. Data from schools with a student participation rate of less than 25% were excluded from the database.

In PISA 2018, five countries and economies did not meet the 85% threshold among schools initially selected to take part in the PISA assessment: Hong Kong (China) (69%), Latvia (82%), New Zealand (83%), the United Kingdom (73%) and the United States (65%). But they did meet the 65% threshold. Upon replacement, Hong Kong (China) (79%), the United Kingdom (87%) and the United States (76%) still failed to reach an acceptable participation rate.<sup>7</sup> Among the schools initially selected before replacement, the Netherlands (61%) did not meet the 65% school response-rate threshold, but it reached a response rate of 87% upon replacement. However, these were not considered to be major issues as, for each of these countries/economies, additional non-response analyses showed that there were limited differences between schools that did participate and the full set of schools originally drawn in the sample.<sup>8</sup> Data from these jurisdictions were hence considered to be largely comparable with data from other countries/economies and were therefore reported together with that data.

PISA 2018 also required that at least 80% of the students chosen within participating schools actually participated. This threshold was calculated at the national level and did not have to be met in each participating school. Follow-up sessions were required in schools where too few students had participated in the original assessment sessions. Student-participation rates were calculated over all original schools and also over all schools, whether original or replacement schools. Students who participated in either the original or in any follow-up assessment sessions were counted in these participation rates. Those who attended only the questionnaire session were included in the international database and contributed to the statistics presented in this publication if they provided at least a description of their father's or mother's occupation.

This 80% threshold was met in every country/economy except Portugal, where only 76% of students who were sampled actually participated. The high level of non-responding students could lead to biased results (e.g. if students who did not respond were more likely to be low-performing students). This was indeed the case in Portugal, but a non-response analysis based on data from a national mathematics assessment in the country showed that the upward bias of Portugal's overall results was likely small enough to preserve comparability over time and with other countries/economies. Data from Portugal were therefore reported along with data from the countries/economies that met this 80% student-participation threshold.

Table I.A2.6 shows the response rate for students and schools, before and after replacement.

- **Column 1** shows the weighted participation rate of schools before replacement; it is equivalent to Column 2 divided by Column 3 (multiplied by 100 to obtain a percentage).
- Column 2 shows the number of responding schools before school replacement, weighted by student enrolment.
- **Column 3** shows the number of sampled schools before school replacement, weighted by student enrolment. This includes both responding and non-responding schools.
- Column 4 shows the unweighted number of responding schools before school replacement.

- **Column 5** shows the unweighted number of sampled schools before school replacement, including both responding and non-responding schools.
- **Columns 6 to 10** repeat Columns 1 to 5 for schools after school replacement (i.e. after non-responding schools were replaced by the replacement schools identified during the initial sampling procedure).
- Columns 11 to 15 repeat Columns 6 to 10 but for students in schools after school replacement. Note that the weighted and unweighted numbers of students sampled (Columns 13 and 15) include students who were assessed and those who should have been assessed but who were absent on the day of assessment. Furthermore, as mentioned above, any students in schools where the student response rate was less than 50% were not considered to be attending participating schools and were thus excluded from Columns 14 and 15 (and, similarly, from Columns 4, 5, 9 and 10).

#### WHAT PROPORTION OF 15-YEAR-OLDS DOES PISA REPRESENT?

All countries and economies attempted to maximise the coverage of 15-year-olds enrolled in education in their national samples, including students enrolled in special-education institutions.

The sampling standards used in PISA only permitted countries to exclude up to a total of 5% of the relevant population (i.e. 15-year-old students enrolled in school at Grade 7 or higher) either by excluding schools or excluding students within schools. Only 16 countries did not achieve this standard: Sweden (11.09%), Israel (10.21%), Luxembourg (7.92%), Norway (7.88%), Canada (6.87%), New Zealand (6.78%), Switzerland (6.68%), the Netherlands (6.24%), Cyprus (5.99%), Iceland (5.99%), Kazakhstan (5.87%), Australia (5.72%), Denmark (5.70%), Turkey (5.66%), the United Kingdom (5.45%) and Estonia (5.03%), and the overall exclusion rate was less than 2% in 28 countries and economies (Table I.A2.1). When language exclusions<sup>9</sup> were accounted for (i.e. removed from the overall exclusion rate), Estonia and Iceland no longer had exclusion rates greater than 5%. More details can be found in the *PISA 2018 Technical Report* (OECD, forthcoming<sub>[11</sub>).

Exclusions that should remain within the above limits include both at the school level and the student level:

- School level:
  - schools that were geographically inaccessible or where the administration of the PISA assessment was not considered feasible
  - schools that provided teaching only for students in the categories defined under "within-school exclusions", such as schools for the blind.

The percentage of 15-year-olds enrolled in such schools had to be less than 2.5% of the nationally desired target population (0.5% maximum for schools that were geographically inaccessible or where administration of PISA was not feasible and 2% maximum for schools only for students in the categories defined under "within-school exclusions). The magnitude, nature and justification of school-level exclusions are documented in the *PISA 2018 Technical Report* (OECD, forthcoming<sub>[11]</sub>).

- Student level:
  - students with an intellectual disability (i.e. a mental or emotional disability resulting in the student being so cognitively delayed that he/she could not perform in the PISA testing environment)
  - students with a functional disability (i.e. a moderate to severe permanent physical disability resulting in the student being unable to perform in the PISA testing environment)
  - students with limited assessment-language proficiency (i.e. students unable to read or speak any of the languages of assessment in the country at a sufficient level and unable to overcome such a language barrier in the PISA testing environment, typically students who had received less than one year of instruction in the language of assessment)
  - other exclusions (a category defined by the PISA national centres in individual participating countries and approved by the PISA international consortium)
  - students taught in a language of instruction for the major domain for which no materials were available.

Students could not be excluded solely because of low proficiency or common disciplinary problems. The percentage of 15-year-olds excluded within schools had to be less than 2.5% of the national desired target population.

Although exceeding the exclusion rate limit of 5% (Table I.A2.1), data from the 16 countries listed above were all deemed to be acceptable for the reasons listed below. In particular, all of these reasons were accepted by a data-adjudication panel to allow for the reliable comparison of PISA results across countries/economies and across time. Thus the data from these countries were reported together with data from other countries/economies.

- In Australia, Canada, Denmark, Luxembourg, New Zealand and Norway, exclusion rates have consistently been above 5% across cycles. In the United Kingdom, exclusion rates were also above 5%, but they have decreased markedly across cycles.
- In Cyprus, Iceland, Kazakhstan, the Netherlands and Switzerland, this could be largely attributed to a marked increase in students who were excluded within schools due to intellectual or functional disabilities. Moreover, in the Netherlands, some 17% of students were not excluded but assigned to UH (*une heure*) booklets, which were intended for students with special education needs. As these booklets did not cover the domain of financial literacy (OECD, 2020<sub>[2]</sub>), the effective exclusion rate for the Netherlands in financial literacy was over 20%. This resulted in a strong upward bias in the country mean and other population statistics in that domain. Data from the Netherlands in financial literacy are not comparable with data from other education systems, but data from the Netherlands in the core PISA subjects were still deemed to be largely comparable.
- The higher exclusion rate in Turkey was likely the result of a higher school-level exclusion rate, due to a particular type of non-formal educational institution that was not listed (and hence not excluded) in 2015 but was listed and excluded in 2018. The global competence sample from Israel does not include students in ultra-Orthodox schools and, thus, is not nationally representative. See PISA 2018 Technical Report (OECD, forthcoming<sub>(11)</sub>) for details.
- The higher exclusion rate in Israel was the result of a higher school-level exclusion rate due to the lack of participation by a particular type of boys' school. These schools were considered to be non-responding schools in cycles up to 2015 but were treated as school-level exclusions in 2018.
- Sweden had the highest exclusion rate: 11.07%. It is believed that this increase in the exclusion rate was due to a large and temporary increase in immigrant and refugee inflows, although because of Swedish data-collection laws, this could not be explicitly stated in student-tracking forms. Instead, students confronted with language barriers were classified as being excluded "for other reasons", as were students with intellectual and functional disabilities. It is expected that the exclusion rate will decrease to previous levels in future cycles of PISA, as such inflows stabilise or shrink.<sup>10</sup>

Table I.A2.1 describes the target population of the countries/economies participating in PISA 2018. Further information on the target population and the implementation of PISA sampling standards can be found in the *PISA 2018 Technical Report* (OECD, forthcoming<sub>[11]</sub>).

- **Column 1** shows the total number of 15-year-olds according to the most recent available information, which in most countries and economies means from 2017, the year before the assessment.
- **Column 2** shows the number of 15-year-olds enrolled in school in Grade 7 or above, which is referred to as the "eligible population".
- **Column 3** shows the national desired target population. Countries were allowed to exclude up to 0.5% of students *a priori* from the eligible population, essentially for practical reasons. The following *a priori exclusions* exceed this limit but were agreed with the PISA Consortium:
  - Canada excluded 1.17% of its population: students living in the Yukon, Northwest Territories and Nunavut, and Indigenous students living on reserves.
  - Chile excluded 0.05% of its population: students living on Easter Island, the Juan Fernandez Archipelago and Antarctica.
  - Cyprus excluded 0.10% of its population: students attending schools on the northern part of the island.
  - The Philippines excluded 2.42% of its population: students living in the Autonomous Region in Muslim Mindanao.
  - Saudi Arabia excluded 7.59% of its population: students living in the regions of Najran and Jizan.
  - Ukraine excluded 0.37% of its population: some students attending schools in the Donetsk and Luhansk regions.
  - The United Arab Emirates excluded 0.04% of its population: home-schooled students.
- **Column 4** shows the number of students enrolled in schools that were excluded from the national desired target population, either from the sampling frame or later in the field during data collection. In other words, these are school-level exclusions.
- Column 5 shows the size of the national desired target population after subtracting the students enrolled in excluded schools.
   This column is obtained by subtracting Column 4 from Column 3.
- **Column 6** shows the percentage of students enrolled in excluded schools. This is obtained by dividing Column 4 by Column 3 and multiplying by 100.

- **Column 7** shows the number of students who participated in PISA 2018. Note that, in some cases, this number does not account for 15-year-olds assessed as part of additional national options.
- **Column 8** shows the weighted number of participating students (i.e. the number of students in the nationally defined target population that the PISA sample represents).
- **Column 9** shows the total number of students excluded within schools. In each sampled school, all eligible students (i.e. those 15 years of age, regardless of grade) were listed, and a reason for the exclusion was provided for each student who was to be excluded from the sample. These reasons are further described and classified into specific categories in Table I.A2.4.
- **Column 10** shows the weighted number of students excluded within schools (i.e. the overall number of students in the national defined target population represented by the number of students from the sample excluded within schools). This weighted number is also described and classified by exclusion categories in Table I.A2.4.
- **Column 11** shows the percentage of students excluded within schools. This is equivalent to the weighted number of excluded students (Column 10) divided by the weighted number of excluded and participating students (the sum of Columns 8 and 10), multiplied by 100.
- **Column 12** shows the overall exclusion rate, which represents the weighted percentage of the national desired target population excluded from PISA, either through school-level exclusions or through the exclusion of students within schools. It is equivalent to the school-level exclusion rate (Column 6) plus the product of the within-school exclusion rate and 1 minus the school-level exclusion rate expressed as a decimal (Column 6 divided by 100).<sup>11</sup>
- **Column 13** shows an index of the extent to which the national desired target population was covered by the PISA sample. As mentioned above, 15 countries fell below the coverage of 95%. This is also known as Coverage Index 1.
- Column 14 shows an index of the extent to which 15-year-olds enrolled in school were covered by the PISA sample. The index, also known as Coverage Index 2, measures the overall proportion of the national enrolled population that is covered by the non-excluded portion of the student sample and takes into account both school- and student-level exclusions. Values close to 100 indicate that the PISA sample represents the entire (Grade 7 and higher) education system as defined for PISA 2018. This is calculated in a similar manner to Column 13, but the total enrolled population of 15-year-olds in Grade 7 or above (Column 2) is used as a base instead of the national desired target population (Column 3).
- **Column 15** shows an index of the coverage of the 15-year-old population. The index is the weighted number of participating students (Column 8) divided by the total population of 15-year-old students (Column 1). This is also known as Coverage Index 3.

The high level of coverage contributes to the comparability of the assessment results. For example, even assuming that the excluded students would have systematically scored worse than those who participated and that this relationship is moderately strong, an exclusion rate on the order of 5% would likely lead to an overestimation of national mean scores of less than 5 score points on the PISA scale (where the standard deviation is 100 score points). <sup>12</sup>

#### **DEFINITION OF SCHOOLS**

In some countries, subunits within schools were sampled instead of schools, which may affect the estimate of the between-school variance. In Austria, the Czech Republic, Germany, Hungary, Japan, Romania and Slovenia, schools with more than one programme of study were split into the units delivering these programmes. In the Netherlands, locations were listed as sampling units. In the Flemish Community of Belgium, each campus (or implantation) of a multi-campus school was sampled independently while, in the French Community of Belgium the larger administrative unit of a multi-campus school was sampled as a whole.

In Argentina, Australia, Colombia and Croatia, each campus of a multi-campus school was sampled independently. Schools in the Basque Country of Spain that were divided into sections by language of instruction were split into these linguistic sections for sampling. International schools in Luxembourg were split into two sampling units: one for students who were instructed in a language for which testing material was available, <sup>13</sup> and one for students who were instructed in a language for which no testing material was available (and who were hence excluded).

Some schools in the United Arab Emirates were sampled as a whole unit, while others were split by curriculum and sometimes by gender. Due to reorganisation, some schools in Sweden were split into two parts, each part with its own principal. Some schools in Portugal were organised into clusters where all units in a cluster shared the same teachers and principal; each of these clusters constituted a single sampling unit.

# THE DISTRIBUTION OF PISA STUDENTS ACROSS GRADES

Students assessed in PISA 2018 were enrolled in various grade levels. The percentage of students at each grade level is presented, by country, in Table I.A2.8 and Table I.A2.9, and by gender within each country/economy in Table I.A2.12 and Table I.A2.13.

Table VI.A2.1 [1/4] PISA target populations and samples

•				Populat	ion and sample info	rmation		
		Total population of 15-year-olds	Total enrolled population of 15-year-olds at grade 7 or above	Total in national desired target population	Total school-level exclusions	Total in national desired target population after all school exclusions and before within-school exclusions	School-level exclusion rate (%)	Number of participating students
_		(1)	(2)	(3)	(4)	(5)	(6)	(7)
OECD	Australia	288 195	284 687	284 687	5 610	279 077	1.97	14 273
ō	Austria	84 473	80 108	80 108	603	79 505	0.75	6 802
	Belgium	126 031	122 808	122 808	1 877	120 931	1.53	8 475
	Canada	388 205	400 139	395 448	7 950	387 498	2.01	22 653
	Chile	239 492	215 580	215 470	2 151	213 319	1.00	7 621
	Colombia	856 081	645 339	645 339	950	644 389	0.15	7 522
	Czech Republic	92 013	90 835	90 835	1 510	89 325	1.66	7 019
	Denmark	68 313	67 414	67 414	653	66 761	0.97	7 657
	Estonia	12 257	12 120	12 120	413	11 707	3.41	5 316
	Finland	58 325	57 552	57 552	496	57 056	0.86	5 649
	France	828 196	798 480	798 480	13 732	784 748	1.72	6 308
	Germany	739 792	739 792	739 792	15 448	724 344	2.09	5 451
	Greece	102 868	100 203	100 203	1 266	98 937	1.26	6 403
	Hungary	96 838	91 297	91 297	1 992	89 305	2.18	5 132
	Iceland	4 232	4 177	4 177	35	4 142	0.84	3 294
	Ireland	61 999	61 188	61 188	59	61 129	0.10	5 577
	Israel	136 848	128 419	128 419	10 613	117 806	8.26	6 623
	Italy	616 185	544 279	544 279	748	543 531	0.14	11 785
	Japan	1 186 849	1 159 226	1 159 226	27 743	1 131 483	2.39	6 109
	Korea	517 040	517 040	517 040	2 489	514 551	0.48	6 650
	Latvia	17 977	17 677	17 677	692	16 985	3.92	5 303
	Lithuania	27 075	25 998	25 998	494	25 504	1.90	6 885
	Luxembourg	6 291	5 952	5 952	156	5 796	2.62	5 230
	Mexico	2 231 751	1 697 100	1 697 100	8 013	1 689 087	0.47	7 299
	Netherlands	208 704	204 753	204 753	10 347	194 406	5.05	4 765
	New Zealand	59 700	58 131	58 131	857	57 274	1.47	6 173
	Norway	60 968	60 794	60 794	852	59 942	1.40	5 813
	Poland	354 020	331 850	331 850	6 853	324 997	2.07	5 625
	Portugal	112 977	110 732	110 732	709	110 023	0.64	5 932
	Slovak Republic	51 526	50 100	50 100	587	49 513	1.17	5 965
	Slovenia	17 501	18 236	18 236	337	17 899	1.85	6 401
	Spain	454 168	436 560	436 560	2 368	434 192	0.54	35 943
	Sweden	108 622	107 824	107 824	1 492	106 332	1.38	5 504
	Switzerland	80 590	78 059	78 059	3 227	74 832	4.13	5 822
	Turkey	1 218 693	1 038 993	1 038 993	43 928	995 065	4.23	6 890
	United Kingdom	703 991	697 603	697 603	1 315	64 076	2.01	13 818
	United States	4 133 719	4 058 637	4 058 637	24 757	4 033 880	0.61	4 838

The figure for total national population of 15-year-olds enrolled in Column 2 may occasionally be larger than the total number of 15-year-olds in Column 1, due to differing data sources.

Table VI.A2.1 [2/4] PISA target populations and samples

			Popula	tion and sample info	rmation		
	Total population of 15-year-olds	Total enrolled population of 15-year-olds at grade 7 or above	Total in national desired target population	Total school-level exclusions	Total in national desired target population after all school exclusions and before within-school exclusions	School-level exclusion rate (%)	Number of participating students
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Albania	36 955	30 160	30 160	0	30 160	0.00	6 359
Albania Argentina	702 788	678 151	678 151	5 597	672 554	0.83	11 975
Baku (Azerbaijan)	43 798	22 672	22 672	454	22 218	2.00	6 827
Belarus	89 440	82 580	82 580	1 440	81 140	1.74	5 803
Bosnia and Herzegovina	35 056	32 313	32 313	243	32 070	0.75	6 480
Brazil	3 132 463	2 980 084	2 980 084	74 772	2 905 312	2.51	10 691
Brunei Darussalam	7 081	7 384	7 384	0	7 384	0.00	6 828
B-S-J-Z (China)	1 221 746	1 097 296	1 097 296	33 279	1 064 017	3.03	12 058
Bulgaria	66 499	51 674	51 674	388	51 286	0.75	5 294
Costa Rica	72 444	58 789	58 789	0	58 789	0.00	7 221
Croatia	39 812	30 534	30 534	409	30 125	1.34	6 609
Cyprus	8 285	8 285	8 277	138	8 139	1.67	5 503
Dominican Republic	192 198	148 033	148 033	2 755	145 278	1.86	5 674
Georgia	46 605	41 750	41 750	1 018	40 732	2.44	5 572
Hong Kong (China)	51 935	51 328	51 328	643	50 685	1.25	6 037
Indonesia	4 439 086	3 684 980	3 684 980	3 892	3 681 088	0.11	12 098
Jordan	212 777	132 291	132 291	90	132 201	0.07	8 963
Kazakhstan	230 646	230 018	230 018	9 814	220 204	4.27	19 507
Kosovo	30 494	27 288	27 288	87	27 201	0.32	5 058
Lebanon	61 979	59 687	59 687	1 300	58 387	2.18	5 614
Macao (China)	4 300	3 845	3 845	14	3 831	0.36	3 775
Malaysia	537 800	455 358	455 358	3 503	451 855	0.77	6 111
Malta	4 039	4 056	4 056	37	4 019	0.91	3 363
Moldova	29 716	29 467	29 467	78	29 389	0.26	5 367
Montenegro	7 484	7 432	7 432	40	7 392	0.54	6 666
Morocco	601 250	415 806	415 806	8 292	407 514	1.99	6 814
North Macedonia	18 812	18 812	18 812	298	18 514	1.59	5 569
Panama	72 084	60 057	60 057	585	59 472	0.97	6 270
Peru	580 690	484 352	484 352	10 483	473 869	2.16	6 086
Philippines	2 063 564	1 734 997	1 692 950	42 290	1 650 660	2.50	7 233
Qatar	16 492	16 408	16 408	245	16 163	1.49	13 828
Romania	203 940	171 685	171 685	4 653	167 032	2.71	5 075
Russia	1 343 738	1 339 706	1 339 706	48 114	1 291 592	3.59	7 608
Saudi Arabia	418 788	406 768	375 914	8 940	366 974	2.38	6 136
Serbia	69 972	66 729	66 729	1 175	65 554	1.76	6 609
Singapore	46 229	45 178	45 178	552	44 626	1.22	6 676
Chinese Taipei	246 260	240 241	240 241	1 978	238 263	0.82	7 243
Thailand	795 130	696 833	696 833	10 014	686 819	1.44	8 633
Ukraine	351 424	321 833	320 636	8 352	312 284	2.60	5 998
United Arab Emirates	59 275	59 203	59 178	847	58 331	1.43	19 277
Uruguay	50 965	46 768	46 768	0	46 768	0.00	5 263
Viet Nam	1 332 000	1 251 842	1 251 842	6 169	1 245 673	0.49	5 377

The figure for total national population of 15-year-olds enrolled in Column 2 may occasionally be larger than the total number of 15-year-olds in Column 1, due to differing data sources.

Table VI.A2.1 [3/4] PISA target populations and samples

			Populatio	on and sample inf	formation			Coverage indices	
		Weighted number of participating students	Number of excluded students	Weighted number of excluded students	Within-school exclusion rate (%)	Overall exclusion rate (%)	Coverage Index 1: Coverage of national desired population	Coverage Index 2: Coverage of national enrolled population	Coverage Index 3: Coverage of 15-year-old population
		(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Austra Austri	alia	257 779	716	10 249	3.82	5.72	0.943	0.943	0.894
		75 077	117	1 379	1.80	2.54	0.975	0.975	0.889
Belgiu		118 025	45	494	0.42	1.94	0.981	0.981	0.936
Canad	da	335 197	1 481	17 496	4.96	6.87	0.931	0.920	0.863
Chile		213 832	68	2 029	0.94	1.93	0.981	0.980	0.893
Color		529 976	28	1 812	0.34	0.49	0.995	0.995	0.619
	Republic	87 808	1	11	0.01	1.67	0.983	0.983	0.954
Denm		59 967	444	3 009	4.78	5.70	0.943	0.943	0.878
Estoni		11 414	96	195	1.68	5.03	0.950	0.950	0.931
Finlan	nd	56 172	157	1 491	2.59	3.42	0.966	0.966	0.963
France	e	756 477	56	6 644	0.87	2.58	0.974	0.974	0.913
Germa	any	734 915	42	4 847	0.66	2.73	0.973	0.973	0.993
Greec	e	95 370	52	798	0.83	2.08	0.979	0.979	0.927
Hunga	ary	86 754	75	1 353	1.54	3.68	0.963	0.963	0.896
Icelan	nd	3 875	209	212	5.19	5.99	0.940	0.940	0.916
Irelan	ıd	59 639	257	2 370	3.82	3.91	0.961	0.961	0.962
Israel		110 645	152	2 399	2.12	10.21	0.898	0.898	0.809
Italy		521 223	93	3 219	0.61	0.75	0.992	0.992	0.846
Japan		1 078 921	0	0	0.00	2.39	0.976	0.976	0.909
Korea		455 544	7	378	0.08	0.56	0.994	0.994	0.881
Latvia	1	15 932	23	62	0.38	4.29	0.957	0.957	0.886
Lithua	ania	24 453	95	360	1.45	3.32	0.967	0.967	0.903
Luxen	nbourg	5 478	315	315	5.44	7.92	0.921	0.921	0.871
Mexic	:0	1 480 904	44	11 457	0.77	1.24	0.988	0.988	0.664
Nethe	erlands	190 281	78	2 407	1.25	6.24	0.938	0.938	0.912
New Z	Zealand	53 000	443	3 016	5.38	6.78	0.932	0.932	0.888
Norwa	ay	55 566	452	3 906	6.57	7.88	0.921	0.921	0.911
Polan	d	318 724	116	5 635	1.74	3.77	0.962	0.962	0.900
Portug	gal	98 628	158	1 749	1.74	2.37	0.976	0.976	0.873
Sloval	k Republic	44 418	12	72	0.16	1.33	0.987	0.987	0.862
Slover	nia	17 138	124	298	1.71	3.52	0.965	0.965	0.979
Spain		416 703	747	8 951	2.10	2.63	0.974	0.974	0.918
Swede	en	93 129	681	10 163	9.84	11.09	0.889	0.889	0.857
Switze	erland	71 683	152	1 955	2.66	6.68	0.933	0.933	0.889
Turkey		884 971	95	13 463	1.50	5.66	0.943	0.943	0.726
	d Kingdom	597 240	688	20 562	3.33	5.45	0.945	0.945	0.848
	d States	3 559 045	194	119 057	3.24	3.83	0.962	0.962	0.861

The figure for total national population of 15-year-olds enrolled in Column 2 may occasionally be larger than the total number of 15-year-olds in Column 1, due to differing data sources.

Table VI.A2.1 [4/4] PISA target populations and samples

		Population and sample information Coverage indices						
	Weighted number of participating students	Number of excluded students	Weighted number of excluded students	Within-school exclusion rate (%)	Overall exclusion rate (%)	Coverage Index 1:  Coverage of national desired population	Coverage Index 2:  Coverage of national enrolled population	Coverage Index 3: Coverage of 15-year-old population
	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Albania	27 963	0	0	0.00	0.00	1.000	1.000	0.757
Albania Argentina  Paku (Azerbaijan)	566 486	118	4 083	0.72	1.54	0.985	0.985	0.806
Baku (Azerbaijan)	20 271	0	0	0.00	2.00	0.980	0.980	0.463
Belarus	78 333	31	462	0.59	2.32	0.977	0.977	0.876
Bosnia and Herzegovina	28 843	24	106	0.36	1.11	0.989	0.989	0.823
Brazil	2 036 861	41	8 180	0.40	2.90	0.971	0.971	0.650
Brunei Darussalam	6 899	53	53	0.76	0.76	0.992	0.992	0.974
B-S-J-Z (China)	992 302	34	1 452	0.15	3.17	0.968	0.968	0.812
Bulgaria	47 851	80	685	1.41	2.15	0.978	0.978	0.720
Costa Rica	45 475	39	249	0.54	0.54	0.995	0.995	0.628
Croatia	35 462	135	637	1.76	3.08	0.969	0.969	0.891
Cyprus	7 639	201	351	4.40	5.99	0.940	0.939	0.922
Dominican Republic	140 330	0	0	0.00	1.86	0.981	0.981	0.730
Georgia	38 489	26	180	0.46	2.89	0.971	0.971	0.826
Hong Kong (China)	51 101	0	0	0.00	1.25	0.987	0.987	0.984
Indonesia	3 768 508	0	0	0.00	0.11	0.999	0.999	0.849
		44	550	0.48	0.11	0.999	0.999	0.549
Jordan	114 901							0.540
Kazakhstan	212 229	300	3 624	1.68	5.87	0.941	0.941	
Kosovo	25 739	26	132	0.51	0.83	0.992	0.992	0.844
Lebanon	53 726	1	8	0.02	2.19	0.978	0.978	0.867
Macao (China)	3 799	0	0	0.00	0.36	0.996	0.996	0.883
Malaysia	388 638	37	2 419	0.62	1.38	0.986	0.986	0.723
Malta	3 925	56	56	1.41	2.31	0.977	0.977	0.972
Moldova	28 252	35	207	0.73	0.99	0.990	0.990	0.951
Montenegro	7 087	4	12	0.18	0.71	0.993	0.993	0.947
Morocco	386 408	4	220	0.06	2.05	0.980	0.980	0.643
North Macedonia	17 820	18	85	0.48	2.05	0.979	0.979	0.947
Panama	38 540	24	106	0.27	1.24	0.988	0.988	0.535
Peru	424 586	20	1 360	0.32	2.48	0.975	0.975	0.731
Philippines	1 400 584	10	2 039	0.15	2.64	0.974	0.950	0.679
Qatar	15 228	192	192	1.25	2.72	0.973	0.973	0.923
Romania	148 098	24	930	0.62	3.32	0.967	0.967	0.726
Russia	1 257 388	96	14 905	1.17	4.72	0.953	0.953	0.936
Saudi Arabia	354 013	1	53	0.01	2.39	0.976	0.902	0.845
Serbia	61 895	42	409	0.66	2.41	0.976	0.976	0.885
Singapore	44 058	35	232	0.52	1.74	0.983	0.983	0.953
Chinese Taipei	226 698	38	1 297	0.57	1.39	0.986	0.986	0.921
Thailand	575 713	17	1 002	0.17	1.61	0.984	0.984	0.724
Ukraine	304 855	34	1 704	0.56	3.15	0.969	0.965	0.867
United Arab Emirates	54 403	166	331	0.60	2.03	0.980	0.979	0.918
Uruguay	39 746	25	164	0.41	0.41	0.996	0.996	0.780
Viet Nam	926 260	0	0	0.00	0.49	0.995	0.995	0.695

The figure for total national population of 15-year-olds enrolled in Column 2 may occasionally be larger than the total number of 15-year-olds in Column 1, due to differing data sources

Table VI.A2.2 [1/4] Change in the enrolment of 15-year-olds in grade 7 and above (PISA 2003 through PISA 2018)

		PISA	2018			PISA	2015		PISA 2012			
	Total population of 15-year-olds	Total population of 15-year-olds enrolled in grade 7 or above	Weighted number of participating students	Coverage Index 3: Coverage of the national 15-year-old population	Total population of 15-year-olds	Total population of 15-year-olds enrolled in grade 7 or above	Weighted number of participating students	Coverage Index 3: Coverage of the national 15-year-old population	Total population of 15-year-olds	Total population of 15-year-olds enrolled in grade 7 or above	Weighted number of participating students	Coverage Index 3: Coverage of the national 15-year-old population
Australia	288 195	284 687	257 779	0.89	282 888	282 547	256 329	0.91	291 967	288 159	250 779	0.86
Austria	84 473	80 108	75 077	0.89	88 013	82 683	73 379	0.83	93 537	89 073	82 242	0.88
Belgium	126 031	122 808	118 025	0.94	123 630	121 954	114 902	0.93	123 469	121 493	117 912	0.95
Canada	388 205	400 139	335 197	0.86	396 966	381 660	331 546	0.84	417 873	409 453	348 070	0.83
Chile	239 492	215 580	213 832	0.89	255 440	245 947	203 782	0.80	274 803	252 733	229 199	0.83
Colombia	856 081	645 339	529 976	0.62	760 919	674 079	567 848	0.75	889 729	620 422	560 805	0.63
Czech Republic	92 013	90 835	87 808	0.95	90 391	90 076	84 519	0.94	96 946	93 214	82 101	0.85
Denmark	68 313	67 414	59 967	0.88	68 174	67 466	60 655	0.89	72 310	70 854	65 642	0.91
Estonia	12 257	12 120	11 414	0.93	11 676	11 491	10 834	0.93	12 649	12 438	11 634	0.92
Finland	58 325	57 552	56 172	0.96	58 526	58 955	56 934	0.97	62 523	62 195	60 047	0.96
France	828 196	798 480	756 477	0.91	807 867	778 679	734 944	0.91	792 983	755 447	701 399	0.88
Germany	739 792	739 792	734 915	0.99	774 149	774 149	743 969	0.96	798 136	798 136	756 907	0.95
Greece	102 868	100 203	95 370	0.93	105 530	105 253	96 157	0.91	110 521	105 096	96 640	0.87
Hungary	96 838	91 297	86 754	0.90	94 515	90 065	84 644	0.90	111 761	108 816	91 179	0.82
Iceland	4 232	4 177	3 875	0.92	4 250	4 195	3 966	0.93	4 505	4 491	4 169	0.93
Ireland	61 999	61 188	59 639	0.96	61 234	59 811	59 082	0.96	59 296	57 979	54 010	0.91
Israel	136 848	128 419	110 645	0.81	124 852	118 997	117 031	0.94	118 953	113 278	107 745	0.91
Italy	616 185	544 279	521 223	0.85	616 761	567 268	495 093	0.80	605 490	566 973	521 288	0.86
Japan	1 186 849	1 159 226	1 078 921	0.91	1 201 615	1 175 907	1 138 349	0.95	1 241 786	1 214 756	1 128 179	0.91
Korea	517 040	517 040	455 544	0.88	620 687	619 950	569 106	0.92	687 104	672 101	603 632	0.88
Latvia	17 977	17 677	15 932	0.89	17 255	16 955	15 320	0.89	18 789	18 389	16 054	0.85
Lithuania	27 075	25 998	24 453	0.90	33 163	32 097	29 915	0.90	38 524	35 567	33 042	0.86
Luxembourg	6 291	5 952	5 478	0.87	6 327	6 053	5 540	0.88	6 187	6 082	5 523	0.85
Mexico	2 231 751	1 697 100	1 480 904	0.66	2 257 399	1 401 247	1 392 995	0.62	2 114 745	1 472 875	1 326 025	0.63
Netherlands	208 704	204 753	190 281	0.91	203 234	200 976	191 817	0.94	194 000	193 190	196 262	1.01
New Zealand	59 700	58 131	53 000	0.89	60 162	57 448	54 274	0.90	60 940	59 118	53 414	0.88
Norway	60 968	60 794	55 566	0.91	63 642	63 491	58 083	0.91	64 917	64 777	59 432	0.92
Poland	354 020	331 850	318 724	0.90	380 366	361 600	345 709	0.91	425 597	410 700	379 275	0.89
Portugal	112 977	110 732	98 628	0.87	110 939	101 107	97 214	0.88	108 728	127 537	96 034	0.88
Slovak Republic	51 526	50 100	44 418	0.86	55 674	55 203	49 654	0.89	59 723	59 367	54 486	0.91
Slovenia	17 501	18 236	17 138	0.98	18 078	17 689	16 773	0.93	19 471	18 935	18 303	0.94
Spain	454 168	436 560	416 703	0.92	440 084	414 276	399 935	0.91	423 444	404 374	374 266	0.88
Sweden	108 622	107 824	93 129	0.86	97 749	97 210	91 491	0.94	102 087	102 027	94 988	0.93
Switzerland	80 590	78 059	71 683	0.89	85 495	83 655	82 223	0.96	87 200	85 239	79 679	0.91
Turkey	1 218 693	1 038 993	884 971	0.73	1 324 089	1 100 074	925 366	0.70	1 266 638	965 736	866 681	0.68
United Kingdom	703 991	697 603	597 240	0.73	747 593	746 328	627 703	0.70	738 066	745 581	688 236	0.00
United States	4 133 719			0.86	4 220 325	3 992 053		0.84	3 985 714	4 074 457	3 536 153	0.93

Notes: Costa Rica, Georgia, Malta and Moldova conducted the PISA 2009 assessment in 2010 as part of PISA 2009+.

For Albania, Brazil, Chile, Jordan, the Netherlands, Romania and Uruguay, estimates of the Total population of 15-year-olds across years have been updated to align data sources with those used in 2018. Therefore, the estimates reported in this table do not match those that appear in previous PISA reports.

For Mexico, in 2015, the total population of 15-year-olds enrolled in Grade 7 or above is an estimate of the target population size of the sample frame from which the 15-year-olds students were selected for the PISA test. At the time Mexico provided the information to PISA, the official figure for this population was 1 573 952.

Table VI.A2.2 [2/4] Change in the enrolment of 15-year-olds in grade 7 and above (PISA 2003 through PISA 2018)

			PISA	2018			PISA	2015			PISA 2012				
		Total population of 15-year-olds	Total population of 15-year-olds enrolled in grade 7 or above	Weighted number of participating students	Coverage Index 3: Coverage of the national 15-year-old population	Total population of 15-year-olds	Total population of 15-year-olds enrolled in grade 7 or above	Weighted number of participating students	Coverage Index 3: Coverage of the national 15-year-old population	Total population of 15-year-olds	Total population of 15-year-olds enrolled in grade 7 or above	Weighted number of participating students	Coverage Index 3: Coverage of the national 15-year-old population		
ers	Albania	36 955	30 160	27 963	0.76	45 667	45 163	40 896	0.90	55 099	50 157	42 466	0.77		
	Argentina	702 788	678 151	566 486	0.81	718 635	578 308	394 917	0.55	684 879	637 603	545 942	0.80		
Ра	Baku (Azerbaijan)	43 798	22 672	20 271	0.46	m	m	m	m	m	m	m	m		
	Belarus	89 440	82 580	78 333	0.88	m	m	m	m	m	m	m	m		
	Bosnia and Herzegovina	35 056	32 313	28 843	0.82	m	m	m	m	m	m	m	m		
	Brazil	3 132 463	2 980 084	2 036 861	0.65	3 379 467	2 853 388	2 425 961	0.72	3 520 371	2 786 064	2 470 804	0.70		
	Brunei Darussalam	7 081	7 384	6 899	0.97	m	m	m	m	m	m	m	m		
	B-S-J-Z (China)	1 221 746	1 097 296	992 302	0.81	m	m	m	m	m	m	m	m		
	Bulgaria	66 499	51 674	47 851	0.72	66 601	59 397	53 685	0.81	70 188	59 684	54 255	0.77		
	Costa Rica	72 444	58 789	45 475	0.63	81 773	66 524	51 897	0.63	81 489	64 326	40 384	0.50		
	Croatia	39 812	30 534	35 462	0.89	45 031	35 920	40 899	0.91	48 155	46 550	45 502	0.94		
	Cyprus	8 285	8 285	7 639	0.92	9 255	9 255	8 785	0.95	9 956	9 956	9 650	0.97		
	Dominican Republic	192 198	148 033	140 330	0.73	193 153	139 555	132 300	0.68	m	m	m	m		
	Georgia	46 605	41 750	38 489	0.83	48 695	43 197	38 334	0.79	m	m	m	m		
	Hong Kong (China)	51 935	51 328	51 101	0.98	65 100	61 630	57 662	0.89	84 200	77 864	70 636	0.84		
	Indonesia	4 439 086	3 684 980	3 768 508	0.85	4 534 216	3 182 816	3 092 773	0.68	4 174 217	3 599 844	2 645 155	0.63		
	Jordan	212 777	132 291	114 901	0.54	196 734	121 729	108 669	0.55	153 293	125 333	111 098	0.72		
	Kazakhstan	230 646	230 018	212 229	0.92	211 407	209 555	192 909	0.91	258 716	247 048	208 411	0.81		
	Kosovo	30 494	27 288	25 739	0.84	31 546	28 229	22 333	0.71	m	m	m	m		
	Lebanon	61 979	59 687	53 726	0.87	64 044	62 281	42 331	0.66	m	m	m	m		
	Macao (China)	4 300	3 845	3 799	0.88	5 100	4 417	4 507	0.88	6 600	5 416	5 366	0.81		
	Malaysia	537 800	455 358	388 638	0.72	540 000	448 838	412 524	0.76	544 302	457 999	432 080	0.79		
	Malta	4 039	4 056	3 925	0.97	4 397	4 406	4 296	0.98	m	m	m	m		
	Moldova	29 716	29 467	28 252	0.95	31 576	30 601	29 341	0.93	m	m	m	m		
	Montenegro	7 484	7 432	7 087	0.95	7 524	7 506	6 777	0.90	8 600	8 600	7 714	0.90		
	Morocco	601 250	415 806	386 408	0.64	m	m	m	m	m	m	m	m		
	North Macedonia	18 812	18 812	17 820	0.95	16 719	16 717	15 847	0.95	m	m	m	m		
	Panama	72 084	60 057	38 540	0.53	m	m	m	m	m	m	m	m		
	Peru	580 690	484 352	424 586	0.73	580 371	478 229	431 738	0.74	584 294	508 969	419 945	0.72		
	Philippines	2 063 564	1 734 997	1 400 584	0.68	m	m	m	m	m	m	m	m		
	Qatar	16 492	16 408	15 228	0.92	13 871	13 850	12 951	0.93	11 667	11 532	11 003	0.94		
	Romania	203 940	171 685	148 098	0.73	218 846	176 334	164 216	0.75	212 694	146 243	140 915	0.66		
	Russia	1 343 738	1 339 706	1 257 388	0.94	1 176 473	1 172 943	1 120 932	0.95	1 272 632	1 268 814	1 172 539	0.92		
	Saudi Arabia	418 788	406 768	354 013	0.85	m	m	m	m	m	m	m	m		
	Serbia	69 972	66 729	61 895	0.88	m	m	m	m	85 121	75 870	67 934	0.80		
	Singapore	46 229	45 178	44 058	0.95	48 218	47 050	46 224	0.96	53 637	52 163	51 088	0.95		
	Chinese Taipei	246 260	240 241	226 698	0.92	m	m	m	m	m	m	m	m		
	Thailand	795 130	696 833	575 713	0.72	895 513	756 917	634 795	0.71	982 080	784 897	703 012	0.72		
	Ukraine	351 424	321 833	304 855	0.87	m	m	m	m	m	m	m	m		
	United Arab Emirates	59 275	59 203	54 403	0.92	51 687	51 518	46 950	0.91	48 824	48 446	40 612	0.83		
	Uruguay	50 965	46 768	39 746	0.78	53 533	43 865	38 287	0.72	54 638	46 442	39 771	0.73		
	Viet Nam	1 332 000	1 251 842	926 260	0.70	1 340 000	1 032 599	874 859	0.65	1 393 000	1 091 462	956 517	0.69		

Notes: Costa Rica, Georgia, Malta and Moldova conducted the PISA 2009 assessment in 2010 as part of PISA 2009+.

For Albania, Brazil, Chile, Jordan, the Netherlands, Romania and Uruguay, estimates of the Total population of 15-year-olds across years have been updated to align data sources with those used in 2018. Therefore, the estimates reported in this table do not match those that appear in previous PISA reports.

For Mexico, in 2015, the total population of 15-year-olds enrolled in Grade 7 or above is an estimate of the target population size of the sample frame from which the 15-year-olds students were selected for the PISA test. At the time Mexico provided the information to PISA, the official figure for this population was 1 573 952.

Table VI.A2.2 [3/4] Change in the enrolment of 15-year-olds in grade 7 and above (PISA 2003 through PISA 2018)

		PISA	2009			PISA	2006		PISA 2003			
	Total population of 15-year-olds	Total population of 15-year-olds enrolled in grade 7 or above	Weighted number of participating students	Coverage Index 3: Coverage of the national 15-year-old population	Total population of 15-year-olds	Total population of 15-year-olds enrolled in grade 7 or above	Weighted number of participating students	Coverage Index 3: Coverage of the national 15-year-old population	Total population of 15-year-olds	Total population of 15-year-olds enrolled in grade 7 or above	Weighted number of participating students	Coverage Index 3: Coverage of the national 15-year-old population
Australia	286 334	269 669	240 851	0.84	270 115	256 754	234 940	0.87	268 164	250 635	235 591	0.88
Austria	99 818	94 192	87 326	0.87	97 337	92 149	89 925	0.92	94 515	89 049	85 931	0.91
Belgium	126 377	126 335	119 140	0.94	124 943	124 557	123 161	0.99	120 802	118 185	111 831	0.93
Canada	430 791	426 590	360 286	0.84	426 967	428 876	370 879	0.87	398 865	399 265	330 436	0.83
Chile	290 056	265 542	247 270	0.85	297 085	255 459	233 526	0.79	m	m	m	m
Colombia	893 057	582 640	522 388	0.58	897 477	543 630	537 262	0.60	m	m	m	m
Czech Republic	122 027	116 153	113 951	0.93	127 748	124 764	128 827	1.01	130 679	126 348	121 183	0.93
Denmark	70 522	68 897	60 855	0.86	66 989	65 984	57 013	0.85	59 156	58 188	51 741	0.87
Estonia	14 248	14 106	12 978	0.91	19 871	19 623	18 662	0.94	m	m	m	m
Finland	66 198	66 198	61 463	0.93	66 232	66 232	61 387	0.93	61 107	61 107	57 883	0.95
France	749 808	732 825	677 620	0.90	809 375	809 375	739 428	0.91	809 053	808 276	734 579	0.91
Germany	852 044	852 044	766 993	0.90	951 535	1 062 920	903 512	0.95	951 800	916 869	884 358	0.93
Greece	102 229	105 664	93 088	0.91	107 505	110 663	96 412	0.90	111 286	108 314	105 131	0.94
Hungary	121 155	118 387	105 611	0.87	124 444	120 061	106 010	0.85	129 138	123 762	107 044	0.83
Iceland	4 738	4 738	4 410	0.93	4 820	4 777	4 624	0.96	4 168	4 112	3 928	0.94
Ireland	56 635	55 464	52 794	0.93	58 667	57 648	55 114	0.94	61 535	58 997	54 850	0.89
Israel	122 701	112 254	103 184	0.84	122 626	109 370	93 347	0.76	m	m	m	m
Italy	586 904	573 542	506 733	0.86	578 131	639 971	520 055	0.90	561 304	574 611	481 521	0.86
Japan	1 211 642	1 189 263	1 113 403	0.92	1 246 207	1 222 171	1 113 701	0.89	1 365 471	1 328 498	1 240 054	0.91
Korea	717 164	700 226	630 030	0.88	660 812	627 868	576 669	0.87	606 722	606 370	533 504	0.88
Latvia	28 749	28 149	23 362	0.81	34 277	33 659	29 232	0.85	37 544	37 138	33 643	0.90
Lithuania	51 822	43 967	40 530	0.78	53 931	51 808	50 329	0.93	m	m	m	m
Luxembourg	5 864	5 623	5 124	0.87	4 595	4 595	4 733	1.03	4 204	4 204	4 080	0.97
Mexico	2 151 771	1 425 397	1 305 461	0.61	2 200 916	1 383 364	1 190 420	0.54	2 192 452	1 273 163	1 071 650	0.49
Netherlands	199 000	198 334	183 546	0.92	197 046	193 769	189 576	0.96	194 216	194 216	184 943	0.95
New Zealand	63 460	60 083	55 129	0.87	63 800	59 341	53 398	0.84	55 440	53 293	48 638	0.88
Norway	63 352	62 948	57 367	0.91	61 708	61 449	59 884	0.97	56 060	55 648	52 816	0.94
Poland	482 500	473 700	448 866	0.93	549 000	546 000	515 993	0.94	589 506	569 294	534 900	0.91
Portugal	115 669	107 583	96 820	0.84	115 426	100 816	90 079	0.78	109 149	99 216	96 857	0.89
Slovak Republic	72 826	72 454	69 274	0.95	79 989	78 427	76 201	0.95	84 242	81 945	77 067	0.91
Slovenia	20 314	19 571	18 773	0.92	23 431	23 018	20 595	0.88	m	m	m	m
Spain	433 224	425 336	387 054	0.89	439 415	436 885	381 686	0.87	454 064	418 005	344 372	0.76
Sweden	121 486	121 216	113 054	0.93	129 734	127 036	126 393	0.97	109 482	112 258	107 104	0.98
Switzerland	90 623	89 423	80 839	0.89	87 766	86 108	89 651	1.02	83 247	81 020	86 491	1.04
Turkey	1 336 842	859 172	757 298	0.57	1 423 514	800 968	665 477	0.47	1 351 492	725 030	481 279	0.36
United Kingdom	786 626	786 825	683 380	0.87	779 076	767 248	732 004	0.94	768 180	736 785	698 579	0.91
United States	4 103 738	4 210 475	3 373 264	0.82	4 192 939	4 192 939	3 578 040	0.85	3 979 116	3 979 116	3 147 089	0.79

Notes: Costa Rica, Georgia, Malta and Moldova conducted the PISA 2009 assessment in 2010 as part of PISA 2009+.

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For Mexico, in 2015, the total population of 15-year-olds enrolled in Grade 7 or above is an estimate of the target population size of the sample frame from which the 15-year-olds students were selected for the PISA test. At the time Mexico provided the information to PISA, the official figure for this population was 1 573 952.

Table VI.A2.2 [4/4] Change in the enrolment of 15-year-olds in grade 7 and above (PISA 2003 through PISA 2018)

		PISA	2009			PISA	2006			PISA	2003	
	Total population of 15-year-olds	Total population of 15-year-olds enrolled in grade 7 or above	Weighted number of participating students	Coverage Index 3: Coverage of the national 15-year-old population	Total population of 15-year-olds	Total population of 15-year-olds enrolled in grade 7 or above	Weighted number of participating students	Coverage Index 3: Coverage of the national 15-year-old population	Total population of 15-year-olds	Total population of 15-year-olds enrolled in grade 7 or above	Weighted number of participating students	Coverage Index 3: Coverage of the national 15-year-old population
Albania	55 587	42 767	34 134	0.61	m	m	m	m	m	m	m	m
Albania Argentina Raku (Azorbaijan)	688 434	636 713	472 106	0.69	662 686	579 222	523 048	0.79	m	m	m	m
Baku (Azerbaijan)	m	m	m	m	m	m	m	m	m	m	m	m
Belarus	m	m	m	m	m	m	m	m	m	m	m	m
Bosnia and Herzegovina	m	m	m	m	m	m	m	m	m	m	m	m
Brazil	3 434 101	2 654 489	2 080 159	0.61	3 439 795	2 374 044	1 875 461	0.55	3 560 650	2 359 854	1 952 253	0.55
Brunei Darussalam	m	m	m	m	m	m	m	m	m	m	m	m
B-S-J-Z (China)	m	m	m	m	m	m	m	m	m	m	m	m
Bulgaria	80 226	70 688	57 833	0.72	89 751	88 071	74 326	0.83	m	m	m	m
Costa Rica	80 523	63 603	42 954	0.53	m	m	m	m	m	m	m	m
Croatia	48 491	46 256	43 065	0.89	54 500	51 318	46 523	0.85	m	m	m	m
Cyprus	m	m	m	m	m	m	m	m	m	m	m	m
Dominican Republic	m	m	m	m	m	m	m	m	m	m	m	m
Georgia	56 070	51 351	42 641	0.76	m	m	m	m	m	m	m	m
Hong Kong (China)	85 000	78 224	75 548	0.89	77 398	75 542	75 145	0.97	75 000	72 631	72 484	0.97
Indonesia	4 267 801	3 158 173	2 259 118	0.53	4 238 600	3 119 393	2 248 313	0.53	4 281 895	3 113 548	1 971 476	0.46
Jordan	133 953	107 254	104 056	0.78	122 354	126 708	90 267	0.74	m	m	m	m
Kazakhstan	281 659	263 206	250 657	0.89	m	m	m	m	m	m	m	m
Kosovo	m	m	m	m	m	m	m	m	m	m	m	m
Lebanon	m	m	m	m	m	m	m	m	m	m	m	m
Macao (China)	7 500	5 969	5 978	0.80	m	m	m	m	8 318	6 939	6 546	0.79
Malaysia	539 295	492 758	421 448	0.78	m	m	m	m	m	m	m	m
Malta	5 152	4 930	4 807	0.93	m	m	m	m	m	m	m	m
Moldova	47 873	44 069	43 195	0.90	m	m	m	m	m	m	m	m
Montenegro	8 500	8 493	7 728	0.91	9 190	8 973	7 734	0.84	m	m	m	m
Morocco	m	m	m	m	m	m	m	m	m	m	m	m
North Macedonia	m	m	m	m	m	m	m	m	m	m	m	m
Panama	57 919	43 623	30 510	0.53	m	m	m	m	m	m	m	m
Peru	585 567	491 514	427 607	0.73	m	m	m	m	m	m	m	m
Philippines	m	m	m	m	m	m	m	m	m	m	m	m
Qatar	10 974	10 665	9 806	0.89	8 053	7 865	7 271	0.90	m	m	m	m
Romania	220 264	152 084	151 130	0.69	312 483	241 890	223 887	0.72	m	m	m	m
Russia	1 673 085	1 667 460	1 290 047	0.77	2 243 924	2 077 231	1 810 856	0.81	2 496 216	2 366 285	2 153 373	0.86
Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m
Serbia	85 121	75 128	70 796	0.83	88 584	80 692	73 907	0.83	m	m	m	m
Singapore	54 982	54 212	51 874	0.94	m	m	m	m	m	m	m	m
Chinese Taipei	m	m	m	m	m	m	m	m	m	m	m	m
Thailand	949 891	763 679	691 916	0.73	895 924	727 860	644 125	0.72	927 070	778 267	637 076	0.69
Ukraine	m	m	m	m	m	m	m	m	m	m	m	m
United Arab Emirates	41 564	40 447	38 707	0.93	m	m	m	m	m	m	m	m
Uruguay	53 801	43 281	33 971	0.63	52 119	40 815	36 011	0.69	53 948	40 023	33 775	0.63
Viet Nam	m	m	m	m	m	m	m	m	m	m	m	m

Notes: Costa Rica, Georgia, Malta and Moldova conducted the PISA 2009 assessment in 2010 as part of PISA 2009+.

For Albania, Brazil, Chile, Jordan, the Netherlands, Romania and Uruguay, estimates of the Total population of 15-year-olds across years have been updated to align data sources with those used in 2018. Therefore, the estimates reported in this table do not match those that appear in previous PISA reports.

For Mexico, in 2015, the total population of 15-year-olds enrolled in Grade 7 or above is an estimate of the target population size of the sample frame from which the 15-year-olds students were selected for the PISA test. At the time Mexico provided the information to PISA, the official figure for this population was 1 573 952.

Table VI.A2.4 [1/2] Exclusions

	Stı	ıdent exclu	sions (un <u>w</u>	eighted)			S	tudent excl	usions (wei	ighted)	
Number of excluded students with functional disability	Number of excluded students with intellectual disability	Number of excluded students because of language	Number of excluded students for other reasons	Number of excluded students because of no materials available in the language of instruction	Total number of excluded	Number of excluded students with functional disability	Number of excluded students with intellectual disability	Number of excluded students because of language	Number of excluded students for other reasons	Number of excluded students because of no materials available in the language of instruction	Total number of excluded
(Code 1)	(Code 2)	(Code 3)	(Code 4)	(Code 5)	students	(Code 1)	(Code 2)	(Code 3)	(Code 4)	(Code 5)	students
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Australia 69 Austria 7	555	92	0	0	716	1 054	7 895	1 300	0	0	10 249
	49	61	0	0	117	77	531	771	0	0	1 379
Belgium 8	19	18	0	0	45	87	211	196	0	0	494
Canada 125	1 040	316	0	0	1 481	1 611	11 744	4 141	0	0	17 496
Chile 6	58	4	0	0	68	173	1 727	129	0	0	2 029
Colombia 4	24	0	0	0	28	346	1 466	0	0	0	1 812
Czech Republic 1	0	0	0	0	1	11	0	0	0	0	11
Denmark 15	179	88	162	0	444	98	1 453	427	1 032	0	3 009
Estonia 3	85	8	0	0	96	8	174	13	0	0	195
Finland 6	100	22	17	12	157	55	966	204	155	111	1 491
France 8	28	20	0	0	56	776	3 397	2 471	0	0	6 644
Germany 2	18	22	0	0	42	199	1 859	2 789	0	0	4 847
Greece 2	39	11	0	0	52	29	590	179	0	0	798
Hungary 5	20	4	46	0	75	77	432	67	777	0	1 353
Iceland 5	133	61	10	0	209	5	135	62	10	0	212
Ireland 39	90	45	83	0	257	367	831	420	752	0	2 370
Israel 25	87	40	0	0	152	406	1 382	611	0	0	2 399
Italy 0	0	0	93	0	93	0	0	0	3 219	0	3 219
Japan 0	0	0	0	0	0	0	0	0	0	0	0
Korea 5	1	1	0	0	7	302	74	2	0	0	378
Latvia 2	20	1	0	0	23	5	54	2	0	0	62
Lithuania 4	91	0	0	0	95	16	344	0	0	0	360
Luxembourg 5	233	77	0	0	315	5	233	77	0	0	315
Mexico 13	28	3	0	0	44	2 609	7 301	1 547	0	0	11 457
Netherlands 7	58	9	4	0	78	236	1 813	224	134	0	2 407
New Zealand 42	279	119	0	3	443	278	1 905	812	0	21	3 016
Norway 17	327	108	0	0	452	147	2 814	944	0	0	3 906
Poland 21	87	8	0	0	116	964	4 190	481	0	0	5 635
Portugal 10	139	9	0	0	158	126	1 551	73	0	0	1 749
Slovak Republic 1	8	0	3	0	12	5	50	0	18	0	72
Slovenia 13	36	75	0	0	124	20	85	193	0	0	298
Spain 39	481	227	0	0	747	423	5 400	3 128	0	0	8 951
Sweden 0	0	0	681	0	681	0	0	0	10 163	0	10 163
Switzerland 8	71	73	0	0	152	86	813	1 056	0	0	1 955
Turkey 10	46	39	0	0	95	1 248	6 389	5 825	0	0	13 463
United Kingdom 75	573	40	0	0	688	2 448	16 592	1 522	0	0	20 562
United States 38	106	39	11	0	194	25 164	62 555	24 972	6 367	0	119 057

Note: For a full explanation of other details in this table please refer to the PISA 2018 Technical Report (OECD, forthcoming).

### Exclusion codes:

**Code 1:** Functional disability – student has a moderate to severe permanent physical disability.

Code 2: Intellectual disability – student has a mental or emotional disability and has either been tested as cognitively delayed or is considered in the professional opinion of qualified staff to be cognitively delayed.

**Code 3:** Limited assessment language proficiency – student is not a native speaker of any of the languages of the assessment in the country; he/she has limited proficiency in the assessment language, and he/she has received less than one year of instruction in the assessment language.

**Code 4:** Other reasons defined by the national centres and approved by the international centre.

**Code 5:** No materials available in the language of instruction.

Table VI.A2.4 [2/2] Exclusions

		Stı	ıdent exclu	sions (unwe	eighted)			Si	tudent excl	usions (wei	ghted)	
	Number of excluded students with functional disability	Number of excluded students with intellectual disability	Number of excluded students because of language	Number of excluded students for other reasons	Number of excluded students because of no materials available in the language of instruction	Total number of excluded	Number of excluded students with functional disability	Number of excluded students with intellectual disability	Number of excluded students because of language	Number of excluded students for other reasons	Number of excluded students because of no materials available in the language of instruction	Total number of excluded
	(Code 1)	(Code 2)	(Code 3)	(Code 4)	(Code 5)	students	(Code 1)	(Code 2)	(Code 3)	(Code 4)	(Code 5)	students
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
은 Albania	0	0	0	0	0	0	0	0	0	0	0	0
문 Argentina 또 Baku (Azerbaijan)	21	96	1	0	0	118	871	3 199	13	0	0	4 083
	0	0	0	0	0	0	0	0	0	0	0	0
Belarus	30	1	0	0	0	31	449	13	0	0	0	462
Bosnia and Herzegovina	8	16	0	0	0	24	29	77	0	0	0	106
Brazil	4	36	1	0	0	41	693	7 100	386	0	0	8 180
Brunei Darussalam	9	44	0	0	0	53	9	44	0	0	0	53
B-S-J-Z (China)	2	24	8	0	0	34	49	1 194	209	0	0	1 452
Bulgaria	4	76	0	0	0	80	31	653	0	0	0	685
Costa Rica	22	12	5	0	0	39	139	78	31	0	0	249
Croatia	7	84	4	0	40	135	33	397	24	0	182	637
Cyprus  Dominisan Banublis	17 0	143	41	0	0	201	25	250	77	0	0	351
Dominican Republic				0	0	0	0	0	0	0	0	0
Georgia	6	20	0	0	0	26 0	46	134	0	0	0	180
Hong Kong (China)	0	0	0	0	0		0	0	0	0	0	0
Indonesia Jordan	25	17	2	0	0	0 44	322	204	23	0	0	550
Kazakhstan	132	157	11	0	0	300	1 673	1 617	334	0	0	3 624
Kosovo	0	14	0	0	12	26	0	53	0	0	79	132
Lebanon	0	1	0	0	0	1	0	8	0	0	0	8
Macao (China)	0	0	0	0	0	0	0	0	0	0	0	0
Malaysia	15	22	0	0	0	37	968	1 451	0	0	0	2 419
Malta	6	48	2	0	0	56	6	48	2	0	0	56
Moldova	4	29	2	0	0	35	25	164	18	0	0	207
Montenegro	0	4	0	0	0	4	0	12	0	0	0	12
Morocco	4	0	0	0	0	4	220	0	0	0	0	220
North Macedonia	2	3	0	0	13	18	4	8	0	0	73	85
Panama	5	18	1	0	0	24	12	91	3	0	0	106
Peru	11	9	0	0	0	20	756	603	0	0	0	1 360
Philippines	2	8	0	0	0	10	376	1 663	0	0	0	2 039
Qatar	30	150	12	0	0	192	30	150	12	0	0	192
Romania	2	19	3	0	0	24	58	700	172	0	0	930
Russia	14	81	1	0	0	96	2 126	12 620	159	0	0	14 905
Saudi Arabia	0	1	0	0	0	1	0	53	0	0	0	53
Serbia	8	11	2	0	21	42	71	148	16	0	174	409
Singapore	4	22	9	0	0	35	25	145	62	0	0	232
Chinese Taipei	9	28	1	0	0	38	320	957	20	0	0	1 297
Thailand	1	16	0	0	0	17	75	927	0	0	0	1 002
Ukraine	28	6	0	0	0	34	1 389	315	0	0	0	1 704
United Arab Emirates	16	124	26	0	0	166	26	256	49	0	0	331
Uruguay	4	20	1	0	0	25	29	131	5	0	0	164
Viet Nam	0	0	0	0	0	0	0	0	0	0	0	0

Note: For a full explanation of other details in this table please refer to the PISA 2018 Technical Report (OECD, forthcoming).

# Exclusion codes:

Code 1: Functional disability – student has a moderate to severe permanent physical disability.

Code 2: Intellectual disability – student has a mental or emotional disability and has either been tested as cognitively delayed or is considered in the professional opinion of qualified staff to be cognitively delayed.

**Code 3:** Limited assessment language proficiency – student is not a native speaker of any of the languages of the assessment in the country; he/she has limited proficiency in the assessment language, and he/she has received less than one year of instruction in the assessment language.

**Code 4:** Other reasons defined by the national centres and approved by the international centre.

**Code 5:** No materials available in the language of instruction.

Table VI.A2.6 [1/2] **Response rates** 

	rable VI.AZ.01721 Resp			oefore schoo	ol replace	ement	Fin	al sample – a	after school	replacer	nent	Fi	inal sample - after so	- students w chool replac		ools
		Weighted school participation rate before replacement (%)	Weighted number of responding schools (weighted also by enrolment)	Weighted number of schools sampled (responding and non-responding) (weighted also by enrolment)	Number of responding schools (unweighted)	Number of responding and non-responding schools (unweighted)	Weighted school participation rate before replacement (%)	Weighted number of responding schools (weighted also by enrolment)	Weighted number of schools sampled (responding and non-responding) (weighted also by enrolment)	Number of responding schools (unweighted)	Number of responding and non-responding schools (unweighted)	Weighted student participation rate before replacement (%)	Number of students assessed (weighted)	Number of students sampled (assessed and absent) (weighted)	Number of students assessed (unweighted)	Number of students sampled (assessed and absent) (unweighted)
_		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
$\mathbf{m}$	Australia	95	264 304	278 765	734	779	96	267 078	278 765	740	779	85	210 665	247 433	14 081	16 756
	Austria	100	78 872	78 946	291	293	100	78 872	78 946	291	293	93	69 426	75 019	6 802	7 555
	Belgium	87	103 631	119 744	256	308	95	113 259	119 719	285	308	91	101 504	111 421	8 431	9 271
	Canada	86	328 935	383 699	782	914	89	339 896	383 738	804	914	84	251 025	298 737	22 440	26 252
	Chile	90	190 060 596 406	210 669 629 729	224 238	258	100	209 953	210 666	255 244	258 250	93	197 940 475 820	212 625	7 601	8 156 8 036
	Colombia					250	97	610 211	629 088			93		512 614	7 480	
	Czech Republic	99	86 650	87 689	330	334	99	86 650	87 689	330	334	92	79 903	86 943	6 996	7 628
	Denmark	88	52 392	59 459	328	371	93	55 170	59 109	344	371	86	48 473	56 078	7 607	8 891
	Estonia	100	11 684	11 684	231	231	100	11 684	11 684	231	231	92	10 532	11 436	5 3 1 6	5 786
	Finland	99	57 420 769 117	57 710 784 728	213	214	100	57 710 783 049	57 710	214 250	214 252	93	52 102 698 721	56 124	5 649	6 084 6 817
	France	96	739 666		215	232	98	759 094	784 728 773 040	221	232	90		754 842	6 295 5 431	6 036
	Germany Greece	85	83 158	773 082 97 793	213	256	96	94 540	98 005	240	256	96	652 025 88 019	721 258 91 991	6 371	6 664
		98	89 754	91 208	235	245	99	90 303	91 208	236	245	94	80 693	85 878	5 129	5 458
	Hungary Iceland	98	4 178	4 282	140	160	98	4 178	4 282	140	160	87	3 285	3 791	3 285	3 791
	Ireland	100	63 179	63 179	157	157	100	63 179	63 179	157	157	86	51 575	59 639	5 577	6 445
	Israel	95	109 810	115 015	164	174	100	114 896	115 108	173	174	91	99 978	110 459	6 614	7 306
	Italy	93	505 813	541 477	510	550	98	529 552	541 672	531	550	86	437 219	506 762	11 679	13 540
	Japan	89	995 577	1 114 316	175	196	93	1 041 540	1 114 316	183	196	96	971 454	1 008 286	6 109	6 338
	Korea	100	514 768	514 768	188	188	100	514 768	514 768	188	188	97	443 719	455 544	6 650	6 810
	Latvia	82	14 020	17 049	274	349	89	15 219	17 021	308	349	89	12 752	14 282	5 303	5 923
	Lithuania	100	25 370	25 467	363	364	100	25 370	25 467	363	364	93	22 614	24 405	6 885	7 421
	Luxembourg	100	5 796	5 796	44	44	100	5 796	5 796	44	44	95	5 230	5 478	5 230	5 478
	Mexico	89	1 494 409	1 670 484	268	302	96	1 599 670	1 670 484	286	302	96	1 357 446	1 412 604	7 299	7 612
	Netherlands	61	118 705	194 486	106	175	87	169 033	194 397	150	175	83	138 134	165 739	4 668	5 617
	New Zealand	83	47 335	57 316	170	208	91	52 085	57 292	189	208	83	39 801	48 214	6 128	7 450
	Norway	98	58 521	59 889	247	254	99	59 128	59 889	250	254	91	50 009	54 862	5 802	6 368
	Poland	92	302 200	329 827	222	253	99	325 266	329 756	239	253	86	267 756	311 300	5 603	6 540
	Portugal	85	92 797	108 948	233	280	91	99 760	109 168	255	280	76	68 659	90 208	5 690	7 431
	Slovak Republic	92	45 799	49 713	348	388	96	48 391	50 361	373	388	93	39 730	42 628	5 947	6 406
	Slovenia	99	17 702	17 900	337	350	99	17 744	17 900	340	350	91	15 409	16 994	6 374	7 021
	Spain	99	427 230	432 969	1 079	1 102	99	427 899	432 969	1 082	1 102	90	368 767	410 820	35 849	39 772
	Sweden	99	101 591	102 873	218	227	99	102 075	102 873	219	227	86	79 604	92 069	5 487	6 356
	Switzerland	86	68 579	79 671	201	231	99	78 808	79 213	228	231	94	67 261	71 290	5 822	6 157
	Turkey	97	947 428	975 317	181	186	100	975 317	975 317	186	186	99	873 992	884 971	6 890	6 980
	United Kingdom	73	496 742	681 510	399	538	87	590 558	682 212	461	538	83	427 944	514 975	13 668	16 443
	United States	65	2 516 631	3 874 298	136	215	76			162	215	85		2 713 513	4811	5 686

Table VI.A2.6 [2/2] **Response rates** 

Weighted number of schools sampled (responding and non-responding) (weighted also by enrolment)	Number of responding schools (unweighted)	Number of responding and non-responding schools (unweighted)	Weighted school participation rate before replacement (%)	Weighted number of responding schools (weighted also by enrolment)	of schools sampled n-responding) nrolment)	chools	d unweighted)	tion rate	_	(pa:		(pa
34 30 163 40 658 143	Z 3	Numb non-re	Weighted : before rep	Weighted num schools (weigh	Weighted number of schools sampled (responding and non-responding) (weighted also by enrolment)	Number of responding schools (unweighted)	Number of responding and non-responding schools (unweighted)	Weighted student participation rate before replacement (%)	Number of students assessed (weighted)	Number of students sampled (assessed and absent) (weighted)	Number of students assessed (unweighted)	Number of students sampled (assessed and absent) (unweighted)
40 658 143	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
		336	97	29 260	30 163	323	336	98	26 611	27 081	6 333	6 438
20 20 20		458	96	629 651	658 143	445	458	86	467 613	541 981	11 836	13 532
30 20 040		197	100	20 249	20 249	197	197	89	18 049	20 312	6 827	7 607
23 79 623		234	100	79 623	79 623	234	234	97	76 321	78 333	5 803	5 963
25 31 058		213	100	31 051	31 051	213	213	96	27 562	28 843	6 480	6 781
66 2 862 749		638	93	2 649 165	2 858 009	586	638	89	1 683 080	1 894 398	10 606	11 956
81 6 68		55	100	6 681	6 681	55	55	99	6 828	6 899	6 828	6 899
27   1 068 463		362	99	1 062 001	1 068 486	361	362	99	978 803	986 556	12 058	12 156
95 50 164		199	99	49 568	50 145	197	199	93	44 003	47 275	5 294	5 673
43 58 843		205	100	58 843	58 843	205	205	97	44 179	45 522	7 221	7 433
82 29 188		183	100	29 177	29 177	183	183	92	32 632	35 462	6 609	7 190
46 8 122		99	98	7 946	8 122	90	99	93	6 975	7 472	5 503	5 890
00 143 842		235	100	143 816	143 816	235	235	90	126 090	140 330	5 674	6 328
50 40 814		326	99	40 542	40 810	322	326	95	36 366	38 226	5 572	5 874
76 50 37		174	79	39 765	50 608	136	174	85	34 219	40 108	5 706	6 692
73   3 647 226		399	99	3 623 573	3 647 226	398	399	96	3 570 441	3 733 024	12 098	12 570
56 123 056		313	100	123 056	123 056	313	313	98	112 213	114 901	8 963	9 172
44 220 34		616	100	220 344	220 344	616	616	99	210 226	212 229	19 507	19 721
68 27 304		224	97	26 324	27 269	211	224	96	23 902	24 845	5 058	5 259
92 58 119		320	98	56 652	58 093	313	320	91	47 855	52 453	5 614	6 154
30 3 830		45	100	3 830	3 830	45	45	99	3 775	3 799	3 775	3 799
67 450 37		191	100	450 371	450 371	191	191	97	378 791	388 638	6 111	6 264
97 3 999		51	100	3 997	3 999	50	51	86	3 363	3 923	3 363	3 923
54 29 054		236	100	29 054	29 054	236	236	98	27 700	28 252	5 367	5 474
42 7 299		61	100	7 280	7 280	61	61	96	6 822	7 087	6 666	6 912
38 406 348		179	100	406 348	406 348	179	179	97	375 677	386 408	6 814	7 011
89 18 502			100	18 489	18 502	117	120	92	16 467	17 808	5 569	5 999
75 57 873		260	97	56 455	58 002	251	260	90	34 060	37 944	6 256	7 058
64 460 270		342	100	460 276	460 276	342	342	99	419 329	425 036	6 086	6 170
77   1 560 748		187	100	1 560 748	1 560 748	187	187	97	1 359 350	1 400 584	7 233	7 457
63 16 163		188	100	16 163	16 163	188	188	91	13 828	15 228	13 828	15 228
47 160 60		170	100	160 607	160 607	170	170	98	144 688	148 098	5 075	5 184
43   1 355 318		265	100	1 354 843	1 355 318	264	265	96	1 209 339	1 257 352	7 608	7 911
26 364 675		235	100	364 291	364 620	234	235	97	343 747	353 702	6 136	6 320
37 63 87		190	99	63 448 43 738	63 877	187 164	190 167	94 95	57 342	61 233	6 609 6 646	7 062 7 019
38 44 69					44 569				40 960	43 290		7 584
00   09   460												8 739 6 263
E2 200 24												
												20 191
91 58 234												5 445
5	563 238 821 460 691 460 552 308 245 891 58 234 528 46 032	563     238 821     186       460     691 460     290       552     308 245     244       891     58 234     754	563     238 821     186     193       460     691 460     290     290       552     308 245     244     250       891     58 234     754     760       528     46 032     183     189	563     238 821     186     193     99       460     691 460     290     290     100       552     308 245     244     250     100       891     58 234     754     760     99       528     46 032     183     189     99	563     238 821     186     193     99     236 227       460     691 460     290     290     100     691 460       552     308 245     244     250     100     308 163       891     58 234     754     760     99     57 891       528     46 032     183     189     99     45 745	563     238 821     186     193     99     236 227     239 027       460     691 460     290     290     100     691 460     691 460       552     308 245     244     250     100     308 163     308 163       891     58 234     754     760     99     57 891     58 234       528     46 032     183     189     99     45 745     46 018	563     238 821     186     193     99     236 227     239 027     189       460     691 460     290     290     100     691 460     691 460     290       552     308 245     244     250     100     308 163     308 163     250       891     58 234     754     760     99     57 891     58 234     754       528     46 032     183     189     99     45 745     46 018     188	563     238 821     186     193     99     236 227     239 027     189     193       460     691 460     290     290     100     691 460     691 460     290     290       552     308 245     244     250     100     308 163     308 163     250     250       891     58 234     754     760     99     57 891     58 234     754     760       528     46 032     183     189     99     45 745     46 018     188     189	563     238 821     186     193     99     236 227     239 027     189     193     95       460     691 460     290     290     100     691 460     691 460     290     290     99       552     308 245     244     250     100     308 163     308 163     250     250     96       891     58 234     754     760     99     57 891     58 234     754     760     96       528     46 032     183     189     99     45 745     46 018     188     189     87	563     238 821     186     193     99     236 227     239 027     189     193     95     211 796       460     691 460     290     290     100     691 460     691 460     290     290     99     568 456       552     308 245     244     250     100     308 163     308 163     250     250     96     291 850       891     58 234     754     760     99     57 891     58 234     754     760     96     51 517       528     46 032     183     189     99     45 745     46 018     188     189     87     34 333	563     238 821     186     193     99     236 227     239 027     189     193     95     211 796     223 812       460     691 460     290     290     100     691 460     691 460     290     290     99     568 456     575 713       552     308 245     244     250     100     308 163     308 163     250     250     96     291 850     304 855       891     58 234     754     760     99     57 891     58 234     754     760     96     51 517     53 904       528     46 032     183     189     99     45 745     46 018     188     189     87     34 333     39 459	563     238 821     186     193     99     236 227     239 027     189     193     95     211 796     223 812     7 196       460     691 460     290     290     100     691 460     691 460     290     290     99     568 456     575 713     8 633       552     308 245     244     250     100     308 163     308 163     250     250     96     291 850     304 855     5 998       891     58 234     754     760     99     57 891     58 234     754     760     96     51 517     53 904     19 265       528     46 032     183     189     99     45 745     46 018     188     189     87     34 333     39 459     5 247

Table VI.A2.8 [1/2] Percentage of students at each grade level

							All st	udents						
	7th	grade	8th	grade	9th	grade	10th	grade	11th	grade		grade above		nation ailable
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia O Austria	0.0	C	0.1	(0.0)	11.5	(0.4)	81.0	(0.5)	7.4	(0.4)	0.0	(0.0)	0.0	C
O Austria	0.4	(0.1)	6.8	(0.4)	44.5	(0.7)	48.1	(8.0)	0.2	(0.1)	0.0	С	0.0	C
Belgium	0.3	(0.1)	6.1	(0.4)	26.7	(0.7)	63.3	(8.0)	1.3	(0.1)	0.0	С	2.3	(0.3)
Canada	0.3	(0.1)	1.0	(0.2)	9.7	(0.3)	87.7	(0.3)	1.1	(0.1)	0.1	(0.0)	0.0	C
Chile	1.0	(0.2)	4.4	(0.5)	20.6	(0.7)	68.5	(0.9)	5.6	(0.3)	0.0	C	0.0	С
Colombia	4.4	(0.4)	11.3	(0.5)	22.8	(0.6)	43.0	(8.0)	18.5	(0.7)	0.0	C	0.0	C
Czech Republic	0.6	(0.2)	3.3	(0.4)	48.5	(1.2)	47.5	(1.3)	0.0	С	0.0	С	0.0	С
Denmark	0.1	(0.0)	16.3	(0.5)	81.7	(0.5)	1.7	(0.3)	0.0	C	0.1	(0.1)	0.0	C
Estonia	0.4	(0.1)	21.8	(0.6)	76.4	(0.6)	1.3	(0.2)	0.0	(0.0)	0.0	С	0.0	C
Finland	0.3	(0.1)	13.9	(0.4)	85.6	(0.5)	0.2	(0.1)	0.0	C	0.0	С	0.0	C
France	0.0	(0.0)	0.5	(0.1)	16.9	(0.6)	79.2	(0.6)	3.2	(0.2)	0.1	(0.0)	0.0	C
Germany	0.4	(0.1)	8.1	(0.4)	46.4	(1.0)	44.0	(1.1)	1.1	(0.3)	0.0	(0.0)	0.0	С
Greece	0.1	(0.0)	0.7	(0.2)	3.7	(0.5)	95.5	(0.6)	0.0	С	0.0	С	0.0	С
Hungary	1.7	(0.3)	8.3	(0.5)	71.1	(0.7)	18.9	(0.6)	0.0	(0.0)	0.0	С	0.0	С
Iceland	0.0	С	0.0	С	0.0	С	99.2	(0.1)	0.8	(0.1)	0.0	С	0.0	С
Ireland	0.0	(0.0)	2.0	(0.2)	61.6	(0.7)	27.9	(0.9)	8.5	(0.7)	0.0	С	0.0	С
Israel	0.0	(0.0)	0.1	(0.1)	16.7	(0.9)	82.4	(0.9)	0.7	(0.2)	0.0	(0.0)	0.0	С
Italy	0.0	С	1.0	(0.2)	13.5	(0.5)	77.8	(0.5)	7.7	(0.3)	0.0	С	0.0	С
Japan	0.0	С	0.0	С	0.0	С	100.0	С	0.0	С	0.0	С	0.0	С
Korea	0.0	С	0.0	С	16.1	(0.7)	83.8	(0.7)	0.1	(0.0)	0.0	С	0.0	С
Latvia	0.7	(0.1)	9.8	(0.5)	86.0	(0.5)	2.5	(0.2)	0.0	(0.0)	0.0	С	1.1	(0.2)
Lithuania	0.1	(0.1)	2.4	(0.2)	90.2	(0.5)	7.3	(0.4)	0.0	С	0.0	С	0.0	С
Luxembourg	0.3	(0.1)	10.0	(0.1)	48.3	(0.1)	40.3	(0.1)	1.1	(0.1)	0.0	С	0.0	С
Mexico	0.9	(0.2)	2.9	(0.4)	17.6	(1.1)	77.8	(1.0)	0.6	(0.1)	0.1	(0.1)	0.0	С
Netherlands	0.1	(0.0)	2.6	(0.3)	36.8	(0.8)	59.3	(0.8)	1.2	(0.2)	0.0	(0.0)	0.0	С
New Zealand	0.0	C	0.0	C	0.1	(0.0)	6.6	(0.5)	89.0	(0.4)	4.2	(0.2)	0.0	С
Norway	0.0	С	0.0	С	0.3	(0.1)	99.3	(0.3)	0.4	(0.2)	0.0	C	0.0	С
Poland	0.3	(0.1)	3.1	(0.3)	95.1	(0.5)	1.4	(0.4)	0.0	c	0.0	С	0.0	С
Portugal	2.4	(0.2)	7.2	(0.4)	17.2	(0.9)	57.4	(1.3)	0.2	(0.1)	0.0	С	15.7	(1.5)
Slovak Republic	1.9	(0.2)	4.3	(0.4)	40.8	(1.1)	51.3	(1.0)	1.7	(0.5)	0.0	С	0.0	С
Slovenia	0.3	(0.0)	0.7	(0.2)	6.2	(0.4)	92.4	(0.4)	0.4	(0.1)	0.0	С	0.0	С
Spain	0.0	(0.0)	5.9	(0.2)	24.1	(0.4)	69.9	(0.5)	0.1	(0.0)	0.0	С	0.0	С
Sweden	0.0	С	2.1	(0.3)	96.3	(0.6)	1.6	(0.5)	0.0	С	0.0	С	0.0	С
Switzerland	0.5	(0.1)	10.2	(0.6)	60.8	(1.4)	27.8	(1.4)	0.7	(0.3)	0.0	(0.0)	0.0	С
Turkey	0.1	(0.1)	0.4	(0.2)	17.7	(1.1)	78.8	(1.1)	2.9	(0.3)	0.1	(0.0)	0.0	С
United Kingdom	0.0	(0.1) C	0.0	(0.2) C	0.0	(0.0)	1.0	(0.6)	93.4	(0.6)	5.6	(0.2)	0.0	С
United States	0.0	С	0.0	(0.1)	7.5	(0.5)	73.6	(0.0)	18.7	(0.7)	0.1	(0.2)	0.0	С

**Note**: The large number of students with missing grade-level information in Ukraine can be attributed to missing data from students in the first and second year of vocational colleges. Most of these 15-year-old students would have been in the first year of vocational college, which is equivalent to grade 10.

Table VI.A2.8 [2/2] Percentage of students at each grade level

		Studen					All st	udents						
		grade		grade		grade		grade		grade	and	grade above	unav	mation ailable
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Argentina  Raku (Azerbaijan)	0.2	(0.1)	1.2	(0.3)	36.6	(1.4)	61.5	(1.4)	0.5	(0.1)	0.0	(0.0)	0.0	C
Argentina	2.1	(0.5)	9.8	(0.7)	22.1	(0.8)	63.8	(1.4)	1.8	(1.0)	0.0	(0.0)	0.4	(0.4)
Daku (Azerbaijaii)	0.2	(0.1)	2.8	(0.9)	34.7	(0.7)	61.5	(1.2)	0.7	(0.1)	0.0	С	0.0	С
Belarus	0.1	(0.0)	0.9	(0.2)	42.8	(0.9)	56.2	(0.9)	0.0	С	0.0	С	0.0	С
Bosnia and Herzegovina	0.0	(0.0)	0.2	(0.1)	16.2	(1.1)	83.4	(1.1)	0.1	(0.1)	0.0	С	0.0	C
Brazil	4.1	(0.2)	8.1	(0.5)	13.5	(0.6)	33.5	(0.8)	39.3	(0.8)	1.5	(0.1)	0.0	C
Brunei Darussalam	0.0	(0.0)	0.5	(0.1)	6.5	(0.1)	59.7	(0.1)	29.2	(0.1)	4.1	(0.0)	0.0	С
B-S-J-Z (China)	0.3	(0.1)	1.5	(0.2)	38.7	(1.7)	58.2	(1.6)	1.3	(0.2)	0.0	(0.0)	0.0	C
Bulgaria	0.2	(0.1)	2.7	(0.4)	92.8	(0.5)	4.2	(0.3)	0.0	(0.0)	0.0	C	0.0	C
Costa Rica	4.8	(0.5)	13.8	(0.7)	36.5	(1.1)	44.7	(1.5)	0.2	(0.1)	0.0	C	0.0	C
Croatia	0.0	(0.0)	0.3	(0.2)	78.9	(0.4)	20.8	(0.4)	0.0	С	0.0	С	0.0	С
Cyprus	0.0	C	0.1	(0.1)	4.4	(0.4)	94.4	(0.4)	1.1	(0.1)	0.0	C	0.0	C
Dominican Republic	6.4	(0.6)	12.5	(0.8)	23.6	(0.8)	43.8	(1.2)	12.6	(0.7)	1.2	(0.1)	0.0	C
Georgia	0.1	(0.0)	0.5	(0.1)	14.3	(0.6)	84.2	(0.6)	1.0	(0.2)	0.0	C	0.0	C
Hong Kong (China)	1.2	(0.2)	5.9	(0.5)	26.1	(0.9)	66.0	(1.1)	0.8	(0.5)	0.0	С	0.0	С
Indonesia	3.4	(1.1)	8.1	(1.0)	33.7	(2.0)	49.2	(2.2)	4.2	(0.7)	1.4	(0.9)	0.0	С
Jordan	0.2	(0.1)	1.6	(0.2)	11.2	(0.6)	87.0	(0.7)	0.0	С	0.0	С	0.0	С
Kazakhstan	0.1	(0.0)	1.7	(0.1)	44.0	(0.7)	53.4	(0.7)	0.8	(0.1)	0.0	(0.0)	0.0	С
Kosovo	0.0	С	0.4	(0.1)	23.2	(0.9)	74.6	(0.9)	1.7	(0.2)	0.0	(0.0)	0.0	С
Lebanon	5.3	(0.5)	8.5	(0.5)	16.3	(0.9)	58.2	(1.0)	11.7	(0.5)	0.1	(0.1)	0.0	С
Macao (China)	1.9	(0.1)	9.4	(0.2)	29.7	(0.2)	57.9	(0.2)	1.0	(0.1)	0.0	(0.0)	0.0	С
Malaysia	0.0	С	0.0	С	5.5	(0.6)	94.2	(0.6)	0.3	(0.1)	0.0	С	0.0	С
Malta	0.0	С	0.0	С	0.1	(0.0)	5.4	(0.2)	94.4	(0.1)	0.1	(0.0)	0.0	С
Moldova	0.2	(0.1)	6.2	(0.5)	83.2	(0.8)	10.4	(0.8)	0.0	(0.0)	0.0	C	0.0	С
Montenegro	0.0	C	0.0	C	3.3	(0.3)	93.8	(0.3)	2.9	(0.1)	0.0	С	0.0	С
Morocco	8.0	(0.7)	13.9	(1.1)	32.1	(1.9)	38.4	(2.7)	7.7	(0.8)	0.0	C	0.0	С
North Macedonia	0.0	С	0.2	(0.1)	95.8	(0.1)	4.0	(0.1)	0.0	С	0.0	С	0.0	С
Panama	3.2	(0.5)	6.9	(0.6)	20.6	(1.0)	65.4	(1.4)	3.8	(0.4)	0.0	(0.0)	0.0	С
Peru	1.8	(0.3)	5.7	(0.4)	14.3	(0.5)	54.5	(0.7)	23.6	(0.6)	0.0	С	0.0	С
Philippines	4.5	(0.4)	12.8	(0.6)	51.1	(0.7)	30.9	(0.7)	0.6	(0.3)	0.0	(0.0)	0.0	С
Qatar	1.3	(0.1)	4.5	(0.1)	18.0	(0.1)	63.4	(0.1)	12.9	(0.1)	0.0	(0.0)	0.0	С
Romania	0.9	(0.3)	6.0	(0.9)	77.9	(0.9)	15.1	(0.5)	0.0	(0.0)	0.0	(0.0) C	0.0	С
Russia	0.4	(0.0)	7.7	(0.4)	81.1	(0.9)	10.7	(1.1)	0.1	(0.0)	0.0	С	0.0	С
Saudi Arabia	1.2	(0.2)	3.6	(0.6)	14.0	(1.8)	77.5	(2.4)	3.6	(0.3)	0.1	(0.0)	0.0	С
Serbia	0.1	(0.1)	0.8	(0.2)	87.7	(0.4)	11.4	(0.4)	0.0	(0.5)	0.0	(0.0) C	0.0	С
Singapore	0.0	(0.1)	1.1	(0.1)	7.6	(0.3)	90.8	(0.5)	0.4	(0.2)	0.0	С	0.0	С
Chinese Taipei	0.0	(0.0) C	0.1	(0.0)	35.7	(0.9)	64.2	(0.9)	0.4	(0.2)	0.0	С	0.0	С
Thailand	0.0		0.1	(0.0)	19.9		76.6		2.5		0.0		0.0	
Ukraine	0.2	(0.1)	0.7	(0.2)	29.8	(0.9)	41.3	(0.9)	0.5	(0.3)	0.0	С	28.0	c (2.4)
United Arab Emirates						(1.3)		(1.8)				(O 2)		
	0.3	(0.1)	1.5	(0.1)	9.6	(0.3)	56.8	(0.6)	29.9	(0.5)	1.9	(0.2)	0.0	C
Uruguay	4.2	(0.5)	11.2	(0.5)	20.5	(0.7)	63.4	(1.1)	0.6	(0.1)	0.0	С	0.0	С
Viet Nam	0.2	(0.1)	0.8	(0.3)	4.0	(1.2)	92.3	(2.5)	0.0	(0.0)	0.0	С	2.7	(2.0)

**Note**: The large number of students with missing grade-level information in Ukraine can be attributed to missing data from students in the first and second year of vocational colleges. Most of these 15-year-old students would have been in the first year of vocational college, which is equivalent to grade 10.

#### Tables available on line

#### https://doi.org/10.1787/888934171096

- Table VI.A2.3 PISA target populations and samples, by adjudicated regions
- Table VI.A2.5 Exclusions, by adjudicated regions
- Table VI.A2.7 Response rates, by adjudicated regions
- Table VI.A2.9 Percentage of students at each grade level, excluding students with missing grade information
- Table VI.A2.10 Percentage of students at each grade level, by adjudicated regions
- Table VI.A2.11 Percentage of students at each grade level, by adjudicated regions, excluding students with missing grade information
- Table VI.A2.12 Percentage of students at each grade level, by gender
- Table VI.A2.13 Percentage of students at each grade level, by gender, excluding students with missing grade information
- Table VI.A2.14 Percentage of students at each grade level, by gender and adjudicated regions
- Table VI.A2.15 Percentage of students at each grade level, by gender and adjudicated regions, excluding students with missing grade information
- Table VI.A2.16 Participation in the global competence cognitive test and questionnaire modules

#### Note

- 1. More precisely, PISA assessed students who were at least 15 years and 3 complete months old and who were at most 16 years and 3 complete months old (i.e. younger than 16 years, 2 months and roughly 30 days old), with a tolerance of one month on each side of this age window. If the PISA assessment was conducted in April 2018, as was the case in most countries/economies, all students born in 2002 would have been eligible.
- 2. Educational institutions are generally referred to as schools in this publication, although some educational institutions (in particular, some types of vocational education establishments) may not be referred to as schools in certain countries/economies.
- 3. As might be expected from this definition, the average age of students across OECD countries was 15 years and 9 months. The range in country means was 2 months and 13 days (0.20 year), from the minimum country mean of 15 years and 8 months to the maximum country mean of 15 years and 10 months (OECD, 2019<sub>[31</sub>).
- 4. Such a comparison is complicated by first-generation immigrant students, who received part of their education in a country/economy other than the one in which they were assessed. Mean scores in any country/economy should be interpreted in the context of student demographics within that country/economy.
- 5. Details for countries/economies that applied different sampling designs are documented in the PISA 2018 Technical Report (OECD, forthcoming<sub>[11]</sub>).
- 6. Due to the small size of their education systems, all schools and all eligible students within these schools were included in the samples of Brunei Darussalam, Cyprus (see Note 8), Iceland, Luxembourg, Macao (China), Malta, Montenegro and Qatar.
- 7. The threshold for an acceptable participation rate after replacement varies between 85% and 100%, depending on the participation rate before replacement.
- 8. In particular, in the case of the Netherlands and the United Kingdom, non-response bias analyses relied on direct measures of school performance external to PISA, typically from national assessments. More indirect correlates of school performance were analysed in Hong Kong (China) and the United States, due to the absence of national assessments. The non-response problem in Hong Kong (China) can be attributed to two causes: lack of initiative among schools and teachers to participate in PISA and a large number of schools that were considered to be non-responding schools, as less than 50% of sampled students in these schools sat the assessment.
- 9. These exclusions refer only to those students with limited proficiency in the language of instruction/assessment. Exclusions related to the unavailability of test material in the language of instruction are not considered in this analysis.
- 10. The preliminary attribution of school codes in the process of selecting and then excluding students and schools may have resulted in the double exclusion (at both school and student levels) of some of the students with special education needs in Sweden. As a result, the overall exclusion rate in Sweden may have been overestimated by at most 0.5 of a percentage point. In this scenario, the overall exclusion rate would still be over 10%, the highest among countries/economies participating in PISA.
- 11. The overall exclusion rate includes those students who were excluded at the school level (Column 6) and those students who were excluded within schools (Column 11). However, only students enrolled in non-excluded schools were affected by within-school exclusions, hence the presence of the term equivalent to 1 minus Column 6 (expressed as a decimal).
- 12. If the correlation between the propensity of exclusions and student performance were 0.3, then resulting mean scores would likely have been overestimated by: 1 score point if the exclusion rate were 1%; 3 score points if the exclusion rate were 5%; and 6 score points if the exclusion rate were 10%. If the correlation between the propensity of exclusions and student performance were 0.5, then resulting mean scores would likely have been overestimated by: 1 score point if the exclusion rate were 1%; 5 score points if the exclusion rate were 5%; and 10 score points if the exclusion rate were 10%. For this calculation, a model was used that assumed a bivariate normal distribution for performance and the propensity to participate.
- 13. Testing material was adapted to each country. Versions in the same language thus differed across countries/economies, and students in Luxembourg who were not instructed in one of the three languages in which testing material was available (English, French and German) were unable to sit the PISA assessment, even if such material was available in their language of instruction in a different country.

#### References

OECD (forthcoming), PISA 2018 Technical Report, OECD Publishing, Paris.

OECD (2020), PISA 2018 Results (Volume IV): Are Students Smart about Money?, PISA, OECD Publishing, Paris, https://dx.doi.org/10.1787/48ebd1ba-en.

OECD (2019), PISA 2018 Results (Volume II): Where All Students Can Succeed, OECD Publishing, Paris, https://doi.org/10.1787/b5fd1b8f-en. [3]

[1]

#### **ANNEX A3**

# Technical notes on analyses in this volume

#### STANDARD ERRORS. CONFIDENCE INTERVALS AND SIGNIFICANCE TESTS

The statistics in this report represent estimates based on samples of students, rather than values that could be calculated if every student in every country/economy had answered every question. Consequently, it is important to measure the degree of uncertainty of the estimates. In PISA, each estimate has an associated degree of uncertainty, which is expressed through a standard error. The use of confidence intervals provides a way to make inferences about the population parameters (e.g. means and proportions) in a manner that reflects the uncertainty associated with the sample estimates. If numerous different samples were drawn from the same population, according to the same procedures as the original sample, then in 95 out of 100 samples the calculated confidence interval would encompass the true population parameter. For many parameters, sample estimators follow a normal distribution, and the 95% confidence interval can be constructed as the estimated parameter, plus or minus 1.96 times the associated standard error.

In many cases, readers are primarily interested in whether a given value in a particular country/economy is different from a second value in the same or another country/economy (e.g. whether girls in a country/economy perform better than boys in the same country/economy). In the tables and figures used in this report, differences are labelled as statistically significant when a difference of that size or larger, in either direction, would be observed less than 5% of the time, if there were actually no difference in corresponding population values. Similarly, the risk of reporting an association as significant if there is, in fact, no correlation between two measures, is contained at 5%.

Throughout the report, significance tests were undertaken to assess the statistical significance of the comparisons made.

#### Statistical significance of gender differences and differences between subgroup means

Gender differences in student performance or other indices were tested for statistical significance. Positive differences indicate higher scores for girls, while negative differences indicate higher scores for boys. Generally, differences marked in bold in the tables in this volume are statistically significant at the 95% confidence level.

Similarly, differences between other groups of students (e.g. non-immigrant students and students with an immigrant background or socio-economically advantaged and disadvantaged students) were tested for statistical significance. The definitions of the subgroups can, in general, be found in the tables and text accompanying the analysis. All differences marked in bold in the tables presented in Annex B1 of this report are statistically significant at the 95% level.

# Statistical significance of differences between subgroup means, after accounting for other variables

For many tables, subgroup comparisons were performed both on the observed difference ("before accounting for other variables") and after accounting for other variables, such as the PISA index of economic, social and cultural status of students. The adjusted differences were estimated using linear regression and tested for significance at the 95% confidence level. Significant differences are marked in bold.

#### **ODDS RATIOS**

The odds ratio is a measure of the relative likelihood of a particular outcome across two groups. The odds ratio for observing the outcome when an antecedent is present is simply

$$OR = \frac{(p_{11}/p_{12})}{(p_{21}/p_{22})}$$

where  $p_{11}/p_{12}$  represents the "odds" of observing the outcome when the antecedent is present, and  $p_{11}/p_{12}$  represents the "odds" of observing the outcome when the antecedent is not present.

Logistic regression can be used to estimate the log ratio: the exponentiated logit coefficient for a binary variable is equivalent to the odds ratio. A "generalised" odds ratio, after accounting for other differences across groups, can be estimated by introducing control variables in the logistic regression.

#### Statistical significance of odds ratios

Figures in bold in the data tables presented in Annex B1 of this report indicate that the odds ratio is statistically significantly different from 1 at the 95% confidence level. To construct a 95% confidence interval for the odds ratio, the estimator is assumed to follow a log-normal distribution, rather than a normal distribution.

In many tables, odds ratios after accounting for other variables are also presented. These odds ratios were estimated using logistic regression and tested for significance against the null hypothesis of an odds ratio equal to 1 (i.e. equal likelihoods, after accounting for other variables).

#### STATISTICS BASED ON MULTILEVEL MODELS

Statistics based on multilevel models include variance components (between-school and within-school variance). Multilevel models are generally specified as two-level regression models (student and school levels), with normally distributed residuals, and estimated with maximum likelihood procedure. Models were estimated using the Stata (version 15.1) "mixed" module. Components from those regressions are used to estimate the ratio of between-school variation to total variation on the indices derived from data in the student questionnaire.

#### Standard errors in statistics estimated from multilevel models

For statistics based on multilevel models (such as the estimates of variance components and regression coefficients from two-level regression models), the standard errors are not estimated with the usual replication method, which accounts for stratification and sampling rates from finite populations. Instead, standard errors are "model-based": their computation assumes that schools and students within schools are sampled at random (with sampling probabilities reflected in school and student weights) from a theoretical, infinite population of schools and students, which complies with the model's parametric assumptions.

#### **MODAL GRADE SCHOOLS**

Measures such as between-school variations are influenced by how schools are defined and organised within countries and economies and by the units that were chosen for sampling purposes. For example, in some countries, some of the schools in the PISA sample were defined as administrative units (even if they spanned several geographically separate institutions, as in Italy); in others, they were defined as those parts of larger educational institutions that serve 15-year-olds; in others they were defined as physical school buildings; and in others they were defined from a management perspective (e.g. entities having a principal).

The *PISA 2018 Technical Report* (OECD, forthcoming) and Annex A2 provide an overview of how schools are defined. In PISA 2018, the estimation of variance components was restricted to schools with the "modal ISCED level" for 15-year-old students. The "modal ISCED level" is defined here as the level attended by at least one-third of the PISA sample. As PISA students are sampled to represent all 15-year-old students, whatever type of schools they are enrolled in, they may not be representative of their schools. Restricting the sample to schools with the modal ISCED level for 15-year-old students ensures that the characteristics of students represent the profile of the typical student attending the school. Modal grade may be either lower secondary (ISCED level 2), upper secondary (ISCED level 3) or both, as in Albania, Argentina, Baku (Azerbaijan), Beijing, Shanghai, Jiangsu and Zhejiang (China), Belarus, Colombia, Costa Rica, the Czech Republic, the Dominican Republic, Indonesia, Ireland, Kazakhstan, Luxembourg, Macao [China], Morocco, the Slovak Republic, Chinese Taipei and Uruguay. In all other countries/economies, variance decomposition analyses are restricted to either lower secondary or upper secondary schools. In several countries/economies, lower and upper secondary education is provided in the same school. As the restriction is made at the school level, some students from a grade other than the modal grade in the country/economy may also be used in the analysis. Table VI.A3.1 (in the Excel file corresponding to Annex A3) shows the type of ISCED used for every country and economy, as well as the respective proportions of schools and students in the sample used in the analysis.

#### **USE OF STUDENT, SCHOOL AND TEACHER WEIGHTS**

The target population in PISA is 15-year-old students, but a two-stage sampling procedure was used. After the population was defined, school samples were selected with a probability proportional to the expected number of eligible students in each school. Only in a second sampling stage were students drawn from among the eligible students in each selected school.

Although the student samples were drawn from within a sample of schools, the school sample was designed to optimise the resulting sample of students, rather than to give an optimal sample of schools. It is therefore preferable to analyse the school-level variables as attributes of students (e.g. in terms of the share of 15-year-old students affected), rather than as elements in their own right.

Most analyses of student and school characteristics are therefore weighted by student final weights (or their sum, in the case of school characteristics) and use student replicate weights for estimating standard errors.

In PISA 2018, as in PISA 2012 and 2015, multilevel models weights are used at both the student and school levels. The purpose of these weights is to account for differences in the probabilities of students being selected in the sample. Since PISA applies a two-stage sampling procedure, these differences are due to factors at both the school and student levels. For the multilevel models, student final weights (W\_FSTUWT) were used. Within-school weights correspond to student final weights, rescaled to amount to the sample size within each school. Between-school weights correspond to the sum of final student weights (W\_FSTUWT) within each school.

Table VI.A3.1 [1/2] Modal grade, by country/economy

	Modal ISCED level	Students in the modal ISCED level in the sample	Students in a modal ISCED school in the sample
		%	%
Australia Austria	2	92.6	99.2
Austria	m	m	m
Belgium	3	91.2	96.0
Canada	3	88.9	98.8
Chile	3	94.7	96.9
Colombia	2 3	38.5 61.5	100.0
Czech Republic	2 3	52.9 47.1	100.0
Denmark	2	99.0	99.0
Estonia	2	98.6	99.5
Finland	2	99.8	99.8
France	3	82.6	84.9
Germany	2	96.7	99.1
Greece	3	95.5	95.6
Hungary	3	89.8	90.2
Iceland	2	99.2	99.2
Ireland	2 3	63.6 36.4	100.0
Israel	3	87.8	97.6
Italy	3	99.0	99.0
Japan	3	100.0	100.0
Korea	3	83.9	83.9
Latvia	2	96.4	99.0
Lithuania	2	100.0	100.0
Luxembourg	2 3	55.9 44.1	100.0
Mexico	3	78.5	78.5
Netherlands	2	66.8	99.0
New Zealand	3	93.3	99.6
Norway	2	99.6	99.6
Poland	2	98.6	98.6
Portugal	3	69.4	88.5
Slovak Republic	2 3	46.5 53.5	100.0
Slovenia	3	92.9	92.9
Spain	2	99.9	100.0
Sweden	2	98.4	98.4
Switzerland	2	71.5	76.0
Turkey	3	99.5	99.5
United Kingdom	3	100.0	100.0
United States	3	92.4	100.0

Table VI.A3.1 [2/2] Modal grade, by country/economy

	Modal ISCED level	Students in the modal ISCED level in the sample	Students in a modal ISCED school in the sample
		%	%
Albania Argentina	2 3	38.0 62.0	100.0
Argentina	2 3	34.0 66.5	99.6
Baku (Azerbaijan)	2 3	37.8 62.2	100.0
Belarus	2 3	43.8 56.2	100.0
Bosnia and Herzegovina	3	83.5	83.5
Brazil	3	74.3	82.7
Brunei Darussalam	3	99.4	100.0
B-S-J-Z (China)	2 3	40.4 59.6	100.0
Bulgaria	3	99.7	100.0
Costa Rica	2 3	55.1 44.9	100.0
Croatia	3	99.7	99.7
Cyprus	3	95.5	96.0
Dominican Republic	2	42.4	100.0
Georgia	3	57.6 85.2	99.3
Hong Kong (China)	3	66.8	98.4
	2	45.2	
Indonesia	3	54.8	100.0
Jordan	2	100.0	100.0
Kazakhstan	2 3	45.8 34.6	80.4
Kosovo	3	76.3	76.3
Lebanon	3	70.0	80.2
Macao (China)	2 3	41.0 59.0	100.0
Malaysia	3	94.5	100.0
Malta	3	99.9	100.0
Moldova	2	89.5	94.7
Montenegro	3	96.7	96.7
Morocco	2 3	53.9 46.1	100.0
North Macedonia	3	99.8	99.8
Panama	3	69.3	84.8
Peru	3	77.9	98.0
Philippines	2	99.3	99.7
Qatar	3	76.3	86.3
Romania	3	93.1	93.1
Russia	2	88.8	96.4
Saudi Arabia	3	81.2	81.2
Serbia	3	99.1	99.1
Singapore	3	98.5	100.0
Chinese Taipei	2 3	35.8 64.2	100.0
Thailand	3	79.1	93.0
Ukraine	3	100.0	100.0
United Arab Emirates	3	88.6	97.4
Uruguay	2 3	36.0 64.0	100.0
Viet Nam	3	95.0	95.2

# **ANNEX A4**

# **Quality assurance**

Quality assurance procedures were implemented in all parts of PISA 2018, as was done for all previous PISA surveys. The PISA 2018 Technical Standards (available on line at <a href="https://www.oecd.org/pisa/">www.oecd.org/pisa/</a>) specify the way in which PISA must be implemented in each country, economy and adjudicated region. International contractors monitor the implementation in each of these and adjudicate on their adherence to the standards.

The consistent quality and linguistic equivalence of the PISA 2018 assessment instruments were facilitated by assessing the ease with which the original English version could be translated. Two source versions of the assessment instruments, in English and French, were prepared (except for the financial literacy assessment and the operational manuals, which were provided only in English) in order for countries to conduct a double translation design, i.e. two independent translations from the source language(s), and reconciliation by a third person. Detailed instructions for the localisation (adaptation, translation and validation) of the instruments for the field trial and for their review for the main survey, and translation/adaptation guidelines were supplied. An independent team of expert verifiers, appointed and trained by the PISA Consortium, verified each national version against the English and/or French source versions. These translators' mother tongue was the language of instruction in the country concerned, and the translators were knowledgeable about education systems. For further information on PISA translation procedures, see the *PISA 2018 Technical Report* (OECD, forthcoming<sub>[11]</sub>).

The survey was implemented through standardised procedures. The PISA Consortium provided comprehensive manuals that explained the implementation of the survey, including precise instructions for the work of school co-ordinators and scripts for test administrators to use during the assessment sessions. Proposed adaptations to survey procedures, or proposed modifications to the assessment session script, were submitted to the PISA Consortium for approval prior to verification. The PISA Consortium then verified the national translation and adaptation of these manuals.

To establish the credibility of PISA as valid and unbiased and to encourage uniformity in conducting the assessment sessions, test administrators in participating countries were selected using the following criteria: it was required that the test administrator not be the reading, mathematics or science instructor of any student in the sessions he or she would conduct for PISA; and it was considered preferable that the test administrator not be a member of the staff of any school in the PISA sample. Participating countries organised an in-person training session for test administrators.

Participating countries and economies were required to ensure that test administrators worked with the school co-ordinator to prepare the assessment session, including reviewing and updating the Student Tracking Form; completing the Session Attendance Form, which is designed to record students' attendance and instruments allocation; completing the Session Report Form, which is designed to summarise session times, any disturbance to the session, etc.; ensuring that the number of test booklets and questionnaires collected from students tallied with the number sent to the school (for countries using the paper-based assessment) or ensuring that the number of USB sticks or external laptops used for the assessment were accounted for (for countries using the computer-based assessment); and sending or uploading the school questionnaire, student questionnaires, parent and teacher questionnaires (if applicable), and all test materials (both completed and not completed) to the national centre after the assessment.

The PISA Consortium responsible for overseeing survey operations implemented all phases of the PISA Quality Monitor (PQM) process: interviewing and hiring PQM candidates in each of the countries, organising their training, selecting the schools to visit, and collecting information from the PQM visits. PQMs are independent contractors located in participating countries who are hired by the international survey operations contractor. They visit a sample of schools to observe test administration and to record the implementation of the documented field-operations procedures in the main survey.

Typically, two or four PQMs were hired for each country, and they visited an average of 15 schools in each country. If there were adjudicated regions in a country, it was usually necessary to hire additional PQMs, as a minimum of five schools were observed in adjudicated regions.

Approximately one-third of test items are open-ended items in PISA. Reliable human coding is critical for ensuring the validity of assessment results within a country, as well as the comparability of assessment results across countries. Coder reliability in PISA 2018 was evaluated and reported at both within- and across-country levels. The evaluation of coder reliability was made possible by the design of multiple coding: a portion or all of the responses from each human-coded constructed-response item were coded by at least two human coders.

All quality-assurance data collected throughout the PISA 2018 assessment were entered and collated in a central data-adjudication database on the quality of field operations, printing, translation, school and student sampling, and coding. Comprehensive reports were then generated for the PISA Adjudication Group. This group was formed by the Technical Advisory Group and the Sampling Referee. Its role is to review the adjudication database and reports in order to recommend adequate treatment to preserve the quality of PISA data. For further information, see the *PISA 2018 Technical Report* (OECD, forthcoming<sub>[1]</sub>). Overall, the review suggests good adherence of national implementations of PISA to the technical standards. Despite the overall high quality of data, a few countries' data failed to meet critical standards or presented inexplicable anomalies, such that the Adjudication Group recommends a special treatment of these data in databases and/or reporting.

The major issues for adjudication discussed at the adjudication meeting that are relevant to the financial literacy assessment are listed below:

- The Netherlands missed the standard for overall exclusions by a small margin. At the same time, in the Netherlands UH booklets, intended for students with special education needs, were assigned to about 17% of the non-excluded students. Because UH booklets do not cover the domain of financial literacy, the effective exclusion rate for the financial literacy additional sample is above 20%. The fact that students that receive support for learning in school were systematically excluded from the financial literacy sample results in a strong upward bias for the country mean and other population statistics. Therefore, the Netherlands' results in financial literacy may not be comparable to those of other countries or to results for the Netherlands from previous years. The Netherlands also missed the school response rate (before replacement) by a large margin, and could only reach close to an acceptable response rate through the use of replacement schools. However, based on evidence provided in a non-response bias analysis, the Netherlands' results in reading, mathematics and science were accepted as largely comparable.
- Portugal did not meet the student-response rate standard. In Portugal, response rates dropped between 2015 and 2018. A student-non-response-bias analysis was submitted, investigating bias amongst students in grades 9 and above. Students in grades 7 and 8 represented about 11% of the total sample, but 20% of the non-respondents. A comparison of the linked responding and non-responding cases, using sampling weights, revealed that non-respondents tended to score about one-third of a standard deviation below respondents on the national mathematics examination (implying a "raw" upward bias of about 10% of a standard deviation on population statistics that are based on respondents only). At the same time, a significant proportion of the performance differences could be accounted for by variables considered in non-response adjustments (including grade level). Nevertheless, a residual upward bias in population statistics remained, even when using non-response adjusted weights. The non-response bias analysis therefore implies a small upward bias for PISA 2018 performance results in Portugal. The Adjudication Group also considered that trend comparisons and performance comparisons with other countries may not be particularly affected, because an upward bias of that size cannot be excluded even in countries that met the response-rate standard or for previous cycles of PISA. Therefore, Portugal's results are reported with an annotation.

While the adjudication group did not consider the violation of response-rate standards by the United States (see Annex A2) as a major adjudication issue, they noted several limitations in the data used in non-response-bias analyses submitted by the United States. In consideration of the lower response rates, compared to other countries, the data for the United States are reported with an annotation.

In 2018, some regions in Spain conducted their high-stakes exams for tenth-grade students earlier in the year than in the past, which resulted in the testing period for these exams coinciding with the end of the PISA testing window. Because of this overlap, a number of students were negatively disposed towards the PISA test and did not try their best to demonstrate their proficiency. Although the data of only a minority of students show clear signs of lack of engagement, the comparability of PISA 2018 data for Spain with those from earlier PISA assessments cannot be fully ensured. See *PISA 2018 Results (Volume I): What Students Know and Can Do, Annex A9 (OECD, 2019)* for further details.

# Reference

**OECD** (2019), Annex A9A note about Spain in PISA 2018: Further analysis of Spain's data by testing date (updated on 23 July 2020), *PISA 2018 Results (Volume I): What Students Know and Can Do*, PISA, OECD Publishing, Paris, <a href="https://doi.org/10.1787/5f07c754-en">https://doi.org/10.1787/5f07c754-en</a>.



# **ANNEX B**

# PISA 2018 Data

All tables in Annex B are available on line

**Annex B1**: Results for countries and economies

https://doi.org/10.1787/888934171153

https://doi.org/10.1787/888934171172

https://doi.org/10.1787/888934171191

https://doi.org/10.1787/888934171210

https://doi.org/10.1787/888934171229

https://doi.org/10.1787/888934171248

https://doi.org/10.1787/888934171267

Annex B2: Results for regions within countries

https://doi.org/10.1787/888934171286

**Annex B3**: PISA 2018 system-level indicators

# **ANNEX B1**

# **Results for countries and economies**

Table VI.B1.2.1 [1/6] Students' awareness of global issues

Based on students' reports

Dusca on students reports					Student	s' awarene	ess of global	issues				
									the index <sup>1</sup>			
	Mean		Standard (		Total var		Variation scho	ols <sup>3</sup>	Variatior scho	ols	Proporti variation t between s	hat lies chools <sup>4</sup>
A b P.	Mean	S.E.	S.D.	S.E.	Variance	S.E.	Variance	S.E.	Variance	S.E.	%	S.E.
Australia Austria	0.10	(0.01)	1.05	(0.01)	1.11	(0.02)	0.05	(0.01)	1.04	(0.02)	4.4	(0.7)
	-0.02	(0.02)	0.99	(0.02)	0.97	(0.03)	0.10	(0.01)	0.86	(0.03)	10.2	(1.2)
Canada	0.14	(0.01)	1.04	(0.01)	1.08	(0.02)	0.04	(0.01)	1.05	(0.02)	3.4	(0.5)
Chile	-0.10	(0.02)	0.99	(0.02)	0.97	(0.03)	0.03	(0.01)	0.93	(0.03)	3.0	(0.6)
Colombia	-0.14	(0.02)	0.98	(0.02)	0.95	(0.03)	0.04	(0.01)	0.89	(0.03)	4.8	(1.1)
Estonia	-0.01	(0.02)	0.92	(0.01)	0.85	(0.02)	0.03	(0.01)	0.81	(0.03)	3.9	(0.9)
France	0.05	(0.02)	0.95	(0.02)	0.83	(0.03)	0.03	(0.01)	0.80	(0.03)	3.5	(0.9)
Germany	0.06	(0.02) †	0.96	(0.02) †	0.93	(0.03)	0.05	(0.01) †	0.87	(0.04) †	5.2	(1.1)
Greece	0.28	(0.02)	0.99	(0.01)	0.97	(0.03)	0.04	(0.01)	0.92	(0.03)	4.3	(1.0)
Hungary	-0.05	(0.01)	0.94	(0.02)	0.84	(0.03)	0.05	(0.01)	0.78	(0.03)	5.8	(1.2)
Iceland	-0.13	(0.02)	1.13	(0.02)	1.27	(0.04)	0.03	(0.01)	1.20	(0.04)	2.4	(1.0)
Ireland	0.12	(0.01)	0.96	(0.01)	0.92	(0.02)	0.01	(0.00)	0.90	(0.02)	1.3	(0.5)
Israel	-0.15	(0.02)	1.08	(0.01)	1.17	(0.03)	0.08	(0.02)	1.10	(0.04)	6.4	(1.2)
Italy	-0.03	(0.01)	0.92	(0.01)	0.85	(0.03)	0.03	(0.01)	0.79	(0.03)	4.0	(0.7)
Korea	-0.26	(0.01)	0.97	(0.01)	0.93	(0.03)	0.04	(0.01)	0.89	(0.03)	4.1	(0.8)
Latvia	-0.14	(0.01)	0.92	(0.01)	0.85	(0.03)	0.04	(0.01)	0.80	(0.03)	4.9	(1.3)
Lithuania	0.28	(0.02)	1.11	(0.01)	1.22	(0.03)	0.05	(0.01)	1.12	(0.03)	4.5	(0.7)
Mexico	-0.04	(0.02) †	0.96	(0.02) †	0.88	(0.03)	0.04	(0.01) †	0.83	(0.03) †	4.2	(1.0)
New Zealand	-0.06	(0.01)	1.00	(0.01)	1.00	(0.02)	0.01	(0.01)	0.96	(0.03)	1.5	(0.6)
Poland	0.10	(0.02)	1.02	(0.01)	1.04	(0.03)	0.03	(0.01)	1.02	(0.03)	3.2	(0.6)
Portugal	0.20	(0.02)	1.01	(0.01)	0.99	(0.03)	0.03	(0.01)	0.95	(0.03)	2.6	(0.8)
Scotland (United Kingdom)	0.09	(0.02) ‡	0.97	(0.01) ‡	0.93	(0.03)	0.03	(0.01) ‡	0.90	(0.03) ‡	3.0	(0.8)
Slovak Republic	-0.16	(0.02)	1.09	(0.02)	1.19	(0.03)	0.09	(0.01)	1.04	(0.03)	8.3	(1.0)
Slovenia	-0.01	(0.02)	0.96	(0.01)	0.90	(0.02)	0.06	(0.01)	0.84	(0.03)	6.2	(1.0)
Spain	0.03	(0.01)	0.88	(0.01)	0.77	(0.02)	0.02	(0.00)	0.74	(0.02)	2.5	(0.5)
Switzerland	-0.12	(0.02)	0.96	(0.01)	0.98	(0.03)	0.03	(0.01)	0.92	(0.04)	3.5	(0.9)
Turkey	0.13	(0.02)	1.02	(0.01)	1.04	(0.03)	0.05	(0.01)	0.97	(0.03)	4.6	(8.0)
OECD average	0.01	(0.00)	0.99	(0.00)	0.98	(0.01)	0.04	(0.00)	0.92	(0.01)	4.3	(0.2)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

**Note**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

<sup>2.</sup> The total variation in the index of students' awareness of global issues is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.2.1 [2/6] **Students' awareness of global issues** 

						Student	s' awarene	ess of global	issues				
								,	/ariation in	the index <sup>1</sup>			
		Mean		Standard (		Total vai		Variation scho	ols <sup>3</sup>	Variatior scho	ols	Proporti variation t between s	that lies
		Mean	S.E.	S.D.	S.E.	Variance	S.E.	Variance	S.E.	Variance	S.E.	%	S.E.
ē	Albania	0.46	(0.02)	1.20	(0.02)	1.44	(0.04)	0.12	(0.02)	1.27	(0.04)	8.6	(1.2)
	Argentina	-0.41	(0.02)	1.05	(0.02)	1.10	(0.03)	0.05	(0.01)	1.01	(0.03)	4.8	(0.9)
Pa	Baku (Azerbaijan)	0.08	(0.02) †	1.40	(0.02) †	1.95	(0.05)	0.04	(0.01) †	1.91	(0.04) †	2.0	(0.7) †
	Belarus	-0.08	(0.02)	1.02	(0.02)	1.04	(0.03)	0.05	(0.01)	0.97	(0.03)	5.2	(1.0)
	Bosnia and Herzegovina	-0.05	(0.03)	1.18	(0.02)	1.38	(0.05)	0.06	(0.01)	1.31	(0.04)	4.4	(0.9)
	Brazil	-0.24	(0.02) †	1.09	(0.01) †	1.10	(0.03)	0.09	(0.01) †	1.00	(0.03) †	8.4	(1.0) †
	Brunei Darussalam	-0.58	(0.01)	1.06	(0.01)	1.12	(0.02)	0.11	(0.03)	0.99	(0.04)	10.1	(2.3)
	Bulgaria	-0.07	(0.03)	1.25	(0.02)	1.55	(0.05)	0.12	(0.02)	1.39	(0.04)	7.9	(1.2)
	Costa Rica	-0.05	(0.02)	1.00	(0.01)	1.00	(0.03)	0.05	(0.01)	0.94	(0.03)	5.4	(0.9)
	Croatia	0.17	(0.02)	1.02	(0.02)	1.04	(0.03)	0.04	(0.01)	1.00	(0.03)	4.1	(0.7)
	Cyprus	0.00	(0.02)	1.14	(0.01)	1.31	(0.03)	0.05	(0.01)	1.25	(0.05)	4.0	(0.9)
	Dominican Republic	-0.07	(0.03) ‡	1.27	(0.02) ‡	1.61	(0.06)	0.06	(0.02) ‡	1.48	(0.06) ‡	4.0	(1.2) ‡
	Hong Kong (China)	-0.10	(0.02)	0.88	(0.02)	0.78	(0.03)	0.02	(0.01)	0.76	(0.03)	2.3	(1.3)
	Indonesia	-0.51	(0.02)	1.08	(0.02)	1.17	(0.03)	0.08	(0.02)	1.07	(0.04)	7.2	(1.3)
	Jordan	0.17	(0.03)	1.37	(0.02)	1.88	(0.04)	0.19	(0.02)	1.68	(0.04)	10.0	(1.0)
	Kazakhstan	0.09	(0.01)	1.26	(0.01)	1.53	(0.03)	0.09	(0.01)	1.41	(0.03)	5.7	(0.6)
	Kosovo	0.18	(0.02)	1.20	(0.02)	1.39	(0.04)	0.14	(0.02)	1.25	(0.05)	10.0	(1.2)
	Lebanon	-0.27	(0.03)	1.11	(0.01)	1.20	(0.03)	0.22	(0.03)	0.97	(0.03)	18.4	(2.0)
	Macao (China)	-0.28	(0.01)	0.83	(0.01)	0.69	(0.02) †	0.03	(0.01)	0.64	(0.04)	4.2	(1.1)
	Malaysia	-0.41	(0.02)	0.94	(0.01)	0.88	(0.03)	0.06	(0.01)	0.82	(0.02)	6.8	(1.1)
	Malta	0.23	(0.02)	1.16	(0.01)	1.35	(0.03)	0.06	(0.02)	1.32	(0.06)	4.3	(1.5)
	Moldova	-0.04	(0.02)	1.03	(0.01)	1.07	(0.03)	0.05	(0.01)	0.99	(0.03)	5.1	(1.0)
	Montenegro	0.12	(0.02)	1.22	(0.01)	1.50	(0.03)	0.05	(0.01)	1.42	(0.06)	3.7	(0.8)
	Morocco	-0.30	(0.03) †	1.14	(0.02) †	1.31	(0.04)	0.13	(0.02) †	1.18	(0.04) †	9.9	(1.3) †
	North Macedonia	0.10	(0.02)	1.18	(0.01)	1.39	(0.03)	0.16	(0.03)	1.22	(0.05)	11.7	(2.1)
	Panama	-0.08	(0.02) ‡	1.08	(0.02) ‡	1.09	(0.04)	0.05	(0.02) ‡	1.01	(0.04) ‡	4.5	(1.5) ‡
	Peru	0.07	(0.02) †	0.98	(0.02) †	0.96	(0.03)	0.03	(0.01) †	0.91	(0.03) †	2.7	(1.0) †
	Philippines	-0.12	(0.02)	1.20	(0.01)	1.44	(0.03)	0.08	(0.01)	1.36	(0.03)	5.6	(0.8)
	Romania	-0.40	(0.02)	0.98	(0.02)	0.94	(0.03)	0.05	(0.01)	0.89	(0.03)	5.2	(0.8)
	Russia	0.12	(0.02)	1.14	(0.01)	1.29	(0.03)	0.04	(0.01)	1.26	(0.03)	2.8	(0.7)
	Saudi Arabia	-0.50	(0.03)	1.18	(0.02)	1.35	(0.03)	0.15	(0.02)	1.19	(0.04)	11.0	(1.3)
	Serbia	0.07	(0.02)	1.16	(0.02)	1.35	(0.04)	0.06	(0.01)	1.29	(0.04)	4.7	(0.7)
	Singapore	-0.01	(0.01)	0.97	(0.01)	0.94	(0.02)	0.05	(0.01)	0.88	(0.02)	5.2	(1.0)
	Chinese Taipei	-0.07	(0.01)	0.97	(0.01)	0.95	(0.03)	0.02	(0.01)	0.92	(0.03)	1.9	(0.5)
	Thailand	-0.25	(0.02)	0.97	(0.01)	0.93	(0.03)	0.03	(0.01)	0.89	(0.03)	3.7	(0.7)
	Ukraine	-0.08	(0.02)	0.99	(0.01)	0.98	(0.02)	0.07	(0.01)	0.91	(0.03)	6.9	(1.1)
	United Arab Emirates	0.22	(0.01)	1.24	(0.01)	1.52	(0.02)	0.16	(0.02)	1.36	(0.03)	10.5	(0.9)
	Uruguay	-0.20	(0.02) †	1.01	(0.02) †	1.02	(0.03)	0.04	(0.01) †	0.96	(0.03) †	3.6	(0.8) †
	Viet Nam	-0.34	(0.02)	0.81	(0.02)	0.64	(0.02) †	0.03	(0.01)	0.61	(0.02)	4.6	(1.0)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

**Note**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

<sup>2.</sup> The total variation in the index of students' awareness of global issues is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.2.1 [3/6] Students' awareness of global issues

				Percenta	ge of stud	lents wh	o respond	led how i	informed	they are	about the	e followin	g topics:			
	(	limate ch global w	nange and varming			Global (e.g. epi			(m	Migra novement	ation of people	e)	In	ternation	nal conflic	ts
		doesn't much ut it	Knows the topic familiar	or very with it	Never h topic or know abou	doesn't much ıt it	Knows the topic familiar	or very with it	Never h topic or know abou	doesn't much ut it	Knows the topic familiar	or very with it	Never h topic or know abou	doesn't much ut it	Knows the topic familiar	or very with it
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia Austria	17.4	(0.5)	82.6	(0.5)	34.9	(0.5)	65.1	(0.5)	19.1	(0.4)	80.9	(0.4)	33.7	(0.6)	66.3	(0.6)
	22.4	(8.0)	77.6	(8.0)	43.4	(0.8)	56.6	(8.0)	25.9	(0.7)	74.1	(0.7)	37.2	(0.6)	62.8	(0.6)
Canada	12.6	(0.4)	87.4	(0.4)	29.2	(0.5)	70.8	(0.5)	23.0	(0.4)	77.0	(0.4)	32.2	(0.5)	67.8	(0.5)
Chile	28.0	(1.0)	72.0	(1.0)	39.1	(0.8)	60.9	(8.0)	20.6	(0.7)	79.4	(0.7)	38.1	(8.0)	61.9	(0.8)
Colombia	28.2	(0.9)	71.8	(0.9)	36.0	(8.0)	64.0	(8.0)	30.3	(0.9)	69.7	(0.9)	31.5	(8.0)	68.5	(0.8)
Estonia	18.6	(0.7)	81.4	(0.7)	37.3	(0.9)	62.7	(0.9)	20.5	(0.7)	79.5	(0.7)	23.7	(0.6)	76.3	(0.6)
France	19.1	(0.7)	80.9	(0.7)	24.0	(0.6)	76.0	(0.6)	19.3	(0.6)	80.7	(0.6)	39.8	(8.0)	60.2	(0.8)
Germany	17.4	(0.8) †	82.6	(0.8) †	43.0	(0.9) †	57.0	(0.9) †	16.8	(0.8) †	83.2	(0.8) †	30.3	(0.8) †	69.7	(0.8) †
Greece	27.5	(8.0)	72.5	(8.0)	24.9	(0.7)	75.1	(0.7)	11.7	(0.6)	88.3	(0.6)	34.0	(0.6)	66.0	(0.6)
Hungary	24.0	(0.7)	76.0	(0.7)	36.7	(0.7)	63.3	(0.7)	14.0	(0.6)	86.0	(0.6)	41.8	(8.0)	58.2	(0.8)
Iceland	23.2	(8.0)	76.8	(8.0)	39.4	(0.7)	60.6	(0.7)	28.2	(8.0)	71.8	(0.8)	55.2	(0.9)	44.8	(0.9)
Ireland	13.5	(0.5)	86.5	(0.5)	43.1	(0.7)	56.9	(0.7)	13.9	(0.5)	86.1	(0.5)	36.9	(0.7)	63.1	(0.7)
Israel	31.8	(0.9)	68.2	(0.9)	35.9	(8.0)	64.1	(8.0)	29.6	(0.8)	70.4	(0.8)	32.4	(8.0)	67.6	(0.8)
Italy	22.1	(0.6)	77.9	(0.6)	33.7	(8.0)	66.3	(8.0)	14.3	(0.7)	85.7	(0.7)	33.3	(0.7)	66.7	(0.7)
Korea	11.9	(0.5)	88.1	(0.5)	43.5	(0.7)	56.5	(0.7)	39.2	(0.7)	60.8	(0.7)	45.7	(8.0)	54.3	(0.8)
Latvia	24.2	(0.7)	75.8	(0.7)	38.7	(8.0)	61.3	(8.0)	19.7	(0.6)	80.3	(0.6)	27.4	(0.7)	72.6	(0.7)
Lithuania	19.6	(0.6)	80.4	(0.6)	19.3	(0.6)	80.7	(0.6)	12.7	(0.5)	87.3	(0.5)	21.7	(0.6)	78.3	(0.6)
Mexico	23.0	(0.8) †	77.0	(0.8) †	30.3	(0.8) †	69.7	(0.8) †	22.7	(0.6) †	77.3	(0.6) †	34.2	(0.8) †	65.8	(0.8) †
New Zealand	19.5	(0.6)	80.5	(0.6)	42.3	(8.0)	57.7	(8.0)	23.8	(8.0)	76.2	(0.8)	38.0	(0.6)	62.0	(0.6)
Poland	24.6	(8.0)	75.4	(8.0)	28.7	(0.7)	71.3	(0.7)	14.8	(0.6)	85.2	(0.6)	19.0	(0.7)	81.0	(0.7)
Portugal	16.6	(0.7)	83.4	(0.7)	24.9	(0.8)	75.1	(8.0)	19.4	(0.6)	80.6	(0.6)	24.7	(8.0)	75.3	(0.8)
Scotland (United Kingdom)	21.6	(0.9) ‡	78.4	(0.9) ‡	40.6	(1.2) ‡	59.4	(1.2) ‡	20.9	(1.0) ‡	79.1	(1.0) ‡	34.5	(1.1) ‡	65.5	(1.1) ‡
Slovak Republic	30.6	(0.7)	69.4	(0.7)	43.2	(0.7)	56.8	(0.7)	22.9	(0.7)	77.1	(0.7)	32.2	(0.7)	67.8	(0.7)
Slovenia	22.3	(0.6)	77.7	(0.6)	31.7	(8.0)	68.3	(8.0)	18.1	(0.5)	81.9	(0.5)	34.5	(0.7)	65.5	(0.7)
Spain	19.0	(0.5)	81.0	(0.5)	29.0	(0.5)	71.0	(0.5)	22.9	(0.4)	77.1	(0.4)	33.0	(0.5)	67.0	(0.5)
Switzerland	21.3	(1.0)	78.7	(1.0)	39.7	(0.9)	60.3	(0.9)	24.6	(0.8)	75.4	(0.8)	38.6	(1.0)	61.4	(1.0)
Turkey	21.2	(0.7)	78.8	(0.7)	30.9	(0.8)	69.1	(8.0)	13.7	(0.5)	86.3	(0.5)	32.6	(0.7)	67.4	(0.7)
OECD average	21.5	(0.1)	78.5	(0.1)	34.9	(0.1)	65.1	(0.1)	20.8	(0.1)	79.2	(0.1)	33.9	(0.1)	66.1	(0.1)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

**Note**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

<sup>2.</sup> The total variation in the index of students' awareness of global issues is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.2.1 [4/6] **Students' awareness of global issues** Based on students' reports

					Percenta	ge of stud	lents wh	o respond	led how i	nformed	they are	about the	followin	g topics:			
		C	limate ch global w	nange and varming	l		Global (e.g. epi			(m	Migr	ation t of peopl	e)	In	ternation	al conflic	ts
		Never h topic or know abou	doesn't much	Knows the topic familiar	or very	Never he topic or know abou	doesn't much	Knows the topic familiar	or very	Never h topic or know abou	doesn't much	Knows the topic familiar	or very	Never h topic or know abou	doesn't much	Knows the topic familiar	or very
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
യ	Albania	17.9	(0.7)	82.1	(0.7)	21.1	(0.7)	78.9	(0.7)	14.5	(0.7)	85.5	(0.7)	26.7	(0.7)	73.3	(0.7)
≂	Argentina	50.3	(0.8)	49.7	(8.0)	50.4	(8.0)	49.6	(8.0)	41.5	(0.9)	58.5	(0.9)	48.7	(0.7)	51.3	(0.7)
a B	Baku (Azerbaijan)	30.7	(0.9) †	69.3	(0.9) †	34.7	(0.9) †	65.3	(0.9) †	28.0	(0.8) †	72.0	(0.8) †	29.6	(0.9) †	70.4	(0.9) †
	Belarus	27.1	(0.8)	72.9	(8.0)	27.6	(8.0)	72.4	(8.0)	23.3	(0.6)	76.7	(0.6)	27.2	(8.0)	72.8	(0.8)
	Bosnia and Herzegovina	35.5	(0.9)	64.5	(0.9)	36.4	(1.0)	63.6	(1.0)	26.4	(0.9)	73.6	(0.9)	28.5	(0.7)	71.5	(0.7)
	Brazil	38.9	(0.9) †	61.1	(0.9) †	39.1	(0.8) †	60.9	(0.8) †	30.6	(0.7) †	69.4	(0.7) †	38.0	(0.7) †	62.0	(0.7) †
	Brunei Darussalam	28.3	(0.5)	71.7	(0.5)	46.6	(0.6)	53.4	(0.6)	38.4	(0.6)	61.6	(0.6)	61.8	(0.6)	38.2	(0.6)
	Bulgaria	30.2	(1.0)	69.8	(1.0)	31.7	(1.0)	68.3	(1.0)	27.1	(0.9)	72.9	(0.9)	30.6	(8.0)	69.4	(8.0)
	Costa Rica	26.4	(0.9)	73.6	(0.9)	34.7	(1.0)	65.3	(1.0)	25.2	(0.7)	74.8	(0.7)	34.6	(0.7)	65.4	(0.7)
	Croatia	22.2	(0.7)	77.8	(0.7)	31.0	(0.7)	69.0	(0.7)	17.0	(0.6)	83.0	(0.6)	27.4	(0.6)	72.6	(0.6)
	Cyprus	34.3	(0.6)	65.7	(0.6)	32.4	(8.0)	67.6	(8.0)	22.6	(0.7)	77.4	(0.7)	34.5	(0.6)	65.5	(0.6)
	Dominican Republic	33.8	(1.2) ‡	66.2	(1.2) ‡	32.9	(1.1) ‡	67.1	(1.1) ‡	26.7	(1.0) ‡	73.3	(1.0) ‡	35.7	(0.9) ‡	64.3	(0.9) ‡
	Hong Kong (China)	9.4	(0.6)	90.6	(0.6)	18.6	(0.7)	81.4	(0.7)	34.6	(0.9)	65.4	(0.9)	33.7	(0.7)	66.3	(0.7)
	Indonesia	43.4	(1.2)	56.6	(1.2)	52.0	(1.0)	48.0	(1.0)	34.4	(1.0)	65.6	(1.0)	49.5	(1.1)	50.5	(1.1)
	ordan	30.2	(1.0)	69.8	(1.0)	37.5	(8.0)	62.5	(8.0)	23.4	(8.0)	76.6	(0.8)	28.7	(0.7)	71.3	(0.7)
	Kazakhstan	25.6	(0.4)	74.4	(0.4)	25.6	(0.4)	74.4	(0.4)	21.6	(0.5)	78.4	(0.5)	24.8	(0.4)	75.2	(0.4)
	Kosovo	32.2	(0.7)	67.8	(0.7)	29.3	(0.7)	70.7	(0.7)	19.1	(0.7)	80.9	(0.7)	34.8	(0.7)	65.2	(0.7)
	Lebanon	41.8	(1.5)	58.2	(1.5)	46.3	(1.1)	53.7	(1.1)	32.6	(1.1)	67.4	(1.1)	52.5	(0.9)	47.5	(0.9)
	Macao (China)	12.8	(0.5)	87.2	(0.5)	32.9	(0.7)	67.1	(0.7)	36.5	(0.7)	63.5	(0.7)	43.0	(0.7)	57.0	(0.7)
	Malaysia	31.8	(0.9)	68.2	(0.9)	32.0	(0.9)	68.0	(0.9)	38.7	(8.0)	61.3	(0.8)	53.5	(0.7)	46.5	(0.7)
	Malta	16.6	(0.6)	83.4	(0.6)	32.3	(0.9)	67.7	(0.9)	16.2	(0.6)	83.8	(0.6)	34.9	(0.7)	65.1	(0.7)
	Moldova	28.1	(0.7)	71.9	(0.7)	28.1	(0.8)	71.9	(8.0)	20.2	(0.7)	79.8	(0.7)	32.4	(0.8)	67.6	(0.8)
	Montenegro	30.2	(0.7)	69.8	(0.7)	27.1	(0.6)	72.9	(0.6)	22.8	(0.6)	77.2	(0.6)	27.3	(0.6)	72.7	(0.6)
	Morocco	42.4	(1.4) †	57.6	(1.4) †	40.5	(1.2) †	59.5	(1.2) †	32.7	(1.1) †	67.3	(1.1) †	44.5	(0.9) †	55.5	(0.9) †
	North Macedonia	30.9	(0.7)	69.1	(0.7)	38.0	(0.7)	62.0	(0.7)	22.5	(0.5)	77.5	(0.5)	34.9	(0.7)	65.1	(0.7)
	Panama	32.1	(1.1) †	67.9	(1.1) †	31.5	(1.1) ‡	68.5	(1.1) ‡	26.9	(0.9) ‡	73.1	(0.9) ‡	38.4	(0.9) ‡	61.6	(0.9) ‡
	Peru	17.8	(0.8) †	82.2	(0.8) †	26.2	(0.7) †	73.8	(0.7) †	19.0	(0.7) †	81.0	(0.7) †	31.5	(0.8) †	68.5	(0.8) †
	Philippines	27.1	(0.8)	72.9	(0.8)	32.1	(0.8)	67.9	(0.8)	32.1	(0.7)	67.9	(0.7)	42.3	(0.6)	57.7	(0.6)
	Romania	39.1	(1.3)	60.9	(1.3)	32.3	(1.0)	67.7	(1.0)	37.2	(1.0)	62.8	(1.0)	47.0	(0.9)	53.0	(0.9)
	Russia	21.6	(0.7)	78.4	(0.7)	20.9	(0.6)	79.1	(0.6)	19.3	(0.6)	80.7	(0.6)	21.3	(0.6)	78.7	(0.6)
	Saudi Arabia	59.8	(0.9)	40.2	(0.9)	56.5	(0.7)	43.5	(0.7)	33.1	(0.9)	66.9	(0.9)	52.2	(0.9)	47.8	(0.9)
	Serbia	26.4	(1.0)	73.6	(1.0)	27.9	(8.0)	72.1	(8.0)	20.2	(0.8)	79.8	(0.8)	36.1	(0.6)	63.9	(0.6)
	Singapore	10.6	(0.4)	89.4	(0.4)	36.3	(0.6)	63.7	(0.6)	20.7	(0.5)	79.3	(0.5)	34.1	(0.6)	65.9	(0.6)
	Chinese Taipei	14.2	(0.5)	85.8	(0.5)	22.5	(0.5)	77.5	(0.5)	28.0	(0.6)	72.0	(0.6)	26.2	(0.6)	73.8	(0.6)
	Γhailand	22.6	(0.8)	77.4	(0.8)	28.1	(0.7)	71.9	(0.7)	30.3	(0.8)	69.7	(0.8)	34.9	(0.7)	65.1	(0.7)
	Ukraine	26.0	(1.0)	74.0	(1.0)	21.0	(0.9)	79.0	(0.9)	24.6	(1.0)	75.4	(1.0)	28.6	(0.9)	71.4	(0.9)
	United Arab Emirates	25.6	(0.4)	74.4	(0.4)	33.7	(0.5)	66.3	(0.5)	21.7	(0.4)	78.3	(0.4)	32.5	(0.5)	67.5	(0.5)
	Uruguay	32.6	(0.9) †	67.4	(0.9) †	37.1	(1.0) †	62.9	(1.0) †	29.1	(0.8) †	70.9	(0.8) †	37.9	(1.0) †	62.1	(1.0) †
	/iet Nam	25.2	(1.1)	74.8	(1.1)	27.3	(0.9)	72.7	(0.9)	32.2	(0.8)	67.8	(0.8)	54.4	(0.8)	45.6	(0.8)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of students' awareness of global issues is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B2.2.1 [5/6] Students' awareness of global issues

			Percentage	of student	s who respor	nded how i	informed the	y are abou	t the followir	ng topics:		
			alnutrition in s of the world	I		Causes o	f poverty				men and wom	
	Never heard or doesn' much ab	t know	Knows about		Never heard or doesn' much ab	t know	Knows about or very famil		Never heard or doesn't much ab	know	Knows about or very famil	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia  Austria	22.3	(0.5)	77.7	(0.5)	20.2	(0.5)	79.8	(0.5)	13.3	(0.4)	86.7	(0.4)
5 Austria	20.4	(0.6)	79.6	(0.6)	20.2	(0.7)	79.8	(0.7)	15.7	(0.7)	84.3	(0.7)
Canada	22.2	(0.4)	77.8	(0.4)	21.0	(0.5)	79.0	(0.5)	12.5	(0.3)	87.5	(0.3)
Chile	28.7	(0.6)	71.3	(0.6)	26.2	(0.7)	73.8	(0.7)	16.6	(0.7)	83.4	(0.7)
Colombia	23.4	(0.7)	76.6	(0.7)	21.0	(0.7)	79.0	(0.7)	21.5	(0.7)	78.5	(0.7)
Estonia	19.8	(0.6)	80.2	(0.6)	20.3	(0.7)	79.7	(0.7)	18.5	(0.6)	81.5	(0.6)
France	18.4	(0.6)	81.6	(0.6)	23.4	(0.7)	76.6	(0.7)	15.3	(0.6)	84.7	(0.6)
Germany	19.7	(0.8) †	80.3	(0.8) †	18.2	(0.7) †	81.8	(0.7) †	15.3	(0.8) †	84.7	(0.8) †
Greece	14.4	(0.6)	85.6	(0.6)	13.5	(0.6)	86.5	(0.6)	12.8	(0.6)	87.2	(0.6)
Hungary	22.7	(0.7)	77.3	(0.7)	22.1	(0.7)	77.9	(0.7)	22.8	(0.7)	77.2	(0.7)
Iceland	22.2	(0.8)	77.8	(0.8)	27.1	(0.7)	72.9	(0.7)	14.0	(0.6)	86.0	(0.6)
Ireland	22.1	(0.6)	77.9	(0.6)	20.4	(0.6)	79.6	(0.6)	12.1	(0.5)	87.9	(0.5)
Israel	33.3	(0.8)	66.7	(0.8)	29.4	(0.7)	70.6	(0.7)	18.7	(0.6)	81.3	(0.6)
Italy	22.1	(0.7)	77.9	(0.7)	23.6	(0.7)	76.4	(0.7)	16.5	(0.6)	83.5	(0.6)
Korea	33.7	(0.7)	66.3	(0.7)	35.9	(0.7)	64.1	(0.7)	18.1	(0.6)	81.9	(0.6)
Latvia	22.5	(0.7)	77.5	(0.7)	24.8	(0.7)	75.2	(0.7)	28.1	(0.7)	71.9	(0.7)
Lithuania	17.1	(0.5)	82.9	(0.5)	15.9	(0.5)	84.1	(0.5)	18.6	(0.5)	81.4	(0.5)
Mexico	22.6	(0.8) †	77.4	(0.8) †	19.1	(0.7) †	80.9	(0.7) †	16.3	(0.6) †	83.7	(0.6) †
New Zealand	27.4	(0.6)	72.6	(0.6)	22.7	(0.6)	77.3	(0.6)	17.3	(0.5)	82.7	(0.5)
Poland	14.7	(0.6)	85.3	(0.6)	23.7	(0.8)	76.3	(0.8)	19.0	(0.6)	81.0	(0.6)
Portugal	18.5	(0.7)	81.5	(0.7)	16.5	(0.7)	83.5	(0.7)	11.2	(0.5)	88.8	(0.5)
Scotland (United Kingdom)	24.5	(0.9) ‡	75.5	(0.9) ‡	13.0	(0.7) ‡	87.0	(0.7) ‡	15.0	(0.7) ‡	85.0	(0.7) ‡
Slovak Republic	26.9	(0.7)	73.1	(0.7)	29.0	(0.7)	71.0	(0.7)	28.8	(0.7)	71.2	(0.7)
Slovenia	18.2	(0.6)	81.8	(0.6)	18.5	(0.7)	81.5	(0.7)	16.8	(0.7)	83.2	(0.7)
Spain	18.2	(0.4)	81.8	(0.4)	21.0	(0.4)	79.0	(0.4)	8.3	(0.4)	91.7	(0.4)
Switzerland	23.7	(0.7)	76.3	(0.7)	24.9	(0.9)	75.1	(0.9)	19.9	(0.7)	80.1	(0.7)
Turkey	16.9	(0.6)	83.1	(0.6)	14.4	(0.6)	85.6	(0.6)	16.4	(0.6)	83.6	(0.6)
OECD average	22.1	(0.1)	77.9	(0.1)	21.7	(0.1)	78.3	(0.1)	17.0	(0.1)	83.0	(0.1)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

**Note**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

<sup>2.</sup> The total variation in the index of students' awareness of global issues is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B2.2.1 [6/6] **Students' awareness of global issues** Based on students' reports

			Percentage	of student	s who respor	nded how i	informed the	y are abou	it the followir	g topics:		
			alnutrition in s of the world			Causes o	f poverty				nen and wom s of the world	
	Never heard or doesn't much ab	t know	Knows about		Never heard or doesn't much ab	t know	Knows about or very famil		Never heard or doesn't much ab	know	Knows about or very famil	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Albania Argentina Baku (Azerbaijan)	17.3	(0.6)	82.7	(0.6)	13.9	(0.6)	86.1	(0.6)	14.4	(0.6)	85.6	(0.6)
Argentina	34.8	(0.6)	65.2	(0.6)	29.7	(0.7)	70.3	(0.7)	26.6	(0.9)	73.4	(0.9)
(	24.3	(0.7) †	75.7	(0.7) †	21.2	(0.6) †	78.8	(0.6) †	21.9	(0.7) †	78.1	(0.7) †
Belarus	23.6	(0.7)	76.4	(0.7)	22.2	(0.6)	77.8	(0.6)	26.3	(0.8)	73.7	(0.8)
Bosnia and Herzegovina	23.9	(0.8)	76.1	(0.8)	22.2	(0.7)	77.8	(0.7)	22.8	(0.8)	77.2	(0.8)
Brazil	28.3	(0.7) †	71.7	(0.7) †	26.2	(0.7) †	73.8	(0.7) †	25.6	(0.7) †	74.4	(0.7) †
Brunei Darussalam	43.0	(0.6)	57.0	(0.6)	50.5	(0.6)	49.5	(0.6)	42.7	(0.6)	57.3	(0.6)
Bulgaria	24.8	(0.9)	75.2	(0.9)	24.1	(0.9)	75.9	(0.9)	26.1	(0.9)	73.9	(0.9)
Costa Rica	23.0	(0.7)	77.0	(0.7)	18.8	(0.6)	81.2	(0.6)	16.7	(0.7)	83.3	(0.7)
Croatia	14.9	(0.5)	85.1	(0.5)	14.9	(0.5)	85.1	(0.5)	14.2	(0.5)	85.8	(0.5)
Cyprus	21.2	(0.6)	78.8	(0.6)	20.6	(0.6)	79.4	(0.6)	17.3	(0.5)	82.7	(0.5)
Dominican Republic	26.7	(1.0) ‡	73.3	(1.0) ‡	23.4	(1.0) ‡	76.6	(1.0) ‡	24.6	(1.0) ‡	75.4	(1.0) ‡
Hong Kong (China)	20.7	(0.6)	79.3	(0.6)	15.8	(0.6)	84.2	(0.6)	18.6	(0.7)	81.4	(0.7)
Indonesia	38.9	(1.0)	61.1	(1.0)	32.3	(1.0)	67.7	(1.0)	45.4	(1.0)	54.6	(1.0)
Jordan	23.3	(0.8)	76.7	(0.8)	21.3	(0.7)	78.7	(0.7)	21.5	(0.6)	78.5	(0.6)
Kazakhstan 	22.3	(0.4)	77.7	(0.4)	21.8	(0.5)	78.2	(0.5)	23.4	(0.5)	76.6	(0.5)
Kosovo	22.3	(0.6)	77.7	(0.6)	20.3	(0.6)	79.7	(0.6)	19.0	(0.6)	81.0	(0.6)
Lebanon	34.4	(1.0)	65.6	(1.0)	27.2	(1.1)	72.8	(1.1)	28.5	(1.1)	71.5	(1.1)
Macao (China)	24.0	(0.7)	76.0	(0.7)	26.8	(0.8)	73.2	(0.8)	25.7	(0.7)	74.3	(0.7)
Malaysia	36.6	(0.8)	63.4	(0.8)	29.8	(0.9)	70.2	(0.9)	38.4	(0.8)	61.6	(0.8)
Malta	23.0	(0.8)	77.0	(0.8)	23.7	(0.8)	76.3	(0.8)	13.3	(0.6)	86.7	(0.6)
Moldova	33.2	(0.8)	66.8	(0.8)	21.3	(0.7)	78.7	(0.7)	28.1	(0.8)	71.9	(0.8)
Montenegro	20.7	(0.5)	79.3	(0.5)	19.5	(0.5)	80.5	(0.5)	19.8	(0.5)	80.2	(0.5)
Morocco	32.3	(1.0) †	67.7	(1.0) †	25.9	(1.1) †	74.1	(1.1) †	24.8	(1.0) †	75.2	(1.0) †
North Macedonia	24.4	(0.6)	75.6	(0.6)	20.2	(0.6)	79.8	(0.6)	26.1	(0.6)	73.9	(0.6)
Panama	23.2	(0.8) ‡	76.8	(0.8) ‡	21.2	(0.9) ‡	78.8	(0.9) ‡	21.6	(0.8) ‡	78.4	(0.8) ‡
Peru	18.8	(0.7) †	81.2 67.4	(0.7) †	15.8 29.5	(0.6) †	84.2 70.5	(0.6) †	13.5 27.9	(0.6) †	86.5 72.1	(0.6) †
Philippines	32.6 44.7	(0.8)	55.3	(0.8)	33.1	(0.7)	66.9	(0.7)	32.2	(0.8)	67.8	(0.8)
Romania Russia	21.5	(0.9)	78.5	(0.9)	18.8		81.2		23.8	(1.2)	76.2	(1.2)
Saudi Arabia	38.5	(0.6)	61.5	(0.6)	33.9	(0.5)	66.1	(0.5)	42.6	(0.6)	57.4	(0.6)
Serbia												
	21.9	(0.7)	78.1	(0.7)	20.5	(0.7)	79.5	(0.7)	21.0	(0.7)	79.0	(0.7)
Singapore Chinese Taipei	24.0 19.2	(0.5)	76.0 80.8	(0.5)	25.8 25.7	(0.5)	74.2 74.3	(0.5)	22.6 16.3	(0.6)	77.4 83.7	(0.6)
Thailand	32.6	(0.8)	67.4		23.9		74.3		24.1		75.9	
Ukraine	28.7	, ,		(0.8)	23.9	(0.6)		(0.6)	25.1	(0.7)	75.9 74.9	(0.7)
United Arab Emirates	28.7	(0.7)	71.3 78.8	(0.7)	20.0	(0.7)	77.2 80.0	(0.7)	17.8	(0.8)	74.9 82.2	(0.8)
Uruguay	26.9	(0.4)	78.8	(0.4)	26.3	(0.4)	73.7	(0.4)	17.8	(0.4)	83.2	(0.4)
Viet Nam	35.3	(0.9)	64.7	(0.9)	30.4	(0.8) 1	69.6	(0.8) 1	24.0	(1.0)	76.0	(1.0)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of students' awareness of global issues is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.2.4 [1/6] **Self-efficacy regarding global issues** 

						Self-effi	cacy regai	rding global	issues				
								,	/ariation ir	the index <sup>1</sup>			
		Mean		Standard (		Total va		Variation scho	ols <sup>3</sup>	Variatior scho	ols	Proporti variation t between s	that lies chools <sup>4</sup>
Acceptable		Mean	S.E.	S.D. 1.03	S.E.	Variance 1.07	S.E.	Variance 0.07	S.E.	Variance	S.E.	6.3	S.E.
Australia Austria		0.05	(0.01)	1.03	(0.01)	1.07	(0.02)	0.07	(0.01)	1.00 0.88	(0.02)	10.4	(0.8)
			. ,		. ,		, ,		, ,		` '		. ,
Canada		0.14	(0.01)	1.05	(0.01)	1.10	(0.02)	0.05	(0.01)	1.05	(0.02)	4.7	(0.6)
Chile		0.01	(0.02)	0.98	(0.02)	0.96	(0.03)	0.02	(0.00)	0.92	(0.03)	2.1	(0.5)
Colombia		0.15	(0.02)	0.96	(0.01)	0.92	(0.03)	0.04	(0.01)	0.85	(0.03)	4.8	(1.0)
Estonia		-0.11	(0.02)	0.95	(0.01)	0.89	(0.03)	0.03	(0.01)	0.84	(0.02)	3.9	(0.9)
France		0.07	(0.02)	0.99	(0.01)	0.93	(0.03)	0.05	(0.01)	0.88	(0.03)	4.9	(0.9)
Germany		0.21	(0.02) †	0.98	(0.01) †	0.96	(0.03)	0.08	(0.01) †	0.88	(0.03) †	8.6	(1.2) 1
Greece		0.11	(0.01)	0.94	(0.01)	0.88	(0.02)	0.03	(0.01)	0.85	(0.02)	3.2	(0.7)
Hungary		-0.03	(0.02)	1.01	(0.01)	1.00	(0.03)	0.06	(0.01)	0.94	(0.03)	5.9	(1.0)
Iceland		-0.11	(0.02)	1.10	(0.01)	1.21	(0.03)	0.04	(0.02)	1.13	(0.07)	3.7	(1.6)
Ireland		-0.03	(0.01)	0.94	(0.01)	0.89	(0.02)	0.01	(0.00)	0.87	(0.02)	1.2	(0.5)
Israel		0.05	(0.02)	1.08	(0.01)	1.18	(0.03)	0.04	(0.01)	1.12	(0.03)	3.7	(0.9)
Italy		-0.16	(0.02)	0.96	(0.01)	0.92	(0.03)	0.02	(0.01)	0.87	(0.03)	2.8	(0.7)
Korea		0.16	(0.02)	1.10	(0.01)	1.18	(0.03)	0.08	(0.01)	1.10	(0.03)	7.0	(1.1)
Latvia		-0.04	(0.01)	0.92	(0.01)	0.85	(0.02)	0.04	(0.01)	0.81	(0.02)	4.5	(0.9)
Lithuania		0.08	(0.02)	0.95	(0.01)	0.90	(0.02)	0.03	(0.01)	0.83	(0.02)	3.7	(0.9)
Mexico		0.09	(0.02) †	0.90	(0.01) †	0.77	(0.03)	0.02	(0.01) †	0.75	(0.03) †	2.5	(0.8)
New Zeala	nd	-0.08	(0.02)	1.00	(0.01)	1.00	(0.02)	0.03	(0.01)	0.96	(0.03)	2.9	(0.6)
Poland		0.10	(0.02)	0.93	(0.01)	0.88	(0.02)	0.04	(0.01)	0.84	(0.02)	4.4	(0.9)
Portugal		0.01	(0.02)	0.93	(0.01)	0.85	(0.02)	0.03	(0.01)	0.80	(0.02)	3.5	(0.8)
Scotland (	United Kingdom)	-0.19	(0.02) ‡	1.03	(0.02) ‡	1.06	(0.03)	0.02	(0.01) ‡	1.03	(0.03) ‡	2.3	(0.8)
Slovak Rep	oublic	-0.42	(0.01)	1.00	(0.01)	1.00	(0.03)	0.08	(0.01)	0.90	(0.03)	7.9	(1.0)
Slovenia		-0.10	(0.01)	0.99	(0.01)	0.98	(0.02)	0.06	(0.01)	0.91	(0.03)	5.9	(1.0)
Spain		-0.04	(0.01)	0.96	(0.01)	0.92	(0.02)	0.03	(0.00)	0.89	(0.02)	2.7	(0.5)
Switzerlan	d	0.02	(0.02)	0.96	(0.02)	0.96	(0.04)	0.03	(0.01)	0.92	(0.03)	2.7	(1.0)
Turkey		0.03	(0.02)	1.08	(0.01)	1.16	(0.03)	0.06	(0.01)	1.09	(0.03)	5.6	(0.8)
OECD ave	rage	0.00	(0.00)	0.99	(0.00)	0.98	(0.01)	0.04	(0.00)	0.92	(0.01)	4.5	(0.2)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

**Note**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

<sup>2.</sup> The total variation in the index of self-efficacy regarding global issues is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.2.4 [2/6] **Self-efficacy regarding global issues** Based on students' reports

					Self-eff	cacy regar	ding global	issues				
							,	Variation ir	the index <sup>1</sup>			
	0.04 (0.02) -0.62 (0.02) -0.20 (0.02) -0.23 (0.01) -0.31 (0.02) -0.22 (0.02) -0.27 (0.01) -0.21 (0.01) 0.03 (0.02) -0.08 (0.02) -0.09 (0.02) -0.50 (0.02) -0.39 (0.01)		Standard		Total va		Variation scho	ols <sup>3</sup>	Variation scho	ols	Proporti variation t between s	that lies chools <sup>4</sup>
⊻ Albania			S.D. 1,10	S.E. (0.01)	Variance 1.20	S.E. (0.03)	Variance 0.08	S.E. (0.01)	Variance 1.09	S.E. (0.03)	6.7	S.E. (1.0)
의 Albania Baku (Azerbaijan)			1.02	(0.01)	1.04	(0.03)	0.08	(0.01)	0.98	(0.03)	4.3	(0.8)
Baku (Azerbaijan)		, ,	1.02	(0.01) †	1.62	(0.03)	0.04	(0.01) †	1.60	(0.03)	1.2	(0.6) †
Belarus		, ,	0.99	(0.01)	0.99	(0.03)	0.02	(0.01)	0.95	(0.03)	3.1	(0.8)
Bosnia and Herzegovina		, ,	1.17	(0.01)	1.37	(0.04)	0.07	(0.01)	1.29	(0.04)	4.9	(0.9)
Brazil			1.15	(0.01) †	1.28	(0.03)	0.09	(0.01) †	1.19	(0.03) †	7.0	(0.9) †
Brunei Darussalam	-0.26	, ,	0.87	(0.01)	0.76	(0.02)	0.05	(0.01)	0.71	(0.04)	6.0	(1.8)
Bulgaria		` '	1.11	(0.02)	1.23	(0.04)	0.05	(0.01)	1.16	(0.04)	4.1	(1.1)
Costa Rica	0.05	(0.02)	0.98	(0.01)	0.96	(0.03)	0.04	(0.01)	0.91	(0.02)	4.1	(0.7)
Croatia	0.08	(0.02)	1.03	(0.01)	1.05	(0.03)	0.06	(0.01)	0.99	(0.03)	5.9	(0.8)
Cyprus	-0.04	(0.02)	1.05	(0.01)	1.11	(0.03)	0.04	(0.01)	1.07	(0.04)	3.8	(1.2)
Dominican Republic	0.21	(0.03) ‡	1.17	(0.02) ‡	1.36	(0.05)	0.04	(0.01) ‡	1.27	(0.05) ‡	3.3	(1.1) ‡
Hong Kong (China)	0.04	(0.02)	1.00	(0.01)	1.00	(0.03)	0.03	(0.01)	0.96	(0.03)	3.0	(1.0)
Indonesia	-0.62	(0.02)	1.01	(0.02)	1.02	(0.03)	0.03	(0.01)	0.97	(0.03)	2.6	(0.6)
Jordan	-0.20	(0.02)	1.20	(0.01)	1.43	(0.03)	0.06	(0.01)	1.36	(0.03)	4.1	(0.8)
Kazakhstan	-0.23	(0.01)	1.16	(0.01)	1.30	(0.03)	0.08	(0.01)	1.22	(0.02)	6.1	(0.6)
Kosovo	-0.31	(0.02)	1.02	(0.01)	1.05	(0.03)	0.02	(0.01)	1.02	(0.04)	2.0	(0.7)
Lebanon	-0.22	(0.02)	0.94	(0.01)	0.85	(0.03)	0.05	(0.01)	0.79	(0.03)	6.5	(1.1)
Macao (China)	-0.27	(0.01)	0.92	(0.01)	0.85	(0.02)	0.05	(0.01)	0.76	(0.03)	5.6	(1.7)
Malaysia	-0.21	(0.01)	0.84	(0.01)	0.70	(0.02) †	0.05	(0.01)	0.65	(0.02)	7.3	(1.1)
Malta	0.03	(0.02)	1.05	(0.02)	1.09	(0.04)	0.03	(0.01)	1.06	(0.04)	2.9	(1.0)
Moldova	-0.08	(0.02)	0.93	(0.01)	0.88	(0.02)	0.04	(0.01)	0.83	(0.02)	4.4	(1.0)
Montenegro	-0.02	(0.02)	1.15	(0.01)	1.31	(0.03)	0.04	(0.01)	1.24	(0.05)	3.4	(0.9)
Morocco		(0.02) †	1.06	(0.01) †	1.11	(0.03)	0.03	(0.01) †	1.08	(0.03) †	2.5	(0.7) †
North Macedonia		, ,	1.04	(0.01)	1.08	(0.03)	0.09	(0.02)	0.98	(0.03)	8.1	(1.7)
Panama		(0.02) †	0.95	(0.02) †	0.88	(0.03)	0.03	(0.01) †	0.82	(0.04) †	3.0	(1.1) †
Peru		, ,	0.90	(0.01) †	0.80	(0.03)	0.01	(0.01) †	0.78	(0.02) †	1.5	(0.7) †
Philippines			0.91	(0.01)	0.82	(0.02)	0.03	(0.01)	0.80	(0.02)	3.6	(0.7)
Romania			0.90	(0.01)	0.81	(0.02)	0.05	(0.01)	0.76	(0.02)	5.7	(0.8)
Russia		` ′	1.07	(0.01)	1.16	(0.02)	0.02	(0.01)	1.13	(0.03)	1.8	(0.5)
Saudi Arabia			1.11	(0.01)	1.19	(0.03)	0.03	(0.01)	1.16	(0.03)	2.8	(0.6)
Serbia			1.13	(0.01)	1.28	(0.03)	0.07	(0.01)	1.21	(0.03)	5.3	(1.0)
Singapore Chinese Tainei		, ,	0.92	(0.01)	0.85	(0.02)	0.06	(0.01)	0.78	(0.02)	7.0	(1.0)
Chinese Taipei Thailand	-0.11	(0.02)	1.00 0.94	(0.01)	1.01 0.87	(0.02)	0.04	(0.01)	0.96 0.83	(0.03)	3.9 3.9	(0.6)
Ukraine	-0.11	(0.01)	0.94	(0.01)		(0.03)	0.03	(0.01)	0.83	(0.03)	3.9 7.4	(0.7)
United Arab Emirates	0.14	(0.02)	1.13	(0.01)	0.85 1.24	(0.02)	0.06	(0.01)	1.16	(0.02)	6.6	(1.0)
Uruquay	-0.03	(0.01)	0.98	(0.01)	0.96	(0.02)	0.08	(0.01) (0.01) †	0.92	(0.03) †	2.2	(0.7)
		, ,				, ,						
Viet Nam	-0.30	(0.02)	0.84	(0.01)	0.70	(0.03) †	0.05	(0.01)	0.64	(0.02)	7.7	(1.3)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of self-efficacy regarding global issues is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.2.4 [3/6] **Self-efficacy regarding global issues** Based on students' reports

	Percen	tage of st	udents who r	esponded	how easy the	y think it v	vould be for	them to pe	rform the fo	llowing ta	sks on their o	wn:
			n-dioxide emi: limate chang		of textil	es and wor	ion between   king conditio of production	ns in			rent reasons v me refugees	vhy
	Could n struggle to		Could do tasl with some		Could n struggle to		Could do ta or with som		Could n struggle to		Could do ta or with som	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia  Austria	30.2	(0.6)	69.8	(0.6)	45.5	(0.6)	54.5	(0.6)	18.0	(0.5)	82.0	(0.5)
<b>8</b> Austria	47.5	(0.8)	52.5	(8.0)	36.2	(0.8)	63.8	(0.8)	14.6	(0.6)	85.4	(0.6)
Canada	26.7	(0.6)	73.3	(0.6)	45.1	(0.7)	54.9	(0.7)	20.1	(0.4)	79.9	(0.4)
Chile	35.0	(0.8)	65.0	(8.0)	46.1	(8.0)	53.9	(0.8)	30.0	(0.7)	70.0	(0.7)
Colombia	29.1	(1.0)	70.9	(1.0)	33.7	(8.0)	66.3	(0.8)	24.6	(0.9)	75.4	(0.9)
Estonia	40.5	(0.8)	59.5	(8.0)	46.5	(0.7)	53.5	(0.7)	28.3	(0.7)	71.7	(0.7)
France	33.5	(0.8)	66.5	(0.8)	34.0	(0.8)	66.0	(0.8)	22.7	(0.7)	77.3	(0.7)
Germany	39.4	(0.9) †	60.6	(0.9) †	28.4	(1.0) †	71.6	(1.0) †	11.7	(0.5) †	88.3	(0.5) †
Greece	54.9	(0.7)	45.1	(0.7)	37.8	(0.7)	62.2	(0.7)	18.4	(0.8)	81.6	(0.8)
Hungary	33.1	(0.8)	66.9	(8.0)	43.7	(0.8)	56.3	(0.8)	22.4	(0.7)	77.6	(0.7)
Iceland	36.3	(0.9)	63.7	(0.9)	47.0	(0.9)	53.0	(0.9)	20.4	(0.7)	79.6	(0.7)
Ireland	27.7	(0.8)	72.3	(0.8)	46.5	(0.8)	53.5	(0.8)	19.5	(0.7)	80.5	(0.7)
Israel	35.9	(0.8)	64.1	(0.8)	27.1	(0.7)	72.9	(0.7)	32.1	(0.8)	67.9	(0.8)
Italy	42.2	(0.7)	57.8	(0.7)	48.4	(0.8)	51.6	(0.8)	29.5	(0.7)	70.5	(0.7)
Korea	18.7	(0.7)	81.3	(0.7)	41.5	(0.8)	58.5	(0.8)	22.2	(0.6)	77.8	(0.6)
Latvia	36.3	(0.7)	63.7	(0.7)	48.1	(0.7)	51.9	(0.7)	19.8	(0.5)	80.2	(0.5)
Lithuania	37.9	(0.8)	62.1	(0.8)	39.0	(0.7)	61.0	(0.7)	17.3	(0.6)	82.7	(0.6)
Mexico	33.3	(0.9) †	66.7	(0.9) †	41.3	(0.7) †	58.7	(0.7) †	29.2	(0.8) †	70.8	(0.8) †
New Zealand	31.3	(0.7)	68.7	(0.7)	52.4	(0.7)	47.6	(0.7)	22.3	(0.7)	77.7	(0.7)
Poland	37.4	(0.9)	62.6	(0.9)	37.2	(0.8)	62.8	(0.8)	16.6	(0.8)	83.4	(0.8)
Portugal	35.6	(0.9)	64.4	(0.9)	42.9	(1.0)	57.1	(1.0)	20.7	(0.5)	79.3	(0.5)
Scotland (United Kingdom)	38.6	(1.0) ‡	61.4	(1.0) ‡	54.2	(1.2) ‡	45.8	(1.2) ‡	20.5	(1.0) ‡	79.5	(1.0) ‡
Slovak Republic	58.5	(0.8)	41.5	(0.8)	53.7	(0.8)	46.3	(0.8)	35.8	(0.8)	64.2	(0.8)
Slovenia	35.8	(0.7)	64.2	(0.7)	38.9	(0.8)	61.1	(0.8)	27.9	(0.8)	72.1	(0.8)
Spain	41.8	(0.5)	58.2	(0.5)	43.0	(0.5)	57.0	(0.5)	26.6	(0.5)	73.4	(0.5)
Switzerland	42.3	(1.2)	57.7	(1.2)	36.9	(0.9)	63.1	(0.9)	16.9	(0.9)	83.1	(0.9)
Turkey	41.1	(0.8)	58.9	(0.8)	39.7	(0.7)	60.3	(0.7)	26.7	(0.7)	73.3	(0.7)
OECD average	37.1	(0.2)	62.9	(0.2)	42.0	(0.2)	58.0	(0.2)	22.8	(0.1)	77.2	(0.1)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of self-efficacy regarding global issues is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.2.4 [4/6] **Self-efficacy regarding global issues** Based on students' reports

	Percer	itage of stu	ıdents who r	esponded	how easy the	y think it v	vould be for	them to pe	rform the fo	llowing tas	ks on their o	wn:
			-dioxide emi: imate chang		of textil	es and wor	ion between king conditio of productior	ns in			ent reasons v me refugees	vhy
	Could n struggle to	do task	Could do ta or with son	ne effort	Could no	do task	Could do ta or with son	ne effort	Could n struggle to	do task	Could do ta or with son	ne effort
Albania	25.1	S.E. (0.7)	74.9	S.E. (0.7)	27.8	S.E. (0.6)	72.2	S.E. (0.6)	17.0	S.E. (0.7)	83.0	S.E. (0.7)
Argentina	54.6	(0.7)	45.4	(0.7)	57.2	(0.0)	42.8	(0.0)	39.7	(0.7)	60.3	(0.7)
Albania Argentina Baku (Azerbaijan)	49.8	(0.8)	50.2	(0.8)	44.4	(0.7)	55.6	(0.7)	29.8	(0.9)	70.2	(0.8)
Belarus	35.2	(0.8)	64.8	(0.8)	47.5	(0.8)	52.5	(0.8)	25.6	(0.8) 1	74.4	(0.8)
Bosnia and Herzegovina	53.3	(1.1)	46.7	(1.1)	51.6	(0.8)	48.4	(0.8)	32.8	(1.1)	67.2	(1.1)
Brazil	55.1	(0.8) †	44.9	(0.8) †	41.1	(0.8) †	58.9	(0.5)	31.4	(0.6) †	68.6	(0.6)
Brunei Darussalam	35.5	(0.6)	64.5	(0.6)	58.0	(0.6)	42.0	(0.6)	36.3	(0.6)	63.7	(0.6)
Bulgaria	41.7	(1.0)	58.3	(1.0)	41.8	(0.0)	58.2	(0.0)	28.5	(0.0)	71.5	(0.0)
Costa Rica	36.3	(0.8)	63.7	(0.8)	49.3	(0.8)	50.7	(0.8)	30.4	(0.5)	69.6	(0.8)
Croatia	36.3	(0.8)	63.7	(0.8)	39.1	(0.7)	60.9	(0.7)	17.4	(0.6)	82.6	(0.6)
Cyprus	48.3	(0.7)	51.7	(0.7)	53.6	(0.7)	46.4	(0.7)	23.9	(0.6)	76.1	(0.6)
Dominican Republic	33.6	(1.1) †	66.4	(1.1) †	34.2	(1.1) ‡	65.8	(1.1) ‡	26.7	(1.0) ‡	73.3	(1.0)
Hong Kong (China)	20.9	(0.7)	79.1	(0.7)	45.2	(0.9)	54.8	(0.9)	25.5	(0.7)	74.5	(0.7)
Indonesia	66.1	(0.7)	33.9	(0.7)	65.7	(0.9)	34.3	(0.9)	54.1	(0.7)	45.9	(0.7)
Jordan	51.7	(0.9)	48.3	(0.9)	56.3	(0.7)	43.7	(0.7)	40.3	(0.9)	59.7	(0.9)
Kazakhstan	48.0	(0.5)	52.0	(0.5)	53.8	(0.6)	46.2	(0.7)	44.4	(0.5)	55.6	(0.6)
Kosovo	65.8	(0.9)	34.2	(0.9)	54.8	(0.9)	45.2	(0.9)	47.9	(0.9)	52.1	(0.9)
Lebanon	41.6	(1.1)	58.4	(1.1)	50.8	(1.0)	49.2	(1.0)	36.2	(0.9)	63.8	(0.9)
Macao (China)	39.1	(0.8)	60.9	(0.8)	64.3	(0.8)	35.7	(0.8)	43.0	(0.7)	57.0	(0.7)
Malaysia	35.7	(0.8)	64.3	(0.8)	48.8	(0.8)	51.2	(0.8)	36.1	(0.7)	63.9	(0.8)
Malta	31.6	(0.8)	68.4	(0.8)	54.3	(0.9)	45.7	(0.9)	19.0	(0.7)	81.0	(0.7)
Moldova	48.5	(0.7)	51.5	(0.7)	49.4	(0.8)	50.6	(0.8)	27.4	(0.7)	72.6	(0.7)
Montenegro	46.2	(0.6)	53.8	(0.6)	42.5	(0.6)	57.5	(0.6)	27.4	(0.6)	72.8	(0.6)
Morocco	59.8	(1.0) †	40.2	(1.0) †	64.1	(0.8) †	35.9	(0.8) †	48.1	(1.0) †	51.9	(1.0)
North Macedonia	59.1	(0.8)	40.9	(0.8)	59.8	(0.6)	40.2	(0.6)	39.4	(0.7)	60.6	(0.7)
Panama	36.2	(1.1) †	63.8	(1.1) †	41.3	(1.0) †	58.7	(1.0) †	28.5	(1.0) ‡	71.5	(1.0)
Peru	30.6	(0.9) †	69.4	(0.9) †	33.6	(0.9) †	66.4	(0.9) †	24.7	(0.8) †	75.3	(0.8)
Philippines	37.7	(0.8)	62.3	(0.8)	48.2	(0.7)	51.8	(0.7)	41.1	(0.7)	58.9	(0.7)
Romania	60.3	(1.1)	39.7	(1.1)	52.8	(1.0)	47.2	(1.0)	31.8	(1.1)	68.2	(1.1)
Russia	43.8	(0.8)	56.2	(0.8)	50.7	(0.7)	49.3	(0.7)	31.0	(0.7)	69.0	(0.7)
Saudi Arabia	60.1	(0.7)	39.9	(0.7)	58.9	(0.7)	41.1	(0.7)	41.1	(0.8)	58.9	(0.8)
Serbia	46.0	(0.8)	54.0	(0.8)	47.9	(0.9)	52.1	(0.9)	28.2	(0.8)	71.8	(0.8)
Singapore	14.8	(0.5)	85.2	(0.5)	47.7	(0.6)	52.3	(0.6)	27.5	(0.5)	72.5	(0.5)
Chinese Taipei	22.9	(0.6)	77.1	(0.6)	45.8	(0.8)	54.2	(0.8)	24.9	(0.7)	75.1	(0.7)
Thailand	32.7	(0.8)	67.3	(0.8)	36.2	(0.6)	63.8	(0.6)	32.6	(0.7)	67.4	(0.7)
Ukraine	42.6	(1.2)	57.4	(1.2)	35.6	(0.8)	64.4	(0.8)	25.8	(0.9)	74.2	(0.9)
United Arab Emirates	28.5	(0.4)	71.5	(0.4)	37.6	(0.4)	62.4	(0.4)	24.8	(0.4)	75.2	(0.4)
Uruguay	49.0	(0.8) †	51.0	(0.8) †	49.1	(0.9) †	50.9	(0.9) †	30.3	(0.9) †	69.7	(0.9)
Viet Nam	30.9	(1.2)	69.1	(1.2)	63.7	(1.1)	36.3	(1.1)	40.7	(1.1)	59.3	(1.1)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of self-efficacy regarding global issues is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

 $<sup>{\</sup>it 4. This measure corresponds to the intra-class correlation (rho), multiplied by 100.}\\$ 

Table VI.B1.2.4 [5/6] Self-efficacy regarding global issues

	Percen	tage of stu	idents who r	esponded	how easy the	y think it v	would be for t	them to pe	erform the fol	lowing tas	sks on their o	wn:
			countries su te change th				mic crises in s e global econ				uences of eco the environm	
	Could n struggle to	do task	Could do ta or with son	ne effort	Could no	do task	Could do ta	ne effort	Could no struggle to	do task	Could do ta	ne effort
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia Austria	24.4	(0.5)	75.6	(0.5)	42.0	(0.6)	58.0	(0.6)	35.2	(0.5)	64.8	(0.5)
	28.5	(0.7)	71.5	(0.7)	44.3	(0.7)	55.7	(0.7)	34.4	(0.6)	65.6	(0.6)
Canada	22.1	(0.5)	77.9	(0.5)	37.2	(0.5)	62.8	(0.5)	32.7	(0.6)	67.3	(0.6)
Chile	23.6	(0.7)	76.4	(0.7)	31.7	(0.7)	68.3	(0.7)	28.7	(0.6)	71.3	(0.6)
Colombia	21.9	(0.8)	78.1	(0.8)	23.9	(0.8)	76.1	(0.8)	21.1	(0.7)	78.9	(0.7)
Estonia	31.1	(0.8)	68.9	(0.8)	44.7	(0.9)	55.3	(0.9)	35.5	(0.7)	64.5	(0.7)
France	27.0	(0.7)	73.0	(0.7)	38.7	(0.7)	61.3	(0.7)	37.2	(0.7)	62.8	(0.7)
Germany	23.4	(0.8) †	76.6	(0.8) †	39.8	(0.8) †	60.2	(0.8) †	30.8	(0.9) †	69.2	(0.9) †
Greece	28.5	(0.6)	71.5	(0.6)	32.2	(0.7)	67.8	(0.7)	35.7	(0.6)	64.3	(0.6)
Hungary	31.0	(0.7)	69.0	(0.7)	41.0	(0.6)	59.0	(0.6)	37.9	(0.8)	62.1	(8.0)
Iceland	28.6	(0.9)	71.4	(0.9)	44.1	(0.9)	55.9	(0.9)	42.9	(0.9)	57.1	(0.9)
Ireland	24.5	(0.6)	75.5	(0.6)	47.5	(0.7)	52.5	(0.7)	40.1	(0.7)	59.9	(0.7)
Israel	33.5	(0.7)	66.5	(0.7)	33.0	(0.6)	67.0	(0.6)	34.0	(0.7)	66.0	(0.7)
Italy	32.7	(0.7)	67.3	(0.7)	39.2	(0.8)	60.8	(0.8)	36.6	(0.7)	63.4	(0.7)
Korea	21.4	(0.7)	78.6	(0.7)	30.4	(0.6)	69.6	(0.6)	26.5	(0.7)	73.5	(0.7)
Latvia	25.1	(0.6)	74.9	(0.6)	42.6	(0.7)	57.4	(0.7)	41.9	(0.8)	58.1	(0.8)
Lithuania	20.8	(0.6)	79.2	(0.6)	35.9	(0.7)	64.1	(0.7)	33.9	(0.7)	66.1	(0.7)
Mexico	23.0	(0.7) †	77.0	(0.7) †	28.4	(0.8) †	71.6	(0.8) †	25.2	(0.7) †	74.8	(0.7) †
New Zealand	24.9	(0.7)	75.1	(0.7)	45.7	(0.7)	54.3	(0.7)	40.1	(0.7)	59.9	(0.7)
Poland	25.6	(0.7)	74.4	(0.7)	40.4	(0.8)	59.6	(0.8)	27.3	(0.8)	72.7	(8.0)
Portugal	27.6	(0.7)	72.4	(0.7)	37.7	(0.7)	62.3	(0.7)	33.9	(0.8)	66.1	(0.8)
Scotland (United Kingdom)	32.4	(0.9) ‡	67.6	(0.9) ‡	48.3	(1.1) ‡	51.7	(1.1) ‡	48.5	(1.1) ‡	51.5	(1.1) ‡
Slovak Republic	45.7	(8.0)	54.3	(0.8)	56.7	(0.8)	43.3	(0.8)	47.3	(0.8)	52.7	(8.0)
Slovenia	34.2	(0.8)	65.8	(0.8)	42.8	(0.8)	57.2	(0.8)	37.1	(0.8)	62.9	(0.8)
Spain	30.6	(0.5)	69.4	(0.5)	38.0	(0.5)	62.0	(0.5)	41.3	(0.5)	58.7	(0.5)
Switzerland	26.0	(0.9)	74.0	(0.9)	43.7	(0.9)	56.3	(0.9)	37.5	(0.9)	62.5	(0.9)
Turkey	31.1	(0.7)	68.9	(0.7)	35.7	(0.7)	64.3	(0.7)	25.6	(0.6)	74.4	(0.6)
OECD average	27.7	(0.1)	72.3	(0.1)	39.5	(0.1)	60.5	(0.1)	35.2	(0.1)	64.8	(0.1)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

**Note**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

<sup>2.</sup> The total variation in the index of self-efficacy regarding global issues is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

 $\label{table VI.B1.2.4} \textit{[6/6]} \ \ \textbf{Self-efficacy regarding global issues}$ 

		Percen	tage of stu	idents who re	esponded	how easy the	y think it v	would be for t	them to pe	erform the fol	lowing tas	ks on their o	wn:
				countries su te change th				mic crises in s e global econ				iences of ecoi the environm	
		Could no struggle to		Could do ta or with som		Could no struggle to %		Could do ta or with som		Could no struggle to		Could do tas or with som	
ers	lbania	17.5	(0.6)	82.5	(0.6)	21.9	(0.7)	78.1	(0.7)	16.0	(0.6)	84.0	(0.6)
the t	rgentina	31.4	(0.8)	68.6	(0.8)	36.5	(0.9)	63.5	(0.9)	39.1	(0.8)	60.9	(0.8)
=	Jaku (Azerbaijan)	33.3	(0.8) †	66.7	(0.8) †	37.3	(0.8) †	62.7	(0.8) †	29.2	(0.7) †	70.8	(0.7) †
Е	elarus	36.0	(0.7)	64.0	(0.7)	46.3	(0.8)	53.7	(0.8)	40.8	(0.8)	59.2	(0.8)
Е	Bosnia and Herzegovina	39.3	(0.9)	60.7	(0.9)	43.6	(0.9)	56.4	(0.9)	38.3	(0.9)	61.7	(0.9)
Е	Brazil	38.3	(0.8) †	61.7	(0.8) †	38.8	(0.8) †	61.2	(0.8) †	37.3	(0.6) †	62.7	(0.6) †
Е	runei Darussalam	31.1	(0.6)	68.9	(0.6)	51.6	(0.6)	48.4	(0.6)	46.0	(0.6)	54.0	(0.6)
Е	Bulgaria	31.3	(0.9)	68.7	(0.9)	37.5	(0.8)	62.5	(0.8)	33.7	(0.8)	66.3	(0.8)
(	Costa Rica	22.6	(0.7)	77.4	(0.7)	28.5	(0.7)	71.5	(0.7)	27.9	(0.7)	72.1	(0.7)
(	roatia	27.0	(0.7)	73.0	(0.7)	32.9	(0.6)	67.1	(0.6)	28.1	(0.7)	71.9	(0.7)
C	yprus	29.2	(0.7)	70.8	(0.7)	35.6	(0.7)	64.4	(0.7)	33.3	(0.6)	66.7	(0.6)
	Oominican Republic	22.8	(1.0) ‡	77.2	(1.0) ‡	25.5	(1.0) ‡	74.5	(1.0) ‡	23.4	(1.0) ‡	76.6	(1.0) ‡
H	long Kong (China)	25.3	(0.7)	74.7	(0.7)	37.1	(0.8)	62.9	(0.8)	30.4	(0.7)	69.6	(0.7)
I	ndonesia	57.0	(0.9)	43.0	(0.9)	57.1	(0.8)	42.9	(0.8)	55.7	(0.9)	44.3	(0.9)
J	ordan	41.1	(0.8)	58.9	(0.8)	45.5	(0.8)	54.5	(0.8)	44.2	(0.7)	55.8	(0.7)
ŀ	azakhstan 💮	44.3	(0.6)	55.7	(0.6)	46.5	(0.5)	53.5	(0.5)	42.8	(0.6)	57.2	(0.6)
k	Cosovo	50.5	(0.9)	49.5	(0.9)	50.0	(0.8)	50.0	(0.8)	42.9	(0.8)	57.1	(0.8)
L	ebanon	38.3	(0.9)	61.7	(0.9)	48.4	(0.9)	51.6	(0.9)	44.6	(0.8)	55.4	(0.8)
N	Aacao (China)	43.2	(0.8)	56.8	(0.8)	56.3	(0.8)	43.7	(0.8)	50.9	(0.8)	49.1	(0.8)
N	/lalaysia	36.6	(0.8)	63.4	(0.8)	46.1	(0.8)	53.9	(0.8)	34.5	(0.8)	65.5	(0.8)
N	/lalta	25.4	(0.7)	74.6	(0.7)	44.8	(0.9)	55.2	(0.9)	38.1	(0.9)	61.9	(0.9)
N	Moldova	32.9	(0.8)	67.1	(8.0)	40.1	(8.0)	59.9	(0.8)	33.6	(0.7)	66.4	(0.7)
N	Montenegro	33.7	(0.7)	66.3	(0.7)	34.1	(0.7)	65.9	(0.7)	31.2	(0.7)	68.8	(0.7)
N	Morocco	49.3	(1.0) †	50.7	(1.0) †	53.0	(0.8) †	47.0	(0.8) †	50.9	(0.8) †	49.1	(0.8) †
1	lorth Macedonia	46.8	(0.7)	53.2	(0.7)	55.3	(0.7)	44.7	(0.7)	48.3	(0.7)	51.7	(0.7)
F	anama	24.3	(1.0) ‡	75.7	(1.0) ‡	28.5	(0.9) ‡	71.5	(0.9) ‡	26.1	(1.0) ‡	73.9	(1.0) ‡
P	eru	17.5	(0.6) †	82.5	(0.6) †	22.6	(0.7) †	77.4	(0.7) †	22.1	(0.7) †	77.9	(0.7) †
P	hilippines	34.6	(0.8)	65.4	(0.8)	40.8	(0.6)	59.2	(0.6)	38.6	(0.7)	61.4	(0.7)
F	omania	36.6	(1.1)	63.4	(1.1)	46.2	(0.9)	53.8	(0.9)	43.1	(1.0)	56.9	(1.0)
F	tussia	38.4	(0.6)	61.6	(0.6)	48.9	(0.7)	51.1	(0.7)	40.9	(0.5)	59.1	(0.5)
S	audi Arabia	46.3	(0.7)	53.7	(0.7)	50.7	(0.8)	49.3	(0.8)	50.7	(0.9)	49.3	(0.9)
S	erbia	34.7	(0.9)	65.3	(0.9)	40.3	(0.8)	59.7	(0.8)	36.0	(0.8)	64.0	(8.0)
S	ingapore	19.4	(0.5)	80.6	(0.5)	31.2	(0.6)	68.8	(0.6)	28.0	(0.6)	72.0	(0.6)
	hinese Taipei	25.1	(0.6)	74.9	(0.6)	33.8	(0.7)	66.2	(0.7)	29.8	(0.7)	70.2	(0.7)
	hailand	31.5	(0.7)	68.5	(0.7)	35.6	(0.7)	64.4	(0.7)	29.5	(0.6)	70.5	(0.6)
_	Jkraine	36.2	(0.9)	63.8	(0.9)	49.1	(1.0)	50.9	(1.0)	42.1	(0.9)	57.9	(0.9)
	Inited Arab Emirates	23.6	(0.4)	76.4	(0.4)	33.4	(0.4)	66.6	(0.4)	28.5	(0.4)	71.5	(0.4)
	Iruguay	24.3	(0.8) †	75.7	(0.8) †	30.5	(0.8) †	69.5	(0.8) †	31.4	(0.8) †	68.6	(0.8) †
١	iet Nam	35.9	(1.1)	64.1	(1.1)	49.5	(1.0)	50.5	(1.0)	33.9	(1.2)	66.1	(1.2)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

**Note**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

<sup>2.</sup> The total variation in the index of self-efficacy regarding global issues is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.3.1 [1/6] Perspective taking

						Perspecti	ive taking					
							1	/ariation in	the index1			
	Mean i		Standard (		Total var		Variation scho	ols <sup>3</sup>	Variatior scho	ols	Proporti variation t between s	hat lies chools <sup>4</sup>
	Mean	S.E.	S.D.	S.E.	Variance	S.E.	Variance	S.E.	Variance	S.E.	%	S.E.
Australia Austria	0.05	(0.01)	1.00	(0.01)	1.00	(0.02)	0.01	(0.00)	0.99	(0.02)	1.2	(0.5)
	0.03	(0.02)	0.95	(0.01)	0.89	(0.02)	0.02	(0.01)	0.86	(0.02)	2.4	(0.7)
Canada	0.14	(0.01)	0.99	(0.01)	0.98	(0.01)	0.02	(0.00)	0.96	(0.01)	1.6	(0.3)
Chile	0.01	(0.02)	1.03	(0.01)	1.03	(0.03)	0.03	(0.01)	0.99	(0.02)	3.4	(0.7)
Colombia	-0.21	(0.02)	0.93	(0.01)	0.86	(0.03)	0.01	(0.01)	0.84	(0.03)	1.2	(0.6)
Estonia	0.07	(0.01)	0.97	(0.01)	0.95	(0.02)	0.02	(0.01)	0.93	(0.02)	2.6	(0.8)
France	-0.25	(0.01)	0.98	(0.01)	0.95	(0.02)	0.01	(0.00)	0.93	(0.02)	1.0	(0.5)
Germany	0.06	(0.02) †	0.94	(0.01) †	0.88	(0.03)	0.01	(0.01) †	0.87	(0.03) †	0.7	(0.8) †
Greece	-0.10	(0.01)	1.05	(0.01)	1.10	(0.02)	0.00	(0.00)	1.10	(0.02)	0.1	(0.4)
Hungary	-0.17	(0.01)	0.91	(0.01)	0.82	(0.02)	0.02	(0.01)	0.80	(0.02)	2.4	(0.6)
Iceland	0.08	(0.02)	1.06	(0.01)	1.12	(0.03)	0.01	(0.01)	1.10	(0.03)	0.6	(0.7)
Ireland	0.14	(0.01)	0.94	(0.01)	0.88	(0.02)	0.02	(0.00)	0.87	(0.02)	1.7	(0.5)
Israel	-0.08 -0.34	(0.02)	1.08	(0.01)	1.18	(0.02)	0.02	(0.01)	1.17	(0.04)	1.7	(0.7)
Italy		(0.01)	0.90	(0.01)	0.80	(0.02)	0.01	(0.00)	0.78	(0.02)	1.2	(0.6)
Korea	0.22	(0.02)	1.02	(0.01)	1.01	(0.02)	0.04	(0.01)	0.96	(0.02)	4.2	(0.9)
Latvia	-0.19	(0.01)	0.96	(0.01)	0.92	(0.02)	0.02	(0.01)	0.91	(0.02)	2.4	(0.8)
Lithuania	-0.23	(0.01)	1.05	(0.01)	1.11	(0.02)	0.03	(0.01)	1.06	(0.02)	2.4	(0.6)
Mexico	0.17	(0.02) †	1.08	(0.01) †	1.15	(0.02)	0.02	(0.01) †	1.14	(0.02) †	1.4	(0.5) †
New Zealand Poland	0.00	(0.01)	0.98 0.95	(0.01)	0.96 0.91	(0.02)	0.01	(0.01)	0.93	(0.02)	1.5 1.8	(0.6)
		(0.02)		(0.01)		` '		(0.00)		(0.02)		(0.5)
Portugal	0.17	(0.02)	0.94	(0.01) +	0.86	(0.02)	0.01	(0.00)	0.85 0.94	(0.02)	1.1	(0.6)
Scotland (United Kingdom) Slovak Republic	-0.07 -0.24	(0.02) ‡	0.97 1.04	(0.01) ‡	0.94 1.07	(0.03)	0.01	(0.01) ‡	1.04	(0.03) ‡	0.6 1.5	(0.6) ‡
Slovak Republic	0.05	(0.02)	0.94	(0.01)	0.89	(0.02)	0.02	(0.01)	0.86	(0.03)	2.8	(0.6)
	0.05	(0.01)	0.94	(0.01)	0.89	(0.02)	0.02	(0.01)	0.86	(0.02)	1.3	(0.8)
Spain Switzerland	-0.05	(0.01)	0.97	(0.01)	0.94	(0.01)	0.01	(0.00)	0.93	` ′	1.5	(0.3)
Turkey	0.25	(0.02)	0.94	(0.01)	0.93	(0.03)	0.01	(0.01)	0.89	(0.03)	1.0	(0.7)
OECD average	-0.01	(0.00)	0.98	(0.00)	0.97	(0.00)	0.02	(0.00)	0.94	(0.00)	1.7	(0.1)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

**Note**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

<sup>2.</sup> The total variation in the index of perspective taking is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.3.1 [2/6] **Perspective taking** 

						Perspecti	ve taking					
							1	Variation in	the index1			
	Mean	index S.E.	Standard (	deviation S.E.	Total vai	riation <sup>2</sup> S.E.	Variation scho Variance		Variation scho Variance		Proporti variation t between s	that lies
<b>≌</b> Albania	0.47	(0.02)	1.04	(0.01)	1.09	(0.03)	0.05	(0.01)	1.04	(0.03)	4.3	(0.8)
F Argentina	0.47	(0.02)	1.04	(0.01)	1.13	(0.03)	0.03	(0.01)	1.04	(0.03)	1.4	(0.5)
된 Argentina Baku (Azerbaijan)	-0.01	(0.02)	1.06	(0.01)	1.13	(0.02)	0.02	(0.01)	1.54	(0.02)	1.4	(0.5)
Belarus	0.09	(0.02) 1	1.25	(0.02) 1		(0.04)	0.03	(0.01)		, ,	1.7	
Bosnia and Herzegovina	0.09	(0.02)	1.05	(0.01)	1.11 1.25	(0.02)	0.02	(0.01)	1.08 1.21	(0.02)	2.6	(0.6)
Brazil	0.23	(0.01)		, ,	1.25	(0.03)	0.03	(0.01)	1.17	(0.03) †	1.9	, ,
		, ,	1.11	(0.01) †		` '		` '		` '		(0.6) †
Brunei Darussalam	-0.13	(0.01)	0.89	(0.01)	0.80	(0.02)	0.03	(0.01)	0.77	(0.02)	4.3	(1.0)
Bulgaria	-0.08	(0.03)	1.21	(0.02)	1.47	(0.04)	0.06	(0.01)	1.41	(0.04)	4.1	(1.0)
Costa Rica	0.15	(0.02)	1.03	(0.01)	1.07	(0.02)	0.02	(0.01)	1.03	(0.02)	1.8	(0.7)
Croatia	-0.11	(0.02)	1.11	(0.01)	1.23	(0.03)	0.03	(0.01)	1.19	(0.02)	2.7	(0.6)
Cyprus	0.10	(0.01)	1.09	(0.01)	1.20	(0.02)	0.01	(0.01)	1.18	(0.03)	1.0	(0.5)
Dominican Republic	0.02	(0.02) ‡	1.20	(0.02) ‡	1.45	(0.04)	0.02	(0.01) ‡	1.41	(0.05) ‡	1.2	(0.9) ‡
Hong Kong (China)	-0.11	(0.01)	0.93	(0.01)	0.86	(0.02)	0.02	(0.01)	0.84	(0.02)	2.8	(0.6)
Indonesia	0.06	(0.02)	0.83	(0.02)	0.68	(0.03) †	0.01	(0.00)	0.67	(0.03)	1.6	(0.7)
Jordan	-0.02	(0.02)	1.02	(0.01)	1.03	(0.02)	0.02	(0.01)	1.02	(0.03)	1.7	(0.5)
Kazakhstan	0.07	(0.01)	1.09	(0.01)	1.17	(0.02)	0.01	(0.00)	1.13	(0.02)	0.6	(0.2)
Kosovo	0.30	(0.02)	1.01	(0.01)	1.01	(0.03)	0.04	(0.01)	0.97	(0.04)	3.6	(8.0)
Lebanon	0.26	(0.02)	1.03	(0.02)	0.99	(0.03)	0.09	(0.01)	0.89	(0.03)	8.7	(1.4)
Macao (China)	-0.12	(0.01)	0.88	(0.01)	0.77	(0.02)	0.01	(0.00)	0.72	(0.02)	1.5	(0.7)
Malaysia	-0.14	(0.02)	0.88	(0.01)	0.77	(0.02)	0.03	(0.01)	0.74	(0.02)	3.3	(0.9)
Malta	0.18	(0.02)	1.03	(0.01)	1.07	(0.03)	0.04	(0.01)	1.01	(0.04)	3.8	(1.3)
Moldova	0.14	(0.02)	0.90	(0.01)	0.82	(0.02)	0.01	(0.00)	0.79	(0.02)	1.0	(0.6)
Montenegro	0.18	(0.01)	1.08	(0.01)	1.16	(0.02)	0.01	(0.01)	1.15	(0.03)	1.0	(0.5)
Morocco	-0.12	(0.02) †	1.03	(0.01) †	1.05	(0.03)	0.01	(0.01) †	1.05	(0.03) †	0.9	(0.5) †
North Macedonia	0.70	(0.01)	0.97	(0.01)	0.95	(0.02)	0.02	(0.01)	0.91	(0.03)	2.5	(0.7)
Panama	-0.06	(0.02) ‡	1.05	(0.02) ‡	1.08	(0.04)	0.04	(0.01) ‡	1.02	(0.03) ‡	3.6	(1.2) ‡
Peru	-0.04	(0.02) †	0.99	(0.01) †	0.98	(0.03)	0.01	(0.01) †	0.96	(0.03) †	0.9	(0.6) †
Philippines	0.12	(0.01)	0.94	(0.01)	0.88	(0.02)	0.03	(0.01)	0.84	(0.02)	3.8	(8.0)
Romania	0.22	(0.02)	0.89	(0.01)	0.79	(0.02)	0.03	(0.01)	0.75	(0.02)	4.2	(8.0)
Russia	0.17	(0.02)	1.14	(0.01)	1.29	(0.02)	0.02	(0.01)	1.28	(0.03)	1.5	(0.5)
Saudi Arabia	0.05	(0.01)	1.03	(0.01)	1.03	(0.03)	0.00	(0.00)	1.01	(0.03)	0.4	(0.4)
Serbia	0.06	(0.02)	1.11	(0.01)	1.23	(0.03)	0.03	(0.01)	1.20	(0.03)	2.6	(0.6)
Singapore	0.17	(0.01)	0.94	(0.01)	0.88	(0.01)	0.02	(0.00)	0.85	(0.02)	2.0	(0.5)
Chinese Taipei	0.17	(0.01)	0.97	(0.01)	0.95	(0.02)	0.04	(0.01)	0.91	(0.02)	3.9	(0.7)
Thailand	-0.08	(0.02)	0.98	(0.01)	0.96	(0.02)	0.06	(0.01)	0.90	(0.02)	6.4	(0.9)
Ukraine	0.06	(0.02)	1.05	(0.01)	1.09	(0.02)	0.02	(0.01)	1.06	(0.02)	1.6	(0.5)
United Arab Emirates	0.14	(0.01)	1.15	(0.01)	1.31	(0.02)	0.08	(0.01)	1.24	(0.03)	6.0	(0.7)
Uruguay	-0.05	(0.02) †	1.04	(0.02) †	1.08	(0.03)	0.02	(0.01) †	1.04	(0.03) †	1.5	(0.8) †
Viet Nam	0.01	(0.02)	0.86	(0.01)	0.72	(0.02) †	0.03	(0.01)	0.69	(0.02)	3.9	(0.8)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

**Note**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

<sup>2.</sup> The total variation in the index of perspective taking is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.3.1 [3/6] **Perspective taking** 

		Pe	rcentage of s	tudents w	ho reported l	now well e	ach of the fol	lowing sta	tements des	cribes the	n:	
			verybody's sid before I make sion"				ere are two si n and try to lo n both"		friend	s better by	o understand imagining he heir perspect	ow
	Somewhat li not much or like th	not at all	Very much o	,	Somewhat li not much or like th	not at all	Very much o	,	Somewhat li not much or like the	not at all	Very much o	,
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia Austria	37.9	(0.6)	62.1	(0.6)	35.9	(0.5)	64.1	(0.5)	33.7	(0.5)	66.3	(0.5)
	39.1	(0.7)	60.9	(0.7)	32.7	(8.0)	67.3	(0.8)	33.8	(0.7)	66.2	(0.7)
Canada	33.5	(0.5)	66.5	(0.5)	31.4	(0.4)	68.6	(0.4)	29.8	(0.5)	70.2	(0.5)
Chile	47.6	(8.0)	52.4	(8.0)	37.9	(1.0)	62.1	(1.0)	32.1	(8.0)	67.9	(0.8)
Colombia	51.2	(8.0)	48.8	(8.0)	46.8	(8.0)	53.2	(8.0)	40.5	(8.0)	59.5	(0.8)
Estonia	37.7	(0.7)	62.3	(0.7)	31.3	(8.0)	68.7	(8.0)	34.4	(0.7)	65.6	(0.7)
France	48.4	(0.7)	51.6	(0.7)	45.6	(0.6)	54.4	(0.6)	37.4	(8.0)	62.6	(8.0)
Germany	35.8	(1.0) †	64.2	(1.0) †	30.8	(1.0) †	69.2	(1.0) †	31.4	(0.9) †	68.6	(0.9) †
Greece	42.2	(0.7)	57.8	(0.7)	40.4	(0.7)	59.6	(0.7)	46.0	(0.7)	54.0	(0.7)
Hungary	47.2	(0.7)	52.8	(0.7)	46.1	(0.7)	53.9	(0.7)	42.8	(0.7)	57.2	(0.7)
Iceland	44.3	(1.0)	55.7	(1.0)	36.7	(1.0)	63.3	(1.0)	35.7	(0.9)	64.3	(0.9)
Ireland	34.0	(0.7)	66.0	(0.7)	24.1	(0.6)	75.9	(0.6)	33.3	(0.7)	66.7	(0.7)
Israel	42.3	(8.0)	57.7	(8.0)	41.3	(0.7)	58.7	(0.7)	42.1	(0.8)	57.9	(0.8)
Italy	55.4	(8.0)	44.6	(8.0)	54.3	(0.7)	45.7	(0.7)	44.4	(8.0)	55.6	(8.0)
Korea	30.1	(0.6)	69.9	(0.6)	32.0	(0.7)	68.0	(0.7)	28.9	(0.6)	71.1	(0.6)
Latvia	47.6	(0.7)	52.4	(0.7)	42.7	(8.0)	57.3	(8.0)	43.1	(8.0)	56.9	(8.0)
Lithuania	49.7	(0.8)	50.3	(0.8)	46.5	(0.7)	53.5	(0.7)	40.4	(0.7)	59.6	(0.7)
Mexico	36.9	(0.8) †	63.1	(0.8) †	34.0	(0.7) †	66.0	(0.7) †	31.9	(0.7) †	68.1	(0.7) †
New Zealand	38.7	(0.7)	61.3	(0.7)	37.1	(0.7)	62.9	(0.7)	37.1	(0.7)	62.9	(0.7)
Poland	31.5	(0.7)	68.5	(0.7)	30.1	(0.7)	69.9	(0.7)	30.4	(8.0)	69.6	(8.0)
Portugal	30.9	(0.8)	69.1	(0.8)	29.5	(0.8)	70.5	(0.8)	32.2	(8.0)	67.8	(0.8)
Scotland (United Kingdom)	43.0	(0.9) ‡	57.0	(0.9) ‡	41.7	(0.9) ‡	58.3	(0.9) ‡	37.9	(1.0) ‡	62.1	(1.0) ‡
Slovak Republic	45.6	(0.7)	54.4	(0.7)	45.9	(0.7)	54.1	(0.7)	47.4	(0.7)	52.6	(0.7)
Slovenia	33.5	(0.8)	66.5	(0.8)	34.0	(0.8)	66.0	(0.8)	28.7	(0.7)	71.3	(0.7)
Spain	33.5	(0.4)	66.5	(0.4)	32.2	(0.4)	67.8	(0.4)	25.6	(0.4)	74.4	(0.4)
Switzerland	41.0	(0.8)	59.0	(0.8)	38.6	(0.7)	61.4	(0.7)	33.6	(0.9)	66.4	(0.9)
Turkey	35.9	(0.6)	64.1	(0.6)	27.3	(0.6)	72.7	(0.6)	24.2	(0.6)	75.8	(0.6)
OECD average	40.5	(0.1)	59.5	(0.1)	37.3	(0.1)	62.7	(0.1)	35.5	(0.1)	64.5	(0.1)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

**Note**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

<sup>2.</sup> The total variation in the index of perspective taking is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Apper A2)

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.3.1 [4/6] **Perspective taking** 

		Percentage of students who reported how well each of the following statements describes them:											
			verybody's sic before I mak sion"		"I believe that there are two sides to every question and try to look at them both"				"I sometimes try to understand my friends better by imagining how things look from their perspective"				
		Somewhat like them, not much or not at all like them		Very much or mostly like them		Somewhat like them, not much or not at all like them		Very much or mostly like them		Somewhat like them, not much or not at all like them		Very much or mostly like them	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Albania Argentina Baku (Azerbaijan)		18.7	(0.6)	81.3	(0.6)	21.4	(0.7)	78.6	(0.7)	23.1	(0.7)	76.9	(0.7)
Argentina		39.9	(0.7)	60.1	(0.7)	44.3	(0.8)	55.7	(0.8)	36.4	(0.6)	63.6	(0.6)
zana (r.zer.zer.jan.)		37.7	(0.8) †	62.3	(0.8) †	36.4	(0.8) †	63.6	(0.8) †	37.8	(0.8) †	62.2	(0.8) †
Belarus		36.8	(8.0)	63.2	(0.8)	33.4	(0.8)	66.6	(0.8)	35.6	(0.7)	64.4	(0.7)
Bosnia and Herzegov	<i>i</i> na	27.0	(0.6)	73.0	(0.6)	29.5	(0.6)	70.5	(0.6)	29.4	(0.7)	70.6	(0.7)
Brazil		39.0	(0.7) †	61.0	(0.7) †	34.2	(0.7) †	65.8	(0.7) †	36.0	(0.7) †	64.0	(0.7) †
Brunei Darussalam		47.8	(0.6)	52.2	(0.6)	48.5	(0.6)	51.5	(0.6)	34.8	(0.6)	65.2	(0.6)
Bulgaria		38.3	(8.0)	61.7	(0.8)	39.9	(0.8)	60.1	(0.8)	41.6	(1.0)	58.4	(1.0)
Costa Rica		37.2	(0.9)	62.8	(0.9)	33.0	(0.9)	67.0	(0.9)	27.7	(0.7)	72.3	(0.7)
Croatia		42.8	(0.7)	57.2	(0.7)	39.7	(0.8)	60.3	(0.8)	40.5	(0.8)	59.5	(8.0)
Cyprus		35.4	(0.6)	64.6	(0.6)	34.4	(0.6)	65.6	(0.6)	37.4	(0.7)	62.6	(0.7)
Dominican Republic		42.8	(0.9) ‡	57.2	(0.9) ‡	40.9	(1.1) ‡	59.1	(1.1) ‡	39.3	(1.2) ‡	60.7	(1.2) ‡
Hong Kong (China)		45.7	(0.8)	54.3	(0.8)	39.7	(0.9)	60.3	(0.9)	39.4	(0.8)	60.6	(8.0)
Indonesia		27.5	(0.7)	72.5	(0.7)	30.2	(0.8)	69.8	(0.8)	29.9	(0.9)	70.1	(0.9)
Jordan		39.2	(0.7)	60.8	(0.7)	37.2	(0.7)	62.8	(0.7)	37.9	(0.7)	62.1	(0.7)
Kazakhstan		36.8	(0.4)	63.2	(0.4)	34.8	(0.4)	65.2	(0.4)	37.3	(0.5)	62.7	(0.5)
Kosovo		22.6	(0.7)	77.4	(0.7)	24.6	(0.8)	75.4	(0.8)	28.2	(8.0)	71.8	(8.0)
Lebanon		30.6	(0.8)	69.4	(8.0)	28.8	(0.8)	71.2	(0.8)	26.3	(8.0)	73.7	(8.0)
Macao (China)		46.4	(0.7)	53.6	(0.7)	39.1	(0.8)	60.9	(0.8)	38.3	(0.7)	61.7	(0.7)
Malaysia		50.2	(0.8)	49.8	(8.0)	51.6	(0.8)	48.4	(0.8)	38.1	(0.9)	61.9	(0.9)
Malta		35.5	(0.8)	64.5	(0.8)	30.8	(0.9)	69.2	(0.9)	27.3	(0.8)	72.7	(8.0)
Moldova		32.7	(0.7)	67.3	(0.7)	32.9	(0.7)	67.1	(0.7)	26.5	(0.6)	73.5	(0.6)
Montenegro		28.4	(0.6)	71.6	(0.6)	29.2	(0.6)	70.8	(0.6)	31.7	(0.6)	68.3	(0.6)
Morocco		40.1	(0.8) †	59.9	(0.8) †	41.3	(0.8) †	58.7	(0.8) †	41.1	(1.0) †	58.9	(1.0) †
North Macedonia		18.9	(0.6)	81.1	(0.6)	18.9	(0.6)	81.1	(0.6)	14.0	(0.6)	86.0	(0.6)
Panama		43.0	(1.1) ‡	57.0	(1.1) ‡	39.8	(1.0) ‡	60.2	(1.0) ‡	37.2	(1.0) ‡	62.8	(1.0) ‡
Peru		44.2	(0.9) †	55.8	(0.9) †	41.4	(0.9) †	58.6	(0.9) †	36.5	(0.8) †	63.5	(0.8) †
Philippines		33.0	(0.6)	67.0	(0.6)	32.5	(0.7)	67.5	(0.7)	30.6	(0.5)	69.4	(0.5)
Romania		21.1	(0.9)	78.9	(0.9)	24.7	(0.9)	75.3	(0.9)	24.8	(0.8)	75.2	(0.8)
Russia		30.0	(0.6)	70.0	(0.6)	30.5	(0.7)	69.5	(0.7)	33.7	(0.7)	66.3	(0.7)
Saudi Arabia		38.4	(0.7)	61.6	(0.7)	46.9	(0.7)	53.1	(0.7)	31.2	(0.7)	68.8	(0.7)
Serbia		35.6	(0.8)	64.4	(0.8)	36.2	(0.7)	63.8	(0.7)	33.3	(0.8)	66.7	(0.8)
Singapore		34.0	(0.6)	66.0	(0.6)	29.1	(0.6)	70.9	(0.6)	27.2	(0.6)	72.8	(0.6)
Chinese Taipei		28.2	(0.7)	71.8	(0.7)	28.7	(0.7)	71.3	(0.7)	26.5	(0.7)	73.5	(0.7)
Thailand		48.7	(0.9)	51.3	(0.9)	45.2	(0.8)	54.8	(0.8)	42.7	(0.9)	57.3	(0.9)
Ukraine		37.5	(0.8)	62.5	(0.8)	35.5	(0.8)	64.5	(0.8)	35.9	(0.9)	64.1	(0.9)
United Arab Emirate	s	36.2	(0.4)	63.8	(0.4)	35.9	(0.4)	64.1	(0.4)	32.8	(0.4)	67.2	(0.4)
Uruquay		44.8	(0.9) †	55.2	(0.9) †		(0.8) †	55.7	(0.8) †	36.6	(0.9) †	63.4	(0.9) †
Viet Nam		50.7	(1.0)	49.3	(1.0)	33.2	(1.2)	66.8	(1.2)	35.1	(0.9)	64.9	(0.9)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

**Note**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

<sup>2.</sup> The total variation in the index of perspective taking is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.3.1 [5/6] Perspective taking

· ·	Percentage of students who reported how well each of the following statements describes them:										
			g somebody, I try w I would feel their place"		"When I'm upset at someone, I try to take the perspective of that person for a while"						
	Somewhat like them, not at all like		Very much or mostly	/ like them	Somewhat like them, i not at all like t		Very much or mostly like them				
	%	S.E.	%	S.E.	%	S.E.	%	S.E.			
Australia Austria	43.2	(0.6)	56.8	(0.6)	57.0	(0.5)	43.0	(0.5)			
<b>5</b> Austria	47.2	(0.8)	52.8	(0.8)	63.4	(0.7)	36.6	(0.7)			
Canada	40.4	(0.5)	59.6	(0.5)	56.3	(0.5)	43.7	(0.5)			
Chile	42.5	(0.9)	57.5	(0.9)	59.2	(8.0)	40.8	(0.8)			
Colombia	44.6	(0.9)	55.4	(0.9)	56.6	(0.7)	43.4	(0.7)			
Estonia	42.9	(0.8)	57.1	(0.8)	47.8	(0.7)	52.2	(0.7)			
France	46.7	(0.7)	53.3	(0.7)	68.4	(0.6)	31.6	(0.6)			
Germany	47.5	(0.9) †	52.5	(0.9) †	64.8	(0.9) †	35.2	(0.9) †			
Greece	45.8	(0.8)	54.2	(0.8)	63.0	(0.6)	37.0	(0.6)			
Hungary	55.0	(0.8)	45.0	(0.8)	66.6	(0.7)	33.4	(0.7)			
Iceland	42.8	(1.0)	57.2	(1.0)	57.6	(0.9)	42.4	(0.9)			
Ireland	45.7	(0.7)	54.3	(0.7)	62.5	(0.7)	37.5	(0.7)			
Israel	48.2	(0.7)	51.8	(0.7)	57.3	(0.6)	42.7	(0.6)			
Italy	50.2	(0.7)	49.8	(0.7)	71.0	(0.7)	29.0	(0.7)			
Korea	37.0	(0.7)	63.0	(0.7)	47.1	(0.6)	52.9	(0.6)			
Latvia	50.6	(0.8)	49.4	(0.8)	68.0	(0.7)	32.0	(0.7)			
Lithuania	50.4	(0.7)	49.6	(0.7)	57.8	(0.7)	42.2	(0.7)			
Mexico	36.4	(0.8) †	63.6	(0.8) †	46.1	(0.7) †	53.9	(0.7) †			
New Zealand	46.0	(0.6)	54.0	(0.6)	61.7	(0.6)	38.3	(0.6)			
Poland	53.6	(0.7)	46.4	(0.7)	62.9	(0.7)	37.1	(0.7)			
Portugal	38.8	(0.8)	61.2	(0.8)	52.6	(0.9)	47.4	(0.9)			
Scotland (United Kingdom)	47.6	(1.0) ‡	52.4	(1.0) ‡	66.1	(1.0) ‡	33.9	(1.0) ‡			
Slovak Republic	55.3	(0.8)	44.7	(0.8)	62.2	(0.7)	37.8	(0.7)			
Slovenia	42.8	(0.9)	57.2	(0.9)	65.3	(0.7)	34.7	(0.7)			
Spain	40.9	(0.4)	59.1	(0.4)	51.9	(0.5)	48.1	(0.5)			
Switzerland	45.3	(0.8)	54.7	(0.8)	65.0	(0.8)	35.0	(0.8)			
Turkey	27.3	(0.7)	72.7	(0.7)	49.3	(0.6)	50.7	(0.6)			
OECD average	45.0	(0.1)	55.0	(0.1)	59.5	(0.1)	40.5	(0.1)			

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

**Note**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

<sup>2.</sup> The total variation in the index of perspective taking is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.3.1 [6/6] **Perspective taking** 

	P	Percentage of students who reported how well each of the following statements describes them:										
		o imagine ho	riticising somebody, I try "When I'm upset at someone, I try gine how I would feel to take the perspective of that vere in their place" person for a while"									
	Somewhat like them, not at all like	:hem	Very much or mostly	<u> </u>	Somewhat like them, not at all like t	them	Very much or mostly like them					
	%	S.E.	%	S.E.	%	S.E.	%	S.E.				
Albania Argentina Baku (Azerbaijan)	21.6	(0.7)	78.4	(0.7)	26.5	(0.8)	73.5	(0.8)				
Argentina	37.8	(0.7)	62.2	(0.7)	55.6	(0.7)	44.4	(0.7)				
zana (r.zer.zanjan)	39.8	(0.9) †	60.2	(0.9) †	40.1	(0.9) †	59.9	(0.9) †				
Belarus	42.7	(0.8)	57.3	(0.8)	51.0	(0.8)	49.0	(0.8)				
Bosnia and Herzegovina	35.0	(0.6)	65.0	(0.6)	45.2	(0.6)	54.8	(0.6)				
Brazil	39.0	(0.7) †	61.0	(0.7) †	53.6	(0.7) †	46.4	(0.7) †				
Brunei Darussalam	39.7	(0.6)	60.3	(0.6)	51.3	(0.6)	48.7	(0.6)				
Bulgaria	47.7	(0.9)	52.3	(0.9)	59.6	(0.9)	40.4	(0.9)				
Costa Rica	37.2	(0.8)	62.8	(0.8)	52.6	(0.8)	47.4	(0.8)				
Croatia	47.1	(0.8)	52.9	(0.8)	60.3	(0.7)	39.7	(0.7)				
Cyprus	42.7	(0.6)	57.3	(0.6)	56.8	(0.8)	43.2	(0.8)				
Dominican Republic	40.8	(0.9) ‡	59.2	(0.9) ‡	52.1	(1.0) ‡	47.9	(1.0) ‡				
Hong Kong (China)	53.0	(0.8)	47.0	(0.8)	56.3	(0.7)	43.7	(0.7)				
Indonesia	28.8	(0.9)	71.2	(0.9)	35.4	(0.9)	64.6	(0.9)				
Jordan	40.1	(0.9)	59.9	(0.9)	48.0	(0.7)	52.0	(0.7)				
Kazakhstan	37.3	(0.5)	62.7	(0.5)	45.2	(0.5)	54.8	(0.5)				
Kosovo	24.8	(0.7)	75.2	(0.7)	29.6	(0.8)	70.4	(0.8)				
Lebanon	31.1	(1.2)	68.9	(1.2)	49.4	(0.9)	50.6	(0.9)				
Macao (China)	55.0	(0.8)	45.0	(0.8)	61.0	(0.8)	39.0	(0.8)				
Malaysia	41.9	(0.8)	58.1	(0.8)	38.9	(0.9)	61.1	(0.9)				
Malta	35.7	(0.8)	64.3	(0.8)	49.9	(0.9)	50.1	(0.9)				
Moldova	30.7	(0.7)	69.3	(0.7)	40.6	(0.8)	59.4	(0.8)				
Montenegro	35.4	(0.7)	64.6	(0.7)	46.3	(0.8)	53.7	(0.8)				
Morocco	39.9	(0.8) †	60.1	(0.8) †	49.2	(0.8) †	50.8	(0.8) †				
North Macedonia	18.7	(0.6)	81.3	(0.6)	37.8	(0.8)	62.2	(0.8)				
Panama	40.6	(1.2) ‡	59.4	(1.2) ‡	57.1	(1.0) ‡	42.9	(1.0) ‡				
Peru	39.3	(0.8) †	60.7	(0.8) †	53.5	(0.9) †	46.5	(0.9) †				
Philippines	33.4	(0.7)	66.6	(0.7)	38.1	(0.7)	61.9	(0.7)				
Romania	29.7	(0.9)	70.3	(0.9)	39.0	(0.9)	61.0	(0.9)				
Russia	41.8	(0.5)	58.2	(0.5)	55.1	(0.6)	44.9	(0.6)				
Saudi Arabia	33.5	(0.8)	66.5	(0.8)	44.4	(0.0)	55.6	(0.8)				
Serbia	42.6	(0.8)	57.4	(0.8)	57.1	(0.8)	42.9	(0.8)				
	43.5	(0.7)	56.5	, ,	48.4	(0.7)	51.6	(0.7)				
Singapore Chinese Tainei	39.6	` ′	60.4	(0.7)	39.4	. ,	60.6	. ,				
Chinese Taipei		(0.8)		(0.8)		(0.8)		(0.8)				
Thailand	47.5	(0.9)	52.5	(0.9)	54.3	(0.8)	45.7	(0.8)				
Ukraine	42.0	(0.9)	58.0	(0.9)	50.4	(0.8)	49.6	(0.8)				
United Arab Emirates	35.9	(0.4)	64.1	(0.4)	44.0	(0.5)	56.0	(0.5)				
Uruguay	41.1	(1.0) †	58.9	(1.0) †	58.9	(1.0) †	41.1	(1.0) †				
Viet Nam	36.6	(1.0)	63.4	(1.0)	57.7	(0.8)	42.3	(0.8)				

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

**Note**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

<sup>2.</sup> The total variation in the index of perspective taking is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.3.4 [1/4] Students' interest in learning about other cultures Based on students' reports

	Students interest in learning about other cultures											
							,	/ariation in	the index <sup>1</sup>			
	Mean index		Standard (		Total variation <sup>2</sup>		Variation between schools <sup>3</sup>		Variation within schools		Proportion of variation that lies between schools <sup>4</sup>	
	Mean	S.E.	S.D.	S.E.	Variance	S.E.	Variance	S.E.	Variance	S.E.	%	S.E.
Australia  Austria	-0.03	(0.01)	1.01	(0.01)	1.02	(0.01)	0.03	(0.01)	0.98	(0.01)	2.9	(0.5)
	-0.15	(0.02)	1.02	(0.01)	1.03	(0.02)	0.10	(0.01)	0.93	(0.02)	9.7	(1.3)
Canada	0.04	(0.01)	1.03	(0.01)	1.06	(0.01)	0.02	(0.00)	1.04	(0.02)	1.9	(0.4)
Chile	0.08	(0.02)	0.97	(0.01)	0.93	(0.02)	0.03	(0.01)	0.89	(0.02)	3.3	(0.7)
Colombia	0.11	(0.01)	0.88	(0.01)	0.78	(0.02)	0.01	(0.00)	0.77	(0.02)	1.7	(0.5)
Estonia	0.02	(0.02)	0.96	(0.01)	0.91	(0.02)	0.03	(0.01)	0.89	(0.02)	3.1	(8.0)
France	0.06	(0.02)	1.01	(0.01)	0.98	(0.02)	0.03	(0.01)	0.94	(0.02)	3.3	(0.9)
Germany	-0.18	(0.02) †	0.98	(0.01) †	0.96	(0.03)	0.05	(0.01) †	0.90	(0.03) †	5.3	(1.1) †
Greece	-0.04	(0.02)	1.01	(0.01)	1.01	(0.02)	0.03	(0.01)	0.98	(0.02)	3.1	(0.7)
Hungary	-0.21	(0.02)	0.92	(0.01)	0.85	(0.02)	0.06	(0.01)	0.78	(0.02)	7.4	(1.0)
Iceland	-0.05	(0.02)	1.07	(0.01)	1.15	(0.03)	0.03	(0.01)	1.09	(0.04)	2.5	(8.0)
Ireland	-0.10	(0.01)	0.98	(0.01)	0.96	(0.02)	0.03	(0.01)	0.93	(0.02)	2.9	(0.6)
Israel	-0.09	(0.02)	1.06	(0.01)	1.11	(0.02)	0.06	(0.01)	1.05	(0.02)	5.6	(1.1)
Italy	-0.25	(0.02)	0.93	(0.01)	0.87	(0.02)	0.04	(0.01)	0.81	(0.02)	5.1	(0.9)
Korea	-0.14	(0.01)	0.92	(0.01)	0.84	(0.02)	0.02	(0.01)	0.82	(0.02)	2.5	(0.8)
Latvia	0.02	(0.01)	0.96	(0.01)	0.93	(0.02)	0.02	(0.01)	0.90	(0.02)	1.9	(0.6)
Lithuania	0.09	(0.02)	1.03	(0.01)	1.06	(0.02)	0.03	(0.01)	1.01	(0.02)	2.6	(0.6)
Mexico	0.29	(0.02) †	1.01	(0.01) †	1.01	(0.02)	0.04	(0.01) †	0.97	(0.02) †	4.0	(0.8) †
New Zealand	0.03	(0.01)	0.99	(0.01)	0.99	(0.02)	0.03	(0.01)	0.95	(0.02)	3.3	(0.7)
Poland	0.05	(0.01)	0.96	(0.01)	0.93	(0.02)	0.02	(0.01)	0.92	(0.02)	2.0	(0.6)
Portugal	0.14	(0.02)	0.93	(0.01)	0.83	(0.02)	0.02	(0.01)	0.80	(0.02)	2.1	(0.6)
Scotland (United Kingdom)	-0.16	(0.02) ‡	1.01	(0.01) ‡	1.02	(0.03)	0.01	(0.01) ‡	1.02	(0.03) ‡	0.5	(0.7) ‡
Slovak Republic	-0.27	(0.02)	0.98	(0.01)	0.95	(0.02)	0.05	(0.01)	0.88	(0.02)	5.3	(0.9)
Slovenia	-0.07	(0.02)	0.95	(0.01)	0.90	(0.02)	0.06	(0.01)	0.84	(0.02)	6.9	(1.0)
Spain	0.18	(0.01)	1.02	(0.01)	1.03	(0.01)	0.01	(0.00)	1.01	(0.01)	1.4	(0.3)
Switzerland	-0.10	(0.02)	0.97	(0.01)	0.97	(0.03)	0.03	(0.01)	0.95	(0.03)	2.9	(0.8)
Turkey	0.65	(0.01)	0.88	(0.01)	0.77	(0.02)	0.02	(0.01)	0.74	(0.02)	2.9	(0.7)
OECD average	0.00	(0.00)	0.98	(0.00)	0.96	(0.00)	0.03	(0.00)	0.92	(0.00)	3.6	(0.2)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of students interest in learning about other cultures is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.3.4 [2/4] **Students' interest in learning about other cultures** Based on students' reports

					Stu	dents inter	est in learr	ning about o	ther cultu	res			
								,	Variation in	the index <sup>1</sup>			
		Mean		Standard (		Total var		Variation scho	ols <sup>3</sup>	Variatior scho	ols	Proporti variation t between s	hat lies chools <sup>4</sup>
	All	Mean	S.E.	S.D.	S.E.	Variance	S.E.	Variance	S.E.	Variance	S.E.	%	S.E.
ē	Albania	0.51	(0.01)	0.82	(0.01)	0.67	(0.02) †	0.02	(0.01)	0.67	(0.02)	2.9	(0.7)
artı	Argentina Rober (Acceptedian)	0.08 0.20	(0.02) (0.02) †	1.00	(0.01)	1.00	(0.02)	0.02	(0.01)	0.95	(0.02)	2.3	(0.8)
-	Baku (Azerbaijan)	0.20	(0.02)	1.08	(0.01) †	1.16	(0.03)	0.02	(0.01) †	1.14	(0.03) †	1.4	(0.6) †
	Belarus	0.11	(0.02)	1.01	(0.01)	1.01	(0.02)	0.02	(0.01)	0.98	(0.02)	1.7	(0.8)
	Bosnia and Herzegovina		, ,	1.04	(0.01)		(0.03)	0.03	(0.01)	1.04	(0.03)	2.4	(0.6)
	Brazil	0.22 0.24	(0.01) †	1.03	(0.01) †	1.03	(0.02)	0.03	(0.01) †	1.00	(0.02) †	3.0	(0.7) †
	Brunei Darussalam	-0.01	(0.01)	0.87	(0.01)	0.76	(0.01)	0.02	(0.01)	0.74	(0.01)	2.5	(0.7)
	Bulgaria	0.30	(0.02)	1.05 0.99	(0.01)	1.10	(0.02)	0.05	(0.01)	1.04 0.95	(0.02)	4.3 2.2	(0.9)
	Costa Rica Croatia	0.00	(0.02)	1.03	(0.01)	0.97 1.07	(0.02)	0.02	(0.01)	1.03	(0.02)	3.1	(0.9)
	Cyprus	0.00	(0.01)	1.03	(0.01)	1.07	(0.02)	0.03	(0.01)	0.97	(0.02)	1.4	(0.6)
	Dominican Republic	0.07	(0.01)	1.00	(0.01)	1.04	(0.02)	0.01	(0.01)	0.99	(0.02)	3.3	(1.4) ‡
	Hong Kong (China)	-0.11	(0.03) +	0.87	(0.02) +	0.76	(0.03)	0.03	(0.02) +	0.99	(0.03) +	2.8	(0.7)
	Indonesia	0.05	(0.02)	0.87	(0.01)	0.76	(0.02)	0.02	(0.01)	0.73	(0.02)	3.4	(0.7)
	lordan	0.05	(0.01)	0.73	(0.01)	0.33	(0.02)	0.02	(0.00)	0.85	(0.02)	2.9	(0.6)
	Kazakhstan	0.30	(0.01)	0.94	(0.01)	0.86	(0.02)	0.03	(0.01)	0.83	(0.02)	2.9	(0.4)
	Kosovo	0.50	(0.01)	0.99	(0.01)	0.96	(0.01)	0.02	(0.00)	0.95	(0.01)	1.3	(0.4)
	Lebanon	m	(0.01) m	m	(0.01) m	0.00 m	(0.02) T	m	(0.00) m	0.05 m	(0.02) m	m	(0.0) m
	Macao (China)	0.02	(0.01)	0.85	(0.01)	0.72	(0.02) †	0.01	(0.00)	0.70	(0.02)	1.4	(0.6)
	Malaysia	0.02	(0.01)	0.86	(0.01)	0.72	(0.02) †	0.03	(0.00)	0.70	(0.02)	4.4	(0.9)
	Malta	0.05	(0.02)	0.98	(0.01)	0.95	(0.02)	0.03	(0.01)	0.93	(0.03)	2.5	(0.7)
	Moldova	0.26	(0.02)	0.86	(0.01)	0.74	(0.02) †	0.02	(0.00)	0.72	(0.02)	1.6	(0.6)
	Montenegro	0.20	(0.01)	0.99	(0.01)	0.98	(0.02)	0.02	(0.01)	0.99	(0.02)	2.4	(0.9)
	Morocco	0.16	(0.02) †	0.98	(0.01) †	0.96	(0.02)	0.05	(0.01) †	0.90	(0.02) †	5.3	(1.1) †
	North Macedonia	0.13	(0.01)	0.91	(0.01)	0.83	(0.02)	0.03	(0.01)	0.79	(0.02)	3.6	(0.7)
	Panama	0.33	(0.02) ‡	1.00	(0.01) ‡	0.99	(0.03)	0.02	(0.01) ‡	0.96	(0.03) ‡	2.0	(0.8) ‡
	Peru	0.24	(0.02) †	0.91	(0.01) †	0.82	(0.02)	0.01	(0.01) †	0.81	(0.02) †	0.8	(0.7) †
	Philippines	0.38	(0.01)	0.85	(0.01)	0.72	(0.01) †	0.01	(0.00)	0.71	(0.01)	1.2	(0.4)
	Romania	0.09	(0.02)	0.87	(0.01)	0.76	(0.02)	0.02	(0.01)	0.74	(0.02)	3.1	(0.7)
	Russia	-0.03	(0.02)	1.06	(0.01)	1.13	(0.02)	0.01	(0.00)	1.11	(0.02)	1.0	(0.4)
	Saudi Arabia	0.15	(0.01)	0.93	(0.01)	0.86	(0.02)	0.01	(0.00)	0.84	(0.02)	1.4	(0.5)
	Serbia	0.07	(0.02)	1.02	(0.01)	1.05	(0.02)	0.04	(0.01)	1.01	(0.02)	3.8	(0.8)
	Singapore	0.19	(0.01)	0.94	(0.01)	0.88	(0.02)	0.01	(0.00)	0.86	(0.02)	1.4	(0.5)
	Chinese Taipei	0.06	(0.01)	0.86	(0.01)	0.74	(0.01) †	0.03	(0.00)	0.71	(0.01)	3.4	(0.6)
	Thailand	-0.13	(0.01)	0.73	(0.01)	0.54	(0.01) †	0.02	(0.00)	0.52	(0.01)	2.8	(0.5)
	Ukraine	-0.13	(0.02)	0.95	(0.01)	0.91	(0.02)	0.01	(0.00)	0.88	(0.02)	1.5	(0.5)
	United Arab Emirates	m	m	m	m	m	m	m	m	m	m	m	m
	Uruguay	0.16	(0.02) †	1.02	(0.01) †	1.04	(0.03)	0.01	(0.01) †	1.01	(0.02) †	1.2	(0.7) †
	Viet Nam	-0.08	(0.02)	0.79	(0.01)	0.62	(0.02) †	0.03	(0.01)	0.59	(0.01)	5.6	(1.6)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of students interest in learning about other cultures is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.3.4 [3/4] **Students' interest in learning about other cultures** Based on students' reports

				Per	centage	of student	ts who re	ported h	ow well e	ach of th	e followir	ng statem	ents desc	cribes the	m:		
				how peop				more abo				d in how p us culture world"		a		d in findir traditions cultures"	
		Somework them, not a like t	much or	Very m mostly li		Somewh them, not not a like t	much or t all	Very m mostly li		Somew them, no or not like t	ot much at all	Very m mostly li	uch or	Somew them, not not a like t	much or t all	Very m mostly li	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD	Australia	44.2	(0.6)	55.8	(0.6)	63.0	(0.5)	37.0	(0.5)	45.7	(0.6)	54.3	(0.6)	47.0	(0.6)	53.0	(0.6)
ö	Austria	47.2	(1.0)	52.8	(1.0)	65.6	(0.9)	34.4	(0.9)	49.3	(0.9)	50.7	(0.9)	50.0	(0.9)	50.0	(0.9)
	Canada	42.6	(0.6)	57.4	(0.6)	57.5	(0.6)	42.5	(0.6)	42.5	(0.5)	57.5	(0.5)	44.2	(0.6)	55.8	(0.6)
	Chile	41.9	(1.0)	58.1	(1.0)	61.8	(0.8)	38.2	(8.0)	42.1	(0.9)	57.9	(0.9)	42.7	(1.0)	57.3	(1.0)
	Colombia	36.1	(0.9)	63.9	(0.9)	48.6	(0.7)	51.4	(0.7)	39.2	(0.8)	60.8	(0.8)	41.8	(8.0)	58.2	(8.0)
	Estonia	36.8	(0.7)	63.2	(0.7)	58.7	(0.7)	41.3	(0.7)	43.5	(0.7)	56.5	(0.7)	46.6	(8.0)	53.4	(8.0)
	France	37.5	(0.7)	62.5	(0.7)	56.3	(0.7)	43.7	(0.7)	43.7	(0.8)	56.3	(8.0)	36.1	(8.0)	63.9	(8.0)
	Germany	49.6	(1.1) †	50.4	(1.1) †	68.8	(1.0) †	31.2	(1.0) †	50.0	(1.1) †	50.0	(1.1) †	52.7	(1.0) †	47.3	(1.0) †
	Greece	40.7	(0.7)	59.3	(0.7)	59.0	(0.8)	41.0	(0.8)	45.4	(0.8)	54.6	(0.8)	49.6	(0.9)	50.4	(0.9)
	Hungary	57.8	(0.9)	42.2	(0.9)	70.2	(0.9)	29.8	(0.9)	54.8	(0.9)	45.2	(0.9)	55.7	(0.9)	44.3	(0.9)
	Iceland	43.5	(0.9)	56.5	(0.9)	64.7	(0.7)	35.3	(0.7)	49.3	(0.8)	50.7	(0.8)	46.9	(0.8)	53.1	(0.8)
	Ireland	43.3	(0.8)	56.7	(0.8)	71.1	(0.7)	28.9	(0.7)	47.5	(0.7)	52.5	(0.7)	47.8	(0.8)	52.2	(8.0)
	Israel	46.4	(0.9)	53.6	(0.9)	55.9	(0.8)	44.1	(8.0)	47.6	(0.8)	52.4	(0.8)	53.4	(0.9)	46.6	(0.9)
	Italy	56.3	(0.9)	43.7	(0.9)	72.8	(0.7)	27.2	(0.7)	55.6	(0.9)	44.4	(0.9)	52.7	(0.9)	47.3	(0.9)
	Korea	42.3	(0.7)	57.7	(0.7)	73.0	(0.6)	27.0	(0.6)	51.7	(0.7)	48.3	(0.7)	54.8	(0.6)	45.2	(0.6)
	Latvia	33.4	(0.7)	66.6	(0.7)	58.3	(0.8)	41.7	(8.0)	45.1	(0.7)	54.9	(0.7)	46.3	(0.8)	53.7	(8.0)
	Lithuania	33.7	(0.7)	66.3	(0.7)	54.6	(0.7)	45.4	(0.7)	43.2	(0.7)	56.8	(0.7)	44.9	(0.7)	55.1	(0.7)
	Mexico	33.1	(0.9) †	66.9	(0.9) †	45.4	(0.8) †	54.6	(0.8) †	35.3	(0.9) †	64.7	(0.9) †	35.6	(1.0) †	64.4	(1.0) †
	New Zealand	43.1	(0.6)	56.9	(0.6)	60.0	(0.8)	40.0	(8.0)	42.9	(0.7)	57.1	(0.7)	45.2	(0.7)	54.8	(0.7)
	Poland	34.5	(8.0)	65.5	(0.8)	54.0	(0.7)	46.0	(0.7)	44.2	(0.8)	55.8	(0.8)	42.8	(0.9)	57.2	(0.9)
	Portugal	38.3	(0.9)	61.7	(0.9)	54.8	(0.9)	45.2	(0.9)	39.0	(0.8)	61.0	(0.8)	37.5	(8.0)	62.5	(0.8)
	Scotland (United Kingdom)	47.7	(0.9) ‡	52.3	(0.9) ‡	70.7	(0.8) ‡	29.3	(0.8) ‡	51.2	(1.0) ‡	48.8	(1.0) ‡	51.6	(1.0) ‡	48.4	(1.0) ‡
	Slovak Republic	48.0	(0.9)	52.0	(0.9)	65.8	(0.8)	34.2	(0.8)	58.2	(0.9)	41.8	(0.9)	56.4	(0.9)	43.6	(0.9)
	Slovenia	39.1	(0.8)	60.9	(0.8)	61.8	(0.9)	38.2	(0.9)	48.9	(0.9)	51.1	(0.9)	53.6	(0.8)	46.4	(0.8)
	Spain	33.4	(0.5)	66.6	(0.5)	56.7	(0.5)	43.3	(0.5)	37.9	(0.5)	62.1	(0.5)	37.4	(0.5)	62.6	(0.5)
	Switzerland	45.6	(1.0)	54.4	(1.0)	63.4	(1.0)	36.6	(1.0)	48.7	(0.9)	51.3	(0.9)	47.9	(1.0)	52.1	(1.0)
	Turkey	15.3	(0.5)	84.7	(0.5)	24.0	(0.6)	76.0	(0.6)	20.2	(0.6)	79.8	(0.6)	21.5	(0.6)	78.5	(0.6)
	OECD average	41.2	(0.2)	58.8	(0.2)	59.9	(0.1)	40.1	(0.1)	45.3	(0.2)	54.7	(0.2)	46.0	(0.2)	54.0	(0.2)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of students interest in learning about other cultures is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3)

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.3.4 [4/4] Students' interest in learning about other cultures Based on students' reports

	.5		Per	centage o	of studen	ts who re	ported ho	ow well e	each of th	e followii	ng statem	ents des	cribes the	em:		
			how peop t countries				more abo				d in how p us culture world"		a		d in findir traditions cultures"	
	Somew them, not not a like t	much or at all hem	Very m mostly li	ke them	Somewl them, not not a like t	much or it all hem	Very m mostly lil	ke them	Somew them, no or not like t	ot much at all hem	Very m mostly li	ke them	Somewl them, not not a like t	much or it all hem	Very m mostly li	ke them
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Albania Argentina	15.6	(0.5)	84.4	(0.5)	36.3	(0.7)	63.7	(0.7)	21.2	(0.6)	78.8	(0.6)	19.8	(0.6)	80.2	(0.6)
	40.6	(0.7)	59.4	(0.7)	57.3	(0.8)	42.7	(0.8)	44.4	(0.8)	55.6	(0.8)	39.9	(0.9)	60.1	(0.9)
, ,	32.7	(0.9) †	67.3	(0.9) †	40.6	(0.9) †	59.4	(0.9) †	37.5	(1.0) †	62.5	(1.0) †	41.0	(1.0) †	59.0	(1.0) †
Belarus	32.3	(0.6)	67.7	(0.6)	55.9	(0.7)	44.1	(0.7)	46.2	(0.7)	53.8	(0.7)	41.3	(0.7)	58.7	(0.7)
Bosnia and Herzegovina	27.8	(0.7)	72.2	(0.7)	38.0	(0.8)	62.0	(0.8)	33.0	(0.8)	67.0	(0.8)	34.4	(0.8)	65.6	(0.8)
Brazil	36.2	(0.8) †	63.8	(0.8) †	49.4	(0.8) †	50.6	(0.8) †	38.5	(0.7) †	61.5	(0.7) †	40.0	(0.7) †	60.0	(0.7) †
Brunei Darussalam	29.4	(0.7)	70.6	(0.7)	48.4	(0.6)	51.6	(0.6)	35.4	(0.6)	64.6	(0.6)	37.4	(0.6)	62.6	(0.6)
Bulgaria	38.5	(1.0)	61.5	(1.0)	51.5	(0.8)	48.5	(0.8)	46.1	(1.0)	53.9	(1.0)	46.2	(1.1)	53.8	(1.1)
Costa Rica	30.4	(0.8)	69.6	(0.8)	50.2	(0.7)	49.8	(0.7)	32.6	(0.9)	67.4	(0.9)	32.2	(1.0)	67.8	(1.0)
Croatia	42.6 35.9	(0.6)	57.4	(0.6)	54.7 51.7	(0.7)	45.3	(0.7)	46.5 43.7	(0.7)	53.5	(0.7)	48.5 47.3	(0.8)	51.5 52.7	(0.8)
Cyprus  Dominisan Banublis	26.6		64.1 73.4	(0.8)	40.0		48.3 60.0	(0.8)	33.8		56.3 66.2		35.2	(0.9)	64.8	(0.9)
Dominican Republic Hong Kong (China)	46.6	(1.1) ‡ (0.8)	53.4	(1.1) ‡ (0.8)	70.1	(1.2) ‡ (0.8)	29.9	(1.2) ‡ (0.8)	50.1	(1.2) ‡ (0.9)	49.9	(1.2) ‡ (0.9)	51.9	(1.1) ‡ (0.8)	48.1	(1.1) ‡ (0.8)
Indonesia	38.6	(1.0)	61.4	(1.0)	45.6	(0.8)	54.4	(0.8)	38.7	(0.9)	61.3	(0.9)	35.7	(0.0)	64.3	(0.8)
Jordan	23.6	(0.6)	76.4	(0.6)	35.3	(0.8)	64.7	(0.8)	36.1	(0.7)	63.9	(0.7)	35.7	(0.7)	64.3	(0.7)
Kazakhstan	31.8	(0.5)	68.2	(0.5)	44.6	(0.6)	55.4	(0.6)	35.0	(0.6)	65.0	(0.6)	35.4	(0.7)	64.6	(0.5)
Kosovo	17.0	(0.6)	83.0	(0.6)	27.5	(0.7)	72.5	(0.7)	21.7	(0.8)	78.3	(0.8)	24.9	(0.7)	75.1	(0.7)
Lebanon	41.2	(1.0)	58.8	(1.0)	45.3	(1.0)	54.7	(1.0)	44.5	(0.9)	55.5	(0.9)	43.4	(0.7)	56.6	(0.7)
Macao (China)	41.7	(0.8)	58.3	(0.8)	66.8	(0.8)	33.2	(0.8)	42.5	(0.7)	57.5	(0.7)	44.4	(0.8)	55.6	(0.8)
Malaysia	39.7	(0.8)	60.3	(0.8)	51.6	(0.8)	48.4	(0.8)	42.9	(0.9)	57.1	(0.9)	40.9	(0.9)	59.1	(0.9)
Malta	38.8	(0.8)	61.2	(0.8)	59.4	(0.9)	40.6	(0.9)	44.0	(0.9)	56.0	(0.9)	42.9	(1.0)	57.1	(1.0)
Moldova	28.9	(0.6)	71.1	(0.6)	51.3	(0.8)	48.7	(0.8)	34.8	(0.8)	65.2	(0.8)	29.0	(0.7)	71.0	(0.7)
Montenegro	24.6	(0.5)	75.4	(0.5)	36.4	(0.6)	63.6	(0.6)	31.0	(0.6)	69.0	(0.6)	32.4	(0.6)	67.6	(0.6)
Morocco	32.5	(0.9) †	67.5	(0.9) †	41.9	(0.9) †	58.1	(0.9) †	39.9	(1.0) †	60.1	(1.0) †	40.7	(1.1) †	59.3	(1.1) †
North Macedonia	37.5	(0.6)	62.5	(0.6)	50.9	(0.8)	49.1	(0.8)	39.3	(0.7)	60.7	(0.7)	40.4	(0.7)	59.6	(0.7)
Panama	30.7	(1.0) ‡	69.3	(1.0) ‡	43.5	(1.2) ‡	56.5	(1.2) ‡	32.5	(0.9) ‡	67.5	(0.9) ‡	33.2	(1.1) ‡	66.8	(1.1) ‡
Peru	35.9	(0.8) †	64.1	(0.8) †	49.4	(0.9) †	50.6	(0.9) †	34.9	(0.8) †	65.1	(0.8) †	34.7	(0.8) †	65.3	(0.8) †
Philippines	26.1	(0.6)	73.9	(0.6)	33.5	(0.7)	66.5	(0.7)	30.3	(0.6)	69.7	(0.6)	29.8	(0.5)	70.2	(0.5)
Romania	33.4	(0.8)	66.6	(0.8)	50.8	(0.9)	49.2	(0.9)	37.1	(1.1)	62.9	(1.1)	36.1	(1.0)	63.9	(1.0)
Russia	41.3	(0.7)	58.7	(0.7)	58.4	(0.8)	41.6	(0.8)	46.5	(0.8)	53.5	(0.8)	45.2	(0.8)	54.8	(0.8)
Saudi Arabia	32.4	(0.6)	67.6	(0.6)	50.9	(0.9)	49.1	(0.9)	41.2	(0.7)	58.8	(0.7)	40.8	(0.7)	59.2	(0.7)
Serbia	38.1	(0.8)	61.9	(0.8)	50.6	(0.7)	49.4	(0.7)	43.4	(0.9)	56.6	(0.9)	43.3	(0.8)	56.7	(0.8)
Singapore	35.6	(0.6)	64.4	(0.6)	49.1	(0.6)	50.9	(0.6)	37.1	(0.6)	62.9	(0.6)	40.8	(0.6)	59.2	(0.6)
Chinese Taipei	39.6	(0.8)	60.4	(0.8)	62.9	(0.7)	37.1	(0.7)	41.3	(0.6)	58.7	(0.6)	43.2	(0.7)	56.8	(0.7)
Thailand	56.0	(0.7)	44.0	(0.7)	62.2	(0.7)	37.8	(0.7)	55.9	(0.8)	44.1	(0.8)	54.3	(0.9)	45.7	(0.9)
Ukraine	46.3	(0.8)	53.7	(0.8)	62.4	(8.0)	37.6	(8.0)	52.1	(0.8)	47.9	(0.8)	48.9	(0.7)	51.1	(0.7)
United Arab Emirates	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Uruguay	33.6	(0.9) †	66.4	(0.9) †	57.7	(0.9) †	42.3	(0.9) †	40.2	(1.0) †	59.8	(1.0) †	39.7	(1.0) †	60.3	(1.0) †
Viet Nam	58.2	(1.2)	41.8	(1.2)	69.4	(1.0)	30.6	(1.0)	47.5	(1.1)	52.5	(1.1)	39.8	(1.0)	60.2	(1.0)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of students interest in learning about other cultures is calculated from the square of the standard deviation of the index within each country/ economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.3.7 [1/6] Respect for people from other cultures

						Respect f	or people	from other o	ultures				
								\	/ariation in	the index <sup>1</sup>			
		Mean		Standard (		Total va		Variation school	ols <sup>3</sup>	Variatior scho	ols	Proporti variation t between s	that lies chools <sup>4</sup>
		Mean	S.E.	S.D.	S.E.	Variance	S.E.	Variance	S.E.	Variance	S.E.	%	S.E.
_ ر	ustralia	0.19	(0.01)	0.92	(0.01)	0.85	(0.01)	0.03	(0.01)	0.80	(0.02)	4.1	(0.6)
	ustria	-0.04	(0.02)	1.02	(0.01)	1.02	(0.03)	0.13	(0.02)	0.88	(0.03)	13.1	(1.5)
	anada	0.30	(0.01)	0.87	(0.01)	0.75	(0.02)	0.02	(0.00)	0.72	(0.02)	3.3	(0.5)
	hile	0.08	(0.02) †	0.99	(0.01) †	0.96	(0.03)	0.05	(0.01) †	0.89	(0.02) †	5.6	(0.9) 1
	olombia	-0.34	(0.02)	0.94	(0.01)	0.89	(0.02)	0.05	(0.01)	0.83	(0.02)	5.2	(0.9)
	stonia	-0.06	(0.01)	0.99	(0.01)	0.97	(0.02)	0.06	(0.01)	0.89	(0.03)	6.7	(1.2)
	rance	0.14	(0.02)	0.98	(0.01)	0.89	(0.03)	0.06	(0.01)	0.81	(0.02)	7.3	(1.4)
G	ermany	0.16	(0.03) †	0.93	(0.02) †	0.87	(0.03)	0.09	(0.01) †	0.77	(0.03) †	10.5	(1.5) †
G	reece	-0.21	(0.02)	1.05	(0.01)	1.10	(0.02)	0.05	(0.01)	1.05	(0.02)	4.6	(0.9)
	ungary	-0.54	(0.02)	1.02	(0.01)	1.03	(0.02)	0.11	(0.01)	0.93	(0.02)	10.3	(1.2)
I	eland	0.00	(0.02)	1.05	(0.01)	1.10	(0.03)	0.05	(0.01)	0.96	(0.06)	4.7	(1.3)
Ir	eland	0.21	(0.01)	0.85	(0.01)	0.73	(0.02) †	0.04	(0.01)	0.68	(0.02)	6.1	(0.9)
Is	rael	m	m	m	m	m	m	m	m	m	m	m	m
It	aly	-0.41	(0.02)	1.04	(0.01)	1.08	(0.02)	0.06	(0.01)	1.02	(0.02)	5.4	(0.8)
K	orea	0.20	(0.01)	0.92	(0.01)	0.83	(0.02)	0.07	(0.01)	0.75	(0.02)	8.8	(1.4)
L	ntvia	-0.25	(0.02)	1.03	(0.01)	1.07	(0.02)	0.06	(0.01)	0.98	(0.03)	5.7	(1.1)
Li	thuania	-0.07	(0.02)	1.05	(0.01)	1.09	(0.02)	0.08	(0.01)	0.96	(0.02)	7.6	(1.1)
N	lexico	0.20	(0.02) †	0.97	(0.02) †	0.91	(0.03)	0.05	(0.01) †	0.85	(0.03) †	5.0	(0.8) 1
N	ew Zealand	0.17	(0.02)	0.89	(0.01)	0.79	(0.02)	0.03	(0.01)	0.75	(0.02)	3.9	(0.8)
P	oland	-0.13	(0.02)	1.05	(0.01)	1.11	(0.02)	0.03	(0.01)	1.07	(0.03)	3.1	(0.7)
P	ortugal	0.16	(0.01)	0.87	(0.01)	0.70	(0.02) †	0.02	(0.01)	0.67	(0.02)	3.3	(0.9)
S	cotland (United Kingdom)	0.25	(0.02) ‡	0.90	(0.01) ‡	0.82	(0.02)	0.02	(0.01) ‡	0.80	(0.03) ‡	2.7	(1.1) ‡
S	ovak Republic	-0.46	(0.02)	1.10	(0.01)	1.20	(0.02)	0.11	(0.02)	1.07	(0.02)	9.2	(1.3)
S	ovenia	-0.03	(0.02)	0.96	(0.01)	0.92	(0.02)	0.12	(0.01)	0.80	(0.02)	13.2	(1.4)
S	pain	0.38	(0.01)	0.83	(0.01)	0.70	(0.02) †	0.02	(0.00)	0.67	(0.01)	3.0	(0.4)
	witzerland	0.08	(0.02) †	0.99	(0.01) †	1.00	(0.03)	0.06	(0.01) †	0.93	(0.04) †	5.8	(1.1) †
To	urkey	0.08	(0.02)	0.90	(0.01)	0.82	(0.02)	0.04	(0.01)	0.77	(0.02)	5.1	(0.8)
0	ECD average	0.00	(0.00)	0.97	(0.00)	0.93	(0.00)	0.06	(0.00)	0.86	(0.01)	6.3	(0.2)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

**Note**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

<sup>2.</sup> The total variation in the index of respect for people from other cultures is calculated from the square of the standard deviation of the index within each country/ economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Apper A2)

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.3.7  $\[2/6\]$  Respect for people from other cultures Based on students' reports

						Respect f	or people	from other	cultures				
								,	Variation in	the index <sup>1</sup>			
		Mean i		Standard o	deviation S.E.	Total var		Variation scho	ols <sup>3</sup>	Variatior scho	ools	Proporti variation t between s	hat lies chools <sup>4</sup>
S	Albania	Mean 0.23	S.E. (0.02)	S.D. 0.85	(0.01)	Variance 0.72	S.E. (0.02) †	Variance 0.04	S.E. (0.01)	Variance 0.69	S.E. (0.03)	5.9	S.E.
ē		-0.04	(0.02)		(0.01)	0.72	, ,	0.04	(0.01)		(0.03)	4.2	(0.8)
art	Argentina Baku (Azerbaijan)	-0.04	(0.02) †	0.99	(0.01) †	1.27	(0.02)	0.04	(0.01) †	0.91	(0.02) †	2.8	(0.8) † (0.8) †
_	Belarus	-0.36	(0.02) 1	0.99	(0.01)	0.97	(0.03)	0.04	(0.01) 1	0.91	(0.03) 1	5.6	(1.1)
	Bosnia and Herzegovina	0.06	(0.02)	1.00	(0.01)	1.00	(0.02)	0.05	(0.01)	0.91	(0.02)	4.6	(0.9)
	Brazil	0.00	(0.02)	1.04	(0.01)	1.02	(0.02)	0.03	(0.01)	0.94	(0.03) †	7.4	(1.1) †
	Brunei Darussalam	-0.23	(0.02) 1	0.91	(0.01)	0.83	(0.03)	0.07	(0.01)	0.78	(0.03)	6.6	(1.1)
	Bulgaria	-0.23	(0.01)	1.11	(0.01)	1.24	(0.01)	0.05	(0.01)	1.18	(0.03)	5.1	(1.0)
	Costa Rica	0.24	(0.02)	0.89	(0.01)	0.80	(0.03)	0.00	(0.01)	0.76	(0.03)	3.4	(0.8)
	Croatia	0.24	(0.02)	1.10	(0.01)	1.21	(0.02)	0.03	(0.01)	1.11	(0.02)	7.8	(1.0)
	Cyprus	-0.18	(0.01)	1.06	(0.01)	1.12	(0.02)	0.06	(0.01)	1.06	(0.03)	5.1	(1.2)
	Dominican Republic	-0.18	(0.03) ‡	1.10	(0.01)	1.20	(0.04)	0.07	(0.01)	1.10	(0.04) ‡	6.3	(1.9) ‡
	Hong Kong (China)	-0.30	(0.02)	0.95	(0.01)	0.91	(0.01)	0.05	(0.01)	0.86	(0.02)	5.8	(1.0)
	Indonesia	-0.34	(0.02)	0.80	(0.01)	0.64	(0.01) †	0.03	(0.01)	0.60	(0.02)	5.5	(0.9)
	Jordan	-0.05	(0.02)	0.96	(0.01)	0.92	(0.02)	0.07	(0.01)	0.85	(0.02)	7.3	(0.8)
	Kazakhstan	-0.22	(0.01)	1.06	(0.01)	1.09	(0.02)	0.04	(0.01)	1.02	(0.02)	4.0	(0.6)
	Kosovo	0.11	(0.02)	0.86	(0.01)	0.73	(0.02) †	0.05	(0.01)	0.68	(0.02)	7.2	(1.2)
	Lebanon	0.03	(0.03)	0.95	(0.01)	0.87	(0.03)	0.17	(0.02)	0.69	(0.02)	20.0	(2.5)
	Macao (China)	-0.22	(0.01)	0.89	(0.01)	0.79	(0.01)	0.04	(0.01)	0.72	(0.02)	5.8	(1.4)
	Malaysia	-0.33	(0.02)	0.94	(0.01)	0.89	(0.01)	0.05	(0.01)	0.84	(0.01)	5.4	(1.1)
	Malta	0.01	(0.02)	0.98	(0.01)	0.96	(0.02)	0.09	(0.02)	0.85	(0.06)	9.9	(1.9)
	Moldova	0.04	(0.02)	0.88	(0.01)	0.77	(0.02)	0.03	(0.01)	0.73	(0.02)	3.9	(0.9)
	Montenegro	0.11	(0.01)	1.00	(0.01)	1.01	(0.02)	0.03	(0.01)	0.98	(0.04)	3.3	(1.1)
	Morocco	-0.29	(0.03) †	1.03	(0.01) †	1.05	(0.02)	0.11	(0.02) †	0.95	(0.02) †	10.5	(1.4) †
	North Macedonia	0.38	(0.01)	0.82	(0.01)	0.68	(0.02) †	0.02	(0.01)	0.64	(0.03)	3.7	(0.9)
	Panama	-0.07	(0.03) ‡	1.02	(0.02) ‡	1.01	(0.04)	0.09	(0.02) ‡	0.89	(0.04) ‡	9.3	(2.0) ‡
	Peru	-0.13	(0.02) †	0.98	(0.01) †	0.95	(0.02)	0.04	(0.01) †	0.89	(0.03) †	4.1	(1.3) †
	Philippines	-0.10	(0.02)	0.88	(0.01)	0.78	(0.01)	0.03	(0.01)	0.75	(0.01)	3.9	(0.7)
	Romania	-0.08	(0.02)	0.86	(0.01)	0.74	(0.02) †	0.07	(0.01)	0.67	(0.02)	9.2	(1.1)
	Russia	-0.16	(0.02)	1.09	(0.01)	1.18	(0.02)	0.03	(0.01)	1.15	(0.02)	2.6	(0.7)
	Saudi Arabia	-0.05	(0.02)	0.94	(0.01)	0.87	(0.02)	0.04	(0.01)	0.82	(0.02)	4.7	(0.8)
	Serbia	-0.19	(0.02)	1.05	(0.01)	1.10	(0.02)	0.07	(0.01)	1.02	(0.02)	6.6	(1.0)
	Singapore	0.13	(0.01)	0.85	(0.01)	0.73	(0.01) †	0.03	(0.01)	0.69	(0.02)	4.2	(0.9)
	Chinese Taipei	0.00	(0.02)	0.91	(0.01)	0.83	(0.02)	0.04	(0.01)	0.78	(0.02)	5.1	(1.1)
	Thailand	-0.55	(0.02)	0.97	(0.01)	0.94	(0.02)	0.10	(0.01)	0.83	(0.02)	11.0	(1.2)
	Ukraine	-0.22	(0.02)	1.06	(0.01)	1.13	(0.02)	0.06	(0.01)	1.06	(0.02)	5.6	(8.0)
	United Arab Emirates	0.15	(0.01)	1.00	(0.01)	0.99	(0.02)	0.13	(0.01)	0.87	(0.02)	12.6	(1.0)
	Uruguay	-0.01	(0.02) †	1.02	(0.01) †	1.03	(0.03)	0.04	(0.01) †	0.98	(0.03) †	3.5	(1.0) †
	Viet Nam	-0.36	(0.03)	0.87	(0.01)	0.75	(0.03) †	0.07	(0.02)	0.67	(0.02)	9.9	(2.3)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of respect for people from other cultures is calculated from the square of the standard deviation of the index within each country/ economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.3.7 [4/6] **Respect for people from other cultures** Based on students' reports

		Pe	rcentage of s	tudents w	ho reported l	now well e	ach of the fol	lowing sta	atements des	cribes the	m:	
			ple from othe I human bein				ole with respe their cultural round"				eople from of ess themselve	
	Somewhat li not much or like th	not at all	Very much o	,	Somewhat li not much or like th	not at all	Very much o	em	Somewhat li not much or like th	not at all	Very much o	,
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia Austria	11.6	(0.4)	88.4	(0.4)	12.7	(0.3)	87.3	(0.3)	16.8	(0.4)	83.2	(0.4)
Austria	17.5	(0.7)	82.5	(0.7)	18.9	(0.8)	81.1	(8.0)	25.1	(0.8)	74.9	(8.0)
Canada	9.0	(0.4)	91.0	(0.4)	9.8	(0.4)	90.2	(0.4)	12.7	(0.4)	87.3	(0.4)
Chile	17.9	(0.9) †	82.1	(0.9) †	18.2	(0.9) †	81.8	(0.9) †	20.1	(0.9) †	79.9	(0.9) †
Colombia	23.1	(0.8)	76.9	(0.8)	25.2	(0.9)	74.8	(0.9)	27.1	(0.9)	72.9	(0.9)
Estonia	18.4	(0.6)	81.6	(0.6)	20.5	(0.6)	79.5	(0.6)	20.9	(0.6)	79.1	(0.6)
France	12.9	(0.7)	87.1	(0.7)	14.9	(0.7)	85.1	(0.7)	15.4	(0.7)	84.6	(0.7)
Germany	12.8	(0.8) †	87.2	(0.8) †	13.8	(0.7) †	86.2	(0.7) †	16.9	(0.8) †	83.1	(0.8) †
Greece	23.0	(0.7)	77.0	(0.7)	25.7	(0.7)	74.3	(0.7)	28.5	(0.8)	71.5	(0.8)
Hungary	39.1	(8.0)	60.9	(0.8)	34.8	(0.8)	65.2	(8.0)	41.7	(0.8)	58.3	(0.8)
Iceland	22.3	(0.7)	77.7	(0.7)	23.1	(0.7)	76.9	(0.7)	22.2	(0.7)	77.8	(0.7)
Ireland	9.2	(0.4)	90.8	(0.4)	10.5	(0.5)	89.5	(0.5)	17.0	(0.5)	83.0	(0.5)
Israel	m	m	m	m	m	m	m	m	m	m	m	m
Italy	28.7	(0.8)	71.3	(0.8)	31.1	(0.8)	68.9	(8.0)	37.2	(8.0)	62.8	(8.0)
Korea	13.6	(0.6)	86.4	(0.6)	15.5	(0.6)	84.5	(0.6)	15.2	(0.6)	84.8	(0.6)
Latvia	25.0	(0.7)	75.0	(0.7)	25.2	(0.7)	74.8	(0.7)	29.0	(0.7)	71.0	(0.7)
Lithuania	19.9	(0.6)	80.1	(0.6)	20.8	(0.6)	79.2	(0.6)	24.8	(0.7)	75.2	(0.7)
Mexico	15.3	(0.7) †	84.7	(0.7) †	16.2	(0.7) †	83.8	(0.7) †	16.7	(0.7) †	83.3	(0.7) †
New Zealand	10.7	(0.6)	89.3	(0.6)	12.5	(0.6)	87.5	(0.6)	16.2	(0.5)	83.8	(0.5)
Poland	20.0	(0.6)	80.0	(0.6)	21.8	(0.8)	78.2	(0.8)	23.9	(0.7)	76.1	(0.7)
Portugal	11.3	(0.5)	88.7	(0.5)	11.4	(0.6)	88.6	(0.6)	14.5	(0.6)	85.5	(0.6)
Scotland (United Kingdom)	12.8	(0.7) ‡	87.2	(0.7) ‡	13.7	(0.7) ‡	86.3	(0.7) ‡	14.9	(0.7) ‡	85.1	(0.7) ‡
Slovak Republic	29.8	(0.7)	70.2	(0.7)	33.6	(0.8)	66.4	(0.8)	37.3	(0.8)	62.7	(0.8)
Slovenia	15.7	(0.6)	84.3	(0.6)	16.2	(0.5)	83.8	(0.5)	21.3	(0.7)	78.7	(0.7)
Spain	8.0	(0.3)	92.0	(0.3)	9.6	(0.3)	90.4	(0.3)	11.5	(0.4)	88.5	(0.4)
Switzerland	15.2	(0.7) †	84.8	(0.7) †	17.0	(0.7) †	83.0	(0.7) †	19.4	(0.9) †	80.6	(0.9) †
Turkey	13.4	(0.6)	86.6	(0.6)	16.5	(0.5)	83.5	(0.5)	15.5	(0.6)	84.5	(0.6)
OECD average	17.5	(0.1)	82.5	(0.1)	18.8	(0.1)	81.2	(0.1)	21.6	(0.1)	78.4	(0.1)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of respect for people from other cultures is calculated from the square of the standard deviation of the index within each country/ economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.3.7 [4/6] **Respect for people from other cultures** Based on students' reports

		Pe	rcentage of s	tudents w	ho reported	now well e	ach of the fol	llowing sta	atements des	cribes ther	n:	
			ple from othe I human bein				le with respe their cultural ound"				eople from ot ess themselve	
	Somewhat li not much or like th	not at all	Very much o		Somewhat li not much or like th	not at all	Very much o		Somewhat li not much or like th	not at all	Very much o	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Albania	7.4	(0.5)	92.6	(0.5)	9.6	(0.5)	90.4	(0.5)	11.6	(0.5)	88.4	(0.5)
Albania Argentina Baku (Azerbaijan)	20.4	(0.7)	79.6	(0.7)	18.6	(0.6) †	81.4	(0.6) †	24.1	(0.7) †	75.9	(0.7)
zana (rizorzanjan)	26.7	(0.9) †	73.3	(0.9) †	30.7	(0.9) †	69.3	(0.9) †	32.4	(0.9) †	67.6	(0.9)
Belarus	21.8	(0.7)	78.2	(0.7)	21.2	(0.7)	78.8	(0.7)	27.4	(0.8)	72.6	(0.8)
Bosnia and Herzegovina	13.4	(0.5)	86.6	(0.5)	16.3	(0.6)	83.7	(0.6)	20.3	(0.7)	79.7	(0.7)
Brazil	17.4	(0.6) †	82.6	(0.6) †	18.0	(0.7) †	82.0	(0.7) †	21.8	(0.7) †	78.2	(0.7)
Brunei Darussalam	17.9	(0.5)	82.1	(0.5)	24.2	(0.6)	75.8	(0.6)	28.1	(0.6)	71.9	(0.6)
Bulgaria	30.0	(0.9)	70.0	(0.9)	33.7	(0.9)	66.3	(0.9)	36.4	(0.9) †	63.6	(0.9)
Costa Rica	10.7	(0.5)	89.3	(0.5)	12.2	(0.5)	87.8	(0.5)	14.0	(0.6)	86.0	(0.6)
Croatia	18.9	(0.5)	81.1	(0.5)	20.4	(0.5)	79.6	(0.5)	21.8	(0.6)	78.2	(0.6)
Cyprus	22.1	(0.6)	77.9	(0.6)	24.1	(0.7)	75.9	(0.7)	28.2	(0.7)	71.8	(0.7)
Dominican Republic	23.3	(1.2) ‡	76.7	(1.2) ‡	26.5	(1.2) ‡	73.5	(1.2) ‡	28.8	(1.4) ‡	71.2	(1.4)
Hong Kong (China)	23.9	(0.7)	76.1	(0.7)	27.3	(0.8)	72.7	(0.8)	27.3	(0.8)	72.7	(0.8)
Indonesia	15.1	(0.6)	84.9	(0.6)	18.9	(0.8)	81.1	(0.8)	25.8	(0.8)	74.2	(0.8)
Jordan	13.5	(0.5)	86.5	(0.5)	19.6	(0.6)	80.4	(0.6)	25.5	(0.7)	74.5	(0.7)
Kazakhstan	24.0	(0.4)	76.0	(0.4)	24.2	(0.4)	75.8	(0.4)	28.0	(0.5)	72.0	(0.5)
Kosovo	7.9	(0.5)	92.1	(0.5)	10.5	(0.6)	89.5	(0.6)	14.7	(0.6)	85.3	(0.6)
Lebanon	12.8	(0.7)	87.2	(0.7)	18.9	(1.0)	81.1	(1.0)	21.4	(1.1)	78.6	(1.1)
Macao (China)	20.5	(0.7)	79.5	(0.7)	22.4	(0.7)	77.6	(0.7)	24.0	(0.7)	76.0	(0.7)
Malaysia	26.5	(8.0)	73.5	(8.0)	29.4	(8.0)	70.6	(8.0)	34.4	(0.9)	65.6	(0.9)
Malta	15.1	(0.6)	84.9	(0.6)	17.1	(0.7)	82.9	(0.7)	21.6	(0.7)	78.4	(0.7)
Moldova	13.5	(0.5)	86.5	(0.5)	16.7	(0.6)	83.3	(0.6)	15.1	(0.6)	84.9	(0.6)
Montenegro	14.0	(0.4)	86.0	(0.4)	16.0	(0.5)	84.0	(0.5)	19.1	(0.5)	80.9	(0.5)
Morocco	22.1	(0.9) †	77.9	(0.9) †	26.1	(1.1) †	73.9	(1.1) †	30.5	(1.2) †	69.5	(1.2)
North Macedonia	7.8	(0.4)	92.2	(0.4)	9.1	(0.4)	90.9	(0.4)	9.8	(0.4)	90.2	(0.4)
Panama	18.6	(1.0) ‡	81.4	(1.0) ‡	20.2	(1.0) ‡	79.8	(1.0) ‡	22.6	(1.1) ‡	77.4	(1.1)
Peru	19.5	(0.8) †	80.5	(0.8) †	20.9	(0.8) †	79.1	(0.8) †	21.9	(0.9) †	78.1	(0.9)
Philippines	14.8	(0.5)	85.2	(0.5)	19.7	(0.6)	80.3	(0.6)	21.7	(0.6)	78.3	(0.6)
Romania	11.7	(0.6)	88.3	(0.6)	14.0	(0.7)	86.0	(0.7)	17.6	(0.8)	82.4	(8.0)
Russia	20.0	(0.6)	80.0	(0.6)	23.0	(0.6)	77.0	(0.6)	26.6	(0.7)	73.4	(0.7)
Saudi Arabia	16.0	(0.6)	84.0	(0.6)	17.7	(0.6)	82.3	(0.6)	24.9	(0.6)	75.1	(0.6)
Serbia	20.8	(0.8)	79.2	(0.8)	22.8	(0.9)	77.2	(0.9)	25.8	(0.9)	74.2	(0.9)
Singapore	11.4	(0.4)	88.6	(0.4)	12.5	(0.4)	87.5	(0.4)	13.6	(0.4)	86.4	(0.4)
Chinese Taipei	13.4	(0.7)	86.6	(0.7)	19.6	(0.7)	80.4	(0.7)	15.0	(0.7)	85.0	(0.7)
Thailand	35.6	(1.0)	64.4	(1.0)	40.3	(0.9)	59.7	(0.9)	39.6	(0.9)	60.4	(0.9)
Ukraine	29.8	(0.9)	70.2	(0.9)	24.7	(0.9)	75.3	(0.9)	28.1	(0.8)	71.9	(0.8)
United Arab Emirates	14.3	(0.4)	85.7	(0.4)	15.9	(0.4)	84.1	(0.4)	18.9	(0.5)	81.1	(0.5)
Uruguay	19.4	(0.8) †	80.6	(0.8) †		(0.8) †	80.8	(0.8) †	22.3	(0.8) †	77.7	(0.8)
Viet Nam	19.9	(1.0)	80.1	(1.0)	21.9	(1.1)	78.1	(1.1)	44.5	(1.2)	55.5	(1.2)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of respect for people from other cultures is calculated from the square of the standard deviation of the index within each country/ economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.3.7 [5/6] **Respect for people from other cultures** Based on students' reports

		P	ercentage of	students who reporte	ed how well e	ach of the following s	tatements de	scribes them:	
		"I	respect the va from differe	alues of people nt cultures"		"I v	alue the opin from differer	ions of people nt cultures"	
		Somewhat like them, not at all like t	hem	Very much or mostly		Somewhat like them, r not at all like th	nem	Very much or mostly	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.
٠.	Australia	14.5	(0.4)	85.5	(0.4)	16.2	(0.4)	83.8	(0.4)
	Austria	23.6	(0.8)	76.4	(0.8)	25.5	(0.9)	74.5	(0.9)
	Canada	12.1	(0.4)	87.9	(0.4)	13.6	(0.4)	86.4	(0.4)
	Chile	18.4	(0.8) †	81.6	(0.8) †	19.8	(0.9) †	80.2	(0.9) †
	Colombia	26.3	(0.9)	73.7	(0.9)	27.6	(0.9)	72.4	(0.9)
	Estonia	21.0	(0.6)	79.0	(0.6)	21.6	(0.6)	78.4	(0.6)
	France	16.0	(0.7)	84.0	(0.7)	24.0	(0.7)	76.0	(0.7)
	Germany	17.1	(0.9) †	82.9	(0.9) †	19.0	(0.9) †	81.0	(0.9) †
	Greece	26.8	(0.8)	73.2	(0.8)	28.8	(0.9)	71.2	(0.9)
	Hungary	39.1	(0.8)	60.9	(0.8)	38.8	(0.8)	61.2	(8.0)
	Iceland	23.9	(0.8)	76.1	(0.8)	23.6	(0.7)	76.4	(0.7)
	Ireland	13.1	(0.5)	86.9	(0.5)	15.3	(0.6)	84.7	(0.6)
	Israel	m	m	m	m	m	m	m	m
	Italy	35.5	(0.8)	64.5	(0.8)	39.4	(0.9)	60.6	(0.9)
	Korea	14.3	(0.6)	85.7	(0.6)	17.0	(0.6)	83.0	(0.6)
	Latvia	28.5	(0.7)	71.5	(0.7)	27.9	(0.7)	72.1	(0.7)
	Lithuania	23.3	(0.7)	76.7	(0.7)	23.8	(0.7)	76.2	(0.7)
	Mexico	16.2	(0.7) †	83.8	(0.7) †	17.1	(0.8) †	82.9	(0.8) †
	New Zealand	13.7	(0.5)	86.3	(0.5)	14.7	(0.5)	85.3	(0.5)
	Poland	23.4	(0.7)	76.6	(0.7)	26.9	(0.7)	73.1	(0.7)
	Portugal	14.1	(0.6)	85.9	(0.6)	15.3	(0.5)	84.7	(0.5)
	Scotland (United Kingdom)	14.8	(0.8) ‡	85.2	(0.8) ‡	15.1	(0.7) ‡	84.9	(0.7) ‡
	Slovak Republic	36.8	(0.9)	63.2	(0.9)	38.7	(0.8)	61.3	(8.0)
	Slovenia	20.7	(0.7)	79.3	(0.7)	20.8	(0.7)	79.2	(0.7)
	Spain	11.4	(0.3)	88.6	(0.3)	12.9	(0.3)	87.1	(0.3)
	Switzerland	18.7	(0.7) †	81.3	(0.7) †	21.3	(0.8) †	78.7	(0.8) †
	Turkey	14.4	(0.6)	85.6	(0.6)	17.0	(0.6)	83.0	(0.6)
	OECD average	20.7	(0.1)	79.3	(0.1)	22.4	(0.1)	77.6	(0.1)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of respect for people from other cultures is calculated from the square of the standard deviation of the index within each country/ economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.3.7 [6/6] **Respect for people from other cultures** Based on students' reports

	Pe	ercentage of	students who report	ed how well e	ach of the following s	statements de	scribes them:	
	"I	respect the va from differe	alues of people nt cultures"		"I	value the opin from differen		
	Somewhat like them, not at all like t	hem	Very much or mostl	<u> </u>	Somewhat like them, not at all like t	them	Very much or mostly	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Albania	10.7	(0.5)	89.3	(0.5)	11.9	(0.5)	88.1	(0.5)
Albania Argentina Baku (Azerbaijan)	21.6	(0.7) †	78.4	(0.7) †	23.0	(0.7) †	77.0	(0.7) †
	31.3	(0.9) †	68.7 75.9	(0.9) †	33.2	(1.1) †	66.8	(1.1) †
Belarus	24.1	(0.8)		(0.8)	23.7	(0.7)	76.3	(0.7)
Bosnia and Herzegovina	19.6	(0.7)	80.4	(0.7)	19.9	(0.7)	80.1	(0.7)
Brazil	20.3	(0.7) †	79.7	(0.7) †	23.3	(0.7) †	76.7	(0.7) †
Brunei Darussalam	22.9	(0.5)	77.1	(0.5)	30.5	(0.6)	69.5	(0.6)
Bulgaria	36.0	(0.9) †	64.0	(0.9) †	37.3	(1.1) †	62.7	(1.1) †
Costa Rica	11.6	(0.5)	88.4	(0.5)	12.8	(0.5)	87.2	(0.5)
Croatia	21.6	(0.6)	78.4	(0.6)	22.5	(0.5)	77.5	(0.5)
Cyprus	27.2	(0.6)	72.8	(0.6)	28.7	(0.6)	71.3	(0.6)
Dominican Republic	27.1	(1.3) ‡	72.9	(1.3) ‡	27.8	(1.2) ‡	72.2	(1.2) ‡
Hong Kong (China)	26.7	(0.8)	73.3	(0.8)	28.8	(0.7)	71.2	(0.7)
Indonesia	18.8	(0.8)	81.2	(0.8)	19.5	(0.8)	80.5	(0.8)
Jordan	26.4	(0.8)	73.6	(0.8)	26.5	(8.0)	73.5	(0.8)
Kazakhstan	27.6	(0.5)	72.4	(0.5)	28.0	(0.6)	72.0	(0.6)
Kosovo	14.2	(0.7)	85.8	(0.7)	15.3	(0.7)	84.7	(0.7)
Lebanon	20.7	(1.1)	79.3	(1.1)	26.1	(1.0)	73.9	(1.0)
Macao (China)	22.6	(0.7)	77.4	(0.7)	26.1	(0.6)	73.9	(0.6)
Malaysia	30.9	(8.0)	69.1	(0.8)	38.5	(8.0)	61.5	(0.8)
Malta	20.1	(0.6)	79.9	(0.6)	21.0	(0.7)	79.0	(0.7)
Moldova	17.0	(0.7)	83.0	(0.7)	16.6	(0.6)	83.4	(0.6)
Montenegro	17.9	(0.5)	82.1	(0.5)	18.8	(0.5)	81.2	(0.5)
Morocco	29.0	(1.1) †	71.0	(1.1) †	29.4	(1.1) †	70.6	(1.1) †
North Macedonia	12.0	(0.4)	88.0	(0.4)	13.7	(0.5)	86.3	(0.5)
Panama	21.1	(1.0) ‡	78.9	(1.0) ‡	22.0	(1.0) ‡	78.0	(1.0) ‡
Peru	20.8	(0.9) †	79.2	(0.9) †	21.0	(0.9) †	79.0	(0.9) †
Philippines	18.8	(0.7)	81.2	(0.7)	21.8	(0.7)	78.2	(0.7)
Romania	17.9	(0.9)	82.1	(0.9)	18.1	(0.9)	81.9	(0.9)
Russia	25.2	(0.7)	74.8	(0.7)	26.7	(0.8)	73.3	(0.8)
Saudi Arabia	23.4	(0.7)	76.6	(0.7)	25.6	(0.6)	74.4	(0.6)
Serbia	25.2	(0.9)	74.8	(0.9)	26.6	(0.8)	73.4	(0.8)
Singapore	12.2	(0.4)	87.8	(0.4)	13.7	(0.4)	86.3	(0.4)
Chinese Taipei	14.8	(0.6)	85.2	(0.6)	15.9	(0.6)	84.1	(0.6)
Thailand	40.3	(0.9)	59.7	(0.9)	40.7	(1.0)	59.3	(1.0)
Ukraine	27.6	(0.8)	72.4	(0.8)	27.8	(0.9)	72.2	(0.9)
United Arab Emirates	17.7	(0.4)	82.3	(0.4)	19.5	(0.4)	80.5	(0.4)
Uruguay	21.9	(0.8) †	78.1	(0.8) †	23.7	(0.8) †	76.3	(0.8) †
Viet Nam	23.9	(1.1)	76.1	(1.1)	24.2	(1.1)	75.8	(1.1)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of respect for people from other cultures is calculated from the square of the standard deviation of the index within each country/ economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.3.10 [1/6] Cognitive adaptability

						Cognitive a	daptability					
							,	/ariation in	the index1			
	Mean		Standard (		Total va		Variation scho	ols <sup>3</sup>	Variatior scho	ols	Proporti variation t between s	that lies chools <sup>4</sup>
Australia	0.13	S.E. (0.01)	S.D. 1.01	S.E. (0.01)	Variance 1.02	S.E. (0.01)	Variance 0.03	S.E. (0.01)	Variance 0.98	S.E. (0.02)	2.8	S.E. (0.6)
Australia Austria	-0.07	(0.01)	0.93	(0.01)	0.86	(0.01)	0.03	(0.01)	0.98	(0.02)	2.0	(0.6)
Canada	0.20	(0.02)	1.00	(0.01)	1.00	(0.02)	0.02	(0.00)	0.83	(0.02)	1.7	(0.4)
Chile	-0.06	(0.01)	1.00	(0.01)	1.00	(0.02)	0.02	(0.00)	1.00	(0.02)	3.4	(0.4)
Colombia	-0.06	(0.02)	0.99	(0.01)	0.97	(0.03)	0.04	(0.01)	0.94	(0.03)	1.5	(0.7)
Estonia	0.14	(0.02)	0.97	(0.02)	0.94	(0.03)	0.01	(0.00)	0.94	(0.03)	2.8	(0.5)
France	-0.14	(0.02)	0.97	(0.01)	0.94	(0.02)	0.03	(0.01)	0.91	(0.02)	1.1	(0.5)
Germany	0.07	(0.01)	0.99	(0.01)	0.78	(0.02)	0.01	(0.00)	0.92	(0.02)	2.1	(0.8)
Greece	-0.29	(0.02) 1	1.00	(0.01)	1.00	(0.02)	0.02	(0.01) 1	1.00	(0.03) 1	0.4	(0.5)
Hungary	-0.29	(0.01)	0.93	(0.01)	0.84	(0.02)	0.00	(0.00)	0.82	(0.02)	2.4	(0.8)
Iceland	0.12	(0.01)	1.12	(0.01)	1.25	(0.02)	0.02	(0.01)	1.23	(0.03)	1.3	(0.8)
Ireland	0.12	(0.02)	0.95	(0.02)	0.91	(0.03)	0.02	(U.U1)	0.90	(0.02)	0.0	(U.7)
Israel	-0.01	(0.01)	1.11	(0.01)	1.22	(0.02)	0.00	(0.01)	1.18	(0.02)	3.4	(0.8)
Italy	-0.01	(0.02)	0.92	(0.01)	0.83	(0.02)	0.04	(0.01)	0.81	(0.03)	0.6	(0.5)
Korea	-0.10	(0.01)	1.02	(0.01)	1.02	(0.02)	0.01	(0.00)	0.81	(0.02)	4.8	(0.8)
Latvia	-0.10	(0.02)	0.98	(0.01)	0.97	(0.02)	0.03	(0.01)	0.94	(0.02)	2.3	(0.8)
Lithuania	0.00	(0.02)	1.11	(0.01)	1.22	(0.02)	0.02	(0.01)	1.15	(0.02)	1.7	(0.5)
Mexico	0.00	(0.02)	1.09	(0.01)	1.17	(0.02)	0.02	(0.01)	1.13	(0.03)	2.0	(0.5)
New Zealand	0.22	(0.02) 1	0.97	(0.01)	0.94	(0.02)	0.02	(0.01) 1	0.91	(0.02) 1	0.6	(0.4)
Poland	0.09	(0.01)	1.00	(0.01)	1.00	(0.02)	0.01	(0.00)	0.91	(0.02)	0.8	(0.4)
Portugal	-0.15	(0.02)	0.89	(0.01)	0.76	(0.02)	0.01	(0.00)	0.75	(0.02)	1.6	(0.4)
Scotland (United Kingdom)	-0.15	(0.01)	0.89	(0.01)	0.70	(0.02)	0.01	(0.00)	0.73	(0.02)	3.3	(1.0) ‡
Slovak Republic	-0.26	(0.02) +	0.98	(0.02) +	0.96	(0.03)	0.03	(0.01) +	0.90	(0.03) +	0.9	(0.4)
Slovenia	0.00	(0.01)	0.89	(0.01)	0.79	(0.02)	0.01	(0.00)	0.76	(0.03)	1.5	(0.4)
Spain	0.00	(0.02)	0.89	(0.01)	0.79	(0.02)	0.01	(0.00)	0.76	(0.03)	2.2	(0.4)
Switzerland	0.28	(0.01)	0.99	(0.01)	0.98	(0.01)	0.02	(0.00)	0.90	(0.01)	0.9	(0.4)
Turkey	0.00	(0.01)	0.88	(0.01)	0.82	(0.03)	0.01	(0.00)	0.79	(0.03)	1.1	(0.4)
Turkey	0.20	(0.01)	0.55	(0.01)	0.50	(0.02)	0.01	(0.00)	0.50	(0.05)	1.1	(0.4)
OECD average	-0.01	(0.00)	0.99	(0.00)	0.97	(0.00)	0.02	(0.00)	0.94	(0.00)	1.8	(0.1)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

**Note**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

<sup>2.</sup> The total variation in the index of cognitive adaptability is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

## Table VI.B1.3.10 [1/6] Cognitive adaptability

Based on students' reports

						Cognitive a	daptability					
							•	Variation in	the index <sup>1</sup>			
	Mean i		Standard (		Total va		Variation scho	ols <sup>3</sup>	Variatior scho	ols	Proporti variation t between s	that lies schools <sup>4</sup>
2 Albania	Mean 0.17	S.E. (0.02)	S.D. 1.01	S.E. (0.01)	Variance 1.02	S.E.	Variance 0.03	S.E.	Variance 0.99	S.E. (0.03)	2.8	S.E.
Albania  Argentina  Baku (Azerbaijan)	-0.13	(0.02)	1.01	(0.01)	1.02	(0.03)	0.03	(0.01)	1.04	(0.03)	1.6	(0.6)
Baku (Azerbaijan)	-0.13	(0.02)	1.30	(0.01)	1.68	(0.02)	0.02	(0.01)	1.64	(0.02)	2.0	` '
Belarus		,		, ,		` ′		, ,		, ,		(0.6) †
	0.17	(0.02)	1.04	(0.01)	1.08	(0.02)	0.01	(0.00)	1.05	(0.02)	1.3 2.2	(0.5)
Bosnia and Herzegovina Brazil	0.31 -0.12	(0.02)	1.14	(0.01)	1.29		0.03		1.25 1.15			(0.5)
		(0.02) †		(0.01) †		(0.02)		(0.01) †		(0.03) †	1.1	(0.5) †
Brunei Darussalam	-0.42	(0.01)	0.87	(0.01)	0.76	(0.02)	0.01	(0.01)	0.75	(0.02)	1.6	(0.9)
Bulgaria	-0.06	(0.02)	1.18	(0.02)	1.39	(0.04)	0.05	(0.01)	1.35	(0.04)	3.2	(0.8)
Costa Rica	0.04	(0.02)	1.05	(0.01)	1.11	(0.02)	0.01	(0.00)	1.09	(0.03)	0.8	(0.4)
Croatia	-0.03	(0.01)	1.06	(0.01)	1.12	(0.03)	0.01	(0.01)	1.10	(0.02)	1.0	(0.5)
Cyprus	-0.19	(0.02)	1.06	(0.01)	1.15	(0.03)	0.01	(0.01)	1.13	(0.04)	1.3	(0.6)
Dominican Republic	0.01	(0.02) ‡	1.23	(0.02) ‡	1.51	(0.04)	0.01	(0.01) ‡	1.48	(0.05) ‡	0.9	(0.6) ‡
Hong Kong (China)	-0.29	(0.02)	0.92	(0.01)	0.84	(0.03)	0.01	(0.00)	0.83	(0.03)	1.6	(0.6)
Indonesia	-0.14	(0.02)	0.79	(0.02)	0.62	(0.02) †	0.01	(0.00)	0.62	(0.02)	2.0	(0.6)
Jordan	0.18	(0.02)	1.12	(0.01)	1.25	(0.03)	0.02	(0.01)	1.23	(0.03)	1.5	(0.5)
Kazakhstan	-0.04	(0.01)	1.10	(0.01)	1.18	(0.02)	0.01	(0.00)	1.15	(0.02)	1.0	(0.3)
Kosovo	0.01	(0.02)	0.99	(0.01)	0.97	(0.03)	0.01	(0.01)	0.96	(0.04)	0.9	(0.6)
Lebanon	-0.06	(0.02)	0.96	(0.02)	0.87	(0.03)	0.09	(0.01)	0.78	(0.03)	10.0	(1.3)
Macao (China)	-0.45	(0.01)	0.84	(0.01)	0.71	(0.02) †	0.02	(0.01)	0.67	(0.03)	2.9	(1.1)
Malaysia	-0.30	(0.01)	0.91	(0.01)	0.83	(0.02)	0.02	(0.00)	0.82	(0.02)	2.2	(0.6)
Malta	0.07	(0.02)	0.99	(0.02)	0.99	(0.03)	0.04	(0.02)	0.94	(0.05)	3.8	(1.8)
Moldova	0.19	(0.02)	0.92	(0.01)	0.85	(0.02)	0.02	(0.01)	0.82	(0.02)	1.8	(0.7)
Montenegro	0.17	(0.01)	1.07	(0.01)	1.16	(0.03)	0.01	(0.00)	1.16	(0.04)	0.8	(0.4)
Morocco	-0.20	(0.02) †	1.02	(0.01) †	1.04	(0.03)	0.01	(0.01) †	1.03	(0.03) †	1.2	(0.6) †
North Macedonia	0.31	(0.01)	0.98	(0.01)	0.96	(0.02)	0.01	(0.00)	0.93	(0.03)	1.0	(0.4)
Panama	-0.06	(0.02) ‡	1.09	(0.02) ‡	1.18	(0.04)	0.02	(0.01) ‡	1.14	(0.04) ‡	1.8	(0.9) ‡
Peru	-0.06	(0.02) †	1.02	(0.01) †	1.03	(0.03)	0.01	(0.01) †	1.00	(0.03) †	1.2	(0.9) †
Philippines	-0.12	(0.01)	0.89	(0.01)	0.79	(0.02)	0.01	(0.00)	0.78	(0.02)	1.5	(0.4)
Romania	0.16	(0.02)	0.88	(0.02)	0.76	(0.02)	0.02	(0.00)	0.74	(0.03)	2.2	(0.6)
Russia	0.10	(0.02)	1.12	(0.01)	1.25	(0.03)	0.02	(0.01)	1.23	(0.03)	1.5	(0.4)
Saudi Arabia	-0.06	(0.01)	1.05	(0.01)	1.08	(0.03)	0.02	(0.01)	1.05	(0.03)	1.4	(0.6)
Serbia	0.03	(0.02)	1.08	(0.02)	1.16	(0.03)	0.01	(0.01)	1.15	(0.03)	1.1	(0.6)
Singapore	-0.04	(0.01)	0.93	(0.01)	0.86	(0.02)	0.02	(0.00)	0.84	(0.02)	2.6	(0.5)
Chinese Taipei	-0.18	(0.01)	0.92	(0.01)	0.85	(0.02)	0.02	(0.00)	0.83	(0.02)	2.6	(0.5)
Thailand	-0.29	(0.01)	0.89	(0.01)	0.80	(0.02)	0.03	(0.01)	0.76	(0.02)	4.3	(0.7)
Ukraine	0.13	(0.02)	1.05	(0.01)	1.10	(0.02)	0.00	(0.01)	1.09	(0.03)	0.4	(0.5)
United Arab Emirates	0.12	(0.01)	1.17	(0.01)	1.35	(0.02)	0.05	(0.01)	1.30	(0.03)	3.6	(0.7)
Uruguay	-0.06	(0.02) †	1.04	(0.01) †	1.08	(0.03)	0.02	(0.01) †	1.03	(0.04) †	1.7	(0.8) †
Viet Nam	-0.43	(0.02)	0.82	(0.01)	0.66	(0.02) †	0.03	(0.01)	0.63	(0.02)	4.1	(0.9)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

**Note**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

<sup>2.</sup> The total variation in the index of cognitive adaptability is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.3.10 [3/6] **Cognitive adaptability** Based on students' reports

		Pe	rcentage of s	tudents w	ho reported	how well e	ach of the fol	lowing sta	tements des	cribes the	m:	
	"I can d	eal with u	nusual situati	ons"			behaviour to i				fferent situati stress or press	
	Somewhat li not much or like th	not at all	Very much o		Somewhat li not much or like th	not at all	Very much o		Somewhat li not much or like th	not at all	Very much o	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia Austria	38.3	(0.6)	61.7	(0.6)	26.4	(0.5)	73.6	(0.5)	36.2	(0.5)	63.8	(0.5)
<b>8</b> Austria	43.7	(8.0)	56.3	(0.8)	34.8	(0.9)	65.2	(0.9)	45.3	(0.9)	54.7	(0.9)
Canada	35.4	(0.5)	64.6	(0.5)	25.0	(0.5)	75.0	(0.5)	33.6	(0.6)	66.4	(0.6)
Chile	52.1	(0.9)	47.9	(0.9)	39.6	(0.8)	60.4	(0.8)	45.8	(8.0)	54.2	(0.8)
Colombia	48.4	(0.7)	51.6	(0.7)	40.1	(0.7)	59.9	(0.7)	47.4	(0.8)	52.6	(0.8)
Estonia	35.2	(0.7)	64.8	(0.7)	24.3	(0.6)	75.7	(0.6)	37.3	(0.9)	62.7	(0.9)
France	46.0	(8.0)	54.0	(0.8)	34.2	(0.7)	65.8	(0.7)	49.2	(0.8)	50.8	(0.8)
Germany	38.4	(0.8) †	61.6	(0.8) †	26.2	(0.9) †	73.8	(0.9) †	38.1	(0.9) †	61.9	(0.9) †
Greece	50.1	(8.0)	49.9	(0.8)	48.9	(0.7)	51.1	(0.7)	55.9	(0.7)	44.1	(0.7)
Hungary	46.3	(8.0)	53.7	(0.8)	34.5	(0.7)	65.5	(0.7)	41.4	(8.0)	58.6	(0.8)
Iceland	38.8	(0.9)	61.2	(0.9)	34.1	(0.8)	65.9	(0.8)	40.7	(0.8)	59.3	(0.8)
Ireland	37.7	(0.7)	62.3	(0.7)	24.9	(0.6)	75.1	(0.6)	35.4	(0.7)	64.6	(0.7)
Israel	40.5	(0.7)	59.5	(0.7)	38.0	(0.8)	62.0	(0.8)	45.2	(0.7)	54.8	(0.7)
Italy	53.3	(0.7)	46.7	(0.7)	51.0	(0.7)	49.0	(0.7)	58.3	(0.8)	41.7	(0.8)
Korea	47.8	(0.7)	52.2	(0.7)	39.1	(0.8)	60.9	(0.8)	56.6	(0.7)	43.4	(0.7)
Latvia	38.0	(8.0)	62.0	(0.8)	29.8	(0.8)	70.2	(0.8)	44.8	(0.7)	55.2	(0.7)
Lithuania	38.4	(0.6)	61.6	(0.6)	33.1	(0.7)	66.9	(0.7)	42.6	(0.6)	57.4	(0.6)
Mexico	35.6	(0.8) †	64.4	(0.8) †	29.7	(0.8) †	70.3	(0.8) †	34.8	(0.8) †	65.2	(0.8) †
New Zealand	38.5	(0.6)	61.5	(0.6)	26.5	(0.6)	73.5	(0.6)	36.8	(0.6)	63.2	(0.6)
Poland	33.2	(0.7)	66.8	(0.7)	27.3	(0.7)	72.7	(0.7)	38.6	(0.7)	61.4	(0.7)
Portugal	52.5	(8.0)	47.5	(0.8)	35.7	(0.7)	64.3	(0.7)	50.0	(0.8)	50.0	(0.8)
Scotland (United Kingdom)	43.1	(1.1) ‡	56.9	(1.1) ‡	30.8	(1.0) ‡	69.2	(1.0) ‡	43.9	(1.0) ‡	56.1	(1.0) ‡
Slovak Republic	46.3	(0.8)	53.7	(0.8)	42.7	(0.7)	57.3	(0.7)	52.5	(0.8)	47.5	(0.8)
Slovenia	35.9	(0.9)	64.1	(0.9)	33.3	(0.7)	66.7	(0.7)	38.3	(0.9)	61.7	(0.9)
Spain	29.6	(0.4)	70.4	(0.4)	24.3	(0.3)	75.7	(0.3)	35.8	(0.4)	64.2	(0.4)
Switzerland	39.7	(0.8)	60.3	(0.8)	30.7	(0.9)	69.3	(0.9)	40.9	(0.8)	59.1	(0.8)
Turkey	25.9	(0.5)	74.1	(0.5)	22.9	(0.6)	77.1	(0.6)	41.7	(0.6)	58.3	(0.6)
OECD average	41.1	(0.1)	58.9	(0.1)	32.9	(0.1)	67.1	(0.1)	43.2	(0.1)	56.8	(0.1)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of cognitive adaptability is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.3.10 [4/6] **Cognitive adaptability** 

		Pe	rcentage of s	tudents w	ho reported	how well e	ach of the fol	llowing sta	atements des	cribes ther	n:	
	"I can o	deal with u	nusual situati	ons"			oehaviour to i				fferent situat tress or pres	
	Somewhat I not much or like th	not at all	Very much (		Somewhat li not much or like th	not at all	Very much o		Somewhat li not much or like th	not at all	Very much o	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Albania	34.1	(0.7)	65.9	(0.7)	31.2	(0.6)	68.8	(0.6)	38.0	(0.6)	62.0	(0.6)
Albania Argentina Baku (Azerbaijan)	55.9	(0.9)	44.1	(0.9)	39.7	(0.6)	60.3	(0.6)	46.0	(0.6)	54.0	(0.6)
Baku (Azerbaijan)	39.9	(0.9) †	60.1	(0.9) †	39.2	(0.9) †	60.8	(0.9) †	44.2	(0.8) †	55.8	(0.8)
Belarus	35.0	(0.8)	65.0	(0.8)	27.6	(0.7)	72.4	(0.7)	35.8	(0.7)	64.2	(0.7)
Bosnia and Herzegovina	26.2	(0.6)	73.8	(0.6)	26.8	(0.7)	73.2	(0.7)	32.1	(0.7)	67.9	(0.7)
Brazil	52.3	(0.7) †	47.7	(0.7) †	37.2	(0.7) †	62.8	(0.7) †	47.9	(0.7) †	52.1	(0.7)
Brunei Darussalam	62.5	(0.6)	37.5	(0.6)	41.8	(0.6)	58.2	(0.6)	55.6	(0.6)	44.4	(0.6)
Bulgaria	44.5	(0.9)	55.5	(0.9)	38.3	(0.9)	61.7	(0.9)	44.5	(0.9)	55.5	(0.9)
Costa Rica	44.4	(0.7)	55.6	(0.7)	34.1	(0.8)	65.9	(8.0)	41.9	(0.7)	58.1	(0.7)
Croatia	35.4	(0.7)	64.6	(0.7)	37.9	(0.6)	62.1	(0.6)	46.3	(0.7)	53.7	(0.7)
Cyprus	48.0	(0.7)	52.0	(0.7)	45.0	(0.7)	55.0	(0.7)	52.9	(0.7)	47.1	(0.7)
Dominican Republic	47.9	(0.9) ‡	52.1	(0.9) ‡	37.9	(0.9) ‡	62.1	(0.9) ‡	44.4	(0.9) ‡	55.6	(0.9)
Hong Kong (China)	57.2	(0.8)	42.8	(0.8)	47.1	(0.8)	52.9	(0.8)	54.0	(0.8)	46.0	(8.0)
Indonesia	49.3	(0.9)	50.7	(0.9)	29.6	(0.7)	70.4	(0.7)	43.1	(1.0)	56.9	(1.0)
Jordan	27.6	(0.7)	72.4	(0.7)	30.8	(0.8)	69.2	(0.8)	38.2	(0.7)	61.8	(0.7)
Kazakhstan	46.7	(0.6)	53.3	(0.6)	39.6	(0.6)	60.4	(0.6)	43.0	(0.5)	57.0	(0.5)
Kosovo	39.6	(0.8)	60.4	(0.8)	34.3	(0.8)	65.7	(0.8)	43.3	(1.0)	56.7	(1.0)
Lebanon	37.2	(1.0)	62.8	(1.0)	35.6	(0.8)	64.4	(0.8)	46.8	(1.0)	53.2	(1.0)
Macao (China)	62.4	(0.8)	37.6	(0.8)	46.3	(0.8)	53.7	(0.8)	59.0	(0.7)	41.0	(0.7)
Malaysia	62.0	(0.8)	38.0	(0.8)	45.9	(0.8)	54.1	(0.8)	51.5	(0.8)	48.5	(0.8)
Malta	39.9	(0.9)	60.1	(0.9)	26.7	(0.9)	73.3	(0.9)	38.7	(0.9)	61.3	(0.9)
Moldova	35.8	(0.8)	64.2	(0.8)	20.3	(0.6)	79.7	(0.6)	32.1	(0.6)	67.9	(0.6)
Montenegro	25.7	(0.6)	74.3	(0.6)	37.3	(0.6)	62.7	(0.6)	36.5	(0.6)	63.5	(0.6)
Morocco	44.7	(0.9) †	55.3	(0.9) †	40.3	(0.9) †	59.7	(0.9) †	46.4	(0.8) †	53.6	(0.8)
North Macedonia	20.8	(0.6)	79.2	(0.6)	32.0	(0.8)	68.0	(0.8)	33.8	(0.7)	66.2	(0.7)
Panama	45.3	(1.0) ‡	54.7	(1.0) ‡	40.1	(1.0) ‡	59.9	(1.0) ‡	44.8	(1.1) ‡	55.2	(1.1)
Peru	50.3	(0.9) †	49.7	(0.9) †	41.2	(0.9) †	58.8	(0.9) †	43.9	(0.8) †	56.1	(0.8)
Philippines	47.2	(0.7)	52.8	(0.7)	35.2	(0.6)	64.8	(0.6)	43.9	(0.6)	56.1	(0.6)
Romania	27.3	(0.7)	72.7	(0.7)	21.7	(0.7)	78.3	(0.7)	30.8	(0.8)	69.2	(8.0)
Russia	36.5	(0.8)	63.5	(0.8)	28.7	(0.7)	71.3	(0.7)	38.0	(0.8)	62.0	(8.0)
Saudi Arabia	44.7	(0.7)	55.3	(0.7)	40.8	(0.7)	59.2	(0.7)	49.7	(0.7)	50.3	(0.7)
Serbia	32.5	(0.7)	67.5	(0.7)	38.9	(0.7)	61.1	(0.7)	42.2	(0.7)	57.8	(0.7)
Singapore	50.1	(0.7)	49.9	(0.7)	31.9	(0.6)	68.1	(0.6)	44.6	(0.7)	55.4	(0.7)
Chinese Taipei	52.1	(0.6)	47.9	(0.6)	35.0	(0.7)	65.0	(0.7)	50.5	(0.6)	49.5	(0.6)
Thailand	63.7	(0.7)	36.3	(0.7)	50.7	(0.8)	49.3	(0.8)	53.5	(0.8)	46.5	(0.8)
Ukraine	32.9	(0.6)	67.1	(0.6)	29.1	(0.7)	70.9	(0.7)	37.0	(0.7)	63.0	(0.7)
United Arab Emirates	38.4	(0.5)	61.6	(0.5)	30.7	(0.4)	69.3	(0.4)	39.5	(0.5)	60.5	(0.5)
Uruguay	42.9	(0.9) †	57.1	(0.9) †	36.4	(0.9) †	63.6	(0.9) †	47.9	(0.9) †	52.1	(0.9)
Viet Nam	65.2	(0.9)	34.8	(0.9)	36.3	(1.0)	63.7	(1.0)	57.3	(0.9)	42.7	(0.9)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

**Note**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

<sup>2.</sup> The total variation in the index of cognitive adaptability is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

 $<sup>4. \</sup> This \ measure \ corresponds \ to \ the \ intra-class \ correlation \ (rho), \ multiplied \ by \ 100.$ 

Table VI.B1.3.10 [5/6] **Cognitive adaptability** Based on students' reports

•		Pe	ercentage of s	students w	ho reported l	now well e	ach of the fol	llowing sta	atements des	cribes the	m:	
	"I car	ı adapt easily	y to a new cul	ture"	situatio	ons with ot	itering difficu ther people, I ay to resolve uation"		diffic	culties in ir	overcoming nteracting wit ther cultures'	h
	not much	t like them, or not at all them	Very much o		Somewhat li not much or like th	not at all	Very much o		Somewhat li not much or like the	not at all	Very much o	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia Austria	45.5	(0.6)	54.5	(0.6)	37.5	(0.6)	62.5	(0.6)	34.8	(0.6)	65.2	(0.6)
<b>Ö</b> Austria	54.2	(0.9)	45.8	(0.9)	42.2	(8.0)	57.8	(0.8)	41.9	(0.9)	58.1	(0.9)
Canada	45.2	(0.6)	54.8	(0.6)	33.3	(0.5)	66.7	(0.5)	33.3	(0.5)	66.7	(0.5)
Chile	54.7	(0.8)	45.3	(8.0)	42.1	(8.0)	57.9	(0.8)	39.8	(8.0)	60.2	(8.0)
Colombia	54.0	(0.8)	46.0	(8.0)	44.9	(0.7)	55.1	(0.7)	46.5	(8.0)	53.5	(8.0)
Estonia	42.8	(0.9)	57.2	(0.9)	39.5	(8.0)	60.5	(8.0)	38.0	(0.8)	62.0	(8.0)
France	50.1	(0.8)	49.9	(0.8)	41.7	(0.6)	58.3	(0.6)	45.1	(0.7)	54.9	(0.7)
Germany	48.3	(1.0) †	51.7	(1.0) †	38.5	(0.9) †	61.5	(0.9) †	35.1	(1.1) †	64.9	(1.1) †
Greece	57.5	(0.7)	42.5	(0.7)	46.5	(0.7)	53.5	(0.7)	50.5	(0.7)	49.5	(0.7)
Hungary	57.0	(0.7)	43.0	(0.7)	48.4	(0.8)	51.6	(0.8)	53.1	(0.8)	46.9	(0.8)
Iceland	47.9	(0.9)	52.1	(0.9)	42.8	(1.0)	57.2	(1.0)	44.1	(0.9)	55.9	(0.9)
Ireland	51.2	(0.7)	48.8	(0.7)	38.2	(0.7)	61.8	(0.7)	37.4	(0.6)	62.6	(0.6)
Israel	54.6	(0.8)	45.4	(0.8)	46.4	(0.8)	53.6	(0.8)	45.7	(0.8)	54.3	(0.8)
Italy	58.8	(0.7)	41.2	(0.7)	52.4	(0.6)	47.6	(0.6)	52.3	(0.7)	47.7	(0.7)
Korea	46.8	(0.7)	53.2	(0.7)	40.4	(0.7)	59.6	(0.7)	43.3	(0.8)	56.7	(0.8)
Latvia	53.2	(0.7)	46.8	(0.7)	46.8	(0.7)	53.2	(0.7)	48.7	(0.7)	51.3	(0.7)
Lithuania	49.4	(0.7)	50.6	(0.7)	41.4	(0.7)	58.6	(0.7)	45.5	(0.7)	54.5	(0.7)
Mexico	45.5	(1.0) †	54.5	(1.0) †	33.6	(0.8) †	66.4	(0.8) †	37.2	(0.9) †	62.8	(0.9) †
New Zealand	46.3	(0.7)	53.7	(0.7)	39.8	(0.7)	60.2	(0.7)	36.5	(0.6)	63.5	(0.6)
Poland	44.6	(0.8)	55.4	(0.8)	37.2	(0.7)	62.8	(0.7)	40.4	(0.7)	59.6	(0.7)
Portugal	54.0	(0.7)	46.0	(0.7)	43.6	(0.9)	56.4	(0.9)	44.3	(0.9)	55.7	(0.9)
Scotland (United Kingdo	<b>m)</b> 54.6	(0.8) ‡	45.4	(0.8) ‡	43.6	(1.1) ‡	56.4	(1.1) ‡	45.0	(1.1) ‡	55.0	(1.1) ‡
Slovak Republic	59.3	(0.7)	40.7	(0.7)	51.8	(0.8)	48.2	(0.8)	56.4	(0.8)	43.6	(0.8)
Slovenia	54.3	(0.7)	45.7	(0.7)	41.9	(0.8)	58.1	(0.8)	36.5	(0.8)	63.5	(0.8)
Spain	48.9	(0.4)	51.1	(0.4)	29.6	(0.4)	70.4	(0.4)	31.6	(0.4)	68.4	(0.4)
Switzerland	47.0	(0.9)	53.0	(0.9)	39.1	(0.8)	60.9	(0.8)	36.8	(0.8)	63.2	(0.8)
Turkey	43.7	(0.7)	56.3	(0.7)	31.1	(0.6)	68.9	(0.6)	34.5	(0.6)	65.5	(0.6)
OECD average	50.7	(0.1)	49.3	(0.1)	41.3	(0.1)	58.7	(0.1)	42.0	(0.1)	58.0	(0.1)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of cognitive adaptability is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3)

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.3.10 [6/6] **Cognitive adaptability** Based on students' reports

	-		Pe	rcentage of s	tudents w	ho reported l	now well e	ach of the fo	llowing sta	atements des	cribes the	n:	
		"I can a	dapt easily	to a new cul	ture"	situatio	ons with ot	tering difficu her people, I ay to resolve uation"		diffic	culties in ir	overcoming iteracting wit ther cultures'	h
		Somewhat li not much or like th	not at all em	Very much o	em	Somewhat li not much or like th	not at all em	Very much o	em	Somewhat li not much or like the	not at all em	Very much o	em
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Albania		36.2	(0.7)	63.8	(0.7)	25.6	(0.7)	74.4	(0.7)	30.9	(0.7)	69.1	(0.7)
Albania Argentina Baku (Azerbaii	,	56.6	(0.7)	43.4	(0.7)	43.0	(0.7)	57.0	(0.7)	51.5	(0.8)	48.5	(0.8)
	an)	42.5	(1.0) †	57.5	(1.0) †	39.4	(1.0) †	60.6	(1.0) †	42.0	(0.9) †	58.0	(0.9) †
Belarus		37.6	(0.7)	62.4	(0.7)	35.2	(0.7)	64.8	(0.7)	40.0	(0.8)	60.0	(0.8)
Bosnia and Her	zegovina	36.7	(0.8)	63.3	(0.8)	29.9	(0.7)	70.1	(0.7)	32.6	(0.8)	67.4	(0.8)
Brazil		56.3	(0.7) †	43.7	(0.7) †	45.1	(0.7) †	54.9	(0.7) †	50.8	(0.7) †	49.2	(0.7) †
Brunei Darussa	niam	65.9	(0.5)	34.1	(0.5)	59.1	(0.6)	40.9	(0.6)	62.6	(0.5)	37.4	(0.5)
Bulgaria		50.6	(0.9)	49.4	(0.9)	39.9	(1.1)	60.1	(1.1)	45.0	(1.0)	55.0	(1.0)
Costa Rica		49.3	(0.7)	50.7	(0.7)	33.3	(0.7)	66.7	(0.7)	39.8	(0.7)	60.2	(0.7)
Croatia		52.7	(0.7)	47.3	(0.7)	39.2	(0.7)	60.8	(0.7)	44.8	(0.7)	55.2	(0.7)
Cyprus		55.9	(0.7)	44.1	(0.7)	46.6	(0.7)	53.4	(0.7)	51.9	(0.6)	48.1	(0.6)
Dominican Rep		48.4	(1.0) ‡	51.6	(1.0) ‡	41.1	(1.1) ‡	58.9	(1.1) ‡	44.6	(1.0) ‡	55.4	(1.0) ‡
Hong Kong (Ch	ina)	51.4	(0.8)	48.6	(0.8)	51.4	(0.8)	48.6	(0.8)	52.8	(0.8)	47.2	(0.8)
Indonesia		48.9	(0.8)	51.1	(0.8)	36.8	(0.8)	63.2	(0.8)	47.2	(0.8)	52.8	(0.8)
Jordan		39.5	(0.7)	60.5	(0.7)	37.4	(0.8)	62.6	(0.8)	38.6	(0.8)	61.4	(0.8)
Kazakhstan		41.2	(0.5)	58.8	(0.5)	39.0	(0.5)	61.0	(0.5)	44.0	(0.5)	56.0	(0.5)
Kosovo		44.0	(0.9)	56.0	(0.9)	33.5	(0.8)	66.5	(0.8)	37.2	(0.9)	62.8	(0.9)
Lebanon		50.0	(1.0)	50.0	(1.0)	33.9	(0.9)	66.1	(0.9)	42.7	(0.8)	57.3	(0.8)
Macao (China)		57.4	(0.8)	42.6	(8.0)	62.3	(0.8)	37.7	(0.8)	63.2	(0.8)	36.8	(0.8)
Malaysia		54.7	(0.8)	45.3	(0.8)	53.7	(0.8)	46.3	(0.8)	61.9	(0.8)	38.1	(0.8)
Malta		51.2	(0.9)	48.8	(0.9)	36.3	(0.9)	63.7	(0.9)	38.8	(0.9)	61.2	(0.9)
Moldova		41.8	(0.7)	58.2	(0.7)	35.6	(0.7)	64.4	(0.7)	36.9	(0.7)	63.1	(0.7)
Montenegro		36.6	(0.6)	63.4	(0.6)	31.1	(0.6)	68.9	(0.6)	32.7	(0.7)	67.3	(0.7)
Morocco		45.8	(1.0) †	54.2	(1.0) †	44.3	(1.0) †	55.7	(1.0) †	46.4	(1.0) †	53.6	(1.0) 1
North Macedon	nia	49.8	(0.8)	50.2	(8.0)	25.7	(0.7)	74.3	(0.7)	32.6	(0.6)	67.4	(0.6)
Panama		52.2	(1.1) ‡	47.8	(1.1) ‡	40.9	(1.1) ‡	59.1	(1.1) ‡	38.3	(1.0) ‡	61.7	(1.0) ‡
Peru		51.1	(1.0) †	48.9	(1.0) †	38.5	(0.9) †	61.5	(0.9) †	38.8	(1.0) †	61.2	(1.0) †
Philippines		51.6	(0.6)	48.4	(0.6)	42.8	(0.6)	57.2	(0.6)	47.4	(0.6)	52.6	(0.6)
Romania		45.8	(0.9)	54.2	(0.9)	28.4	(0.9)	71.6	(0.9)	32.9	(1.0)	67.1	(1.0)
Russia		39.0	(0.8)	61.0	(0.8)	37.7	(0.9)	62.3	(0.9)	39.9	(1.0)	60.1	(1.0)
Saudi Arabia		48.6	(0.7)	51.4	(0.7)	42.7	(0.6)	57.3	(0.6)	44.1	(0.7)	55.9	(0.7)
Serbia		48.5	(0.6)	51.5	(0.6)	35.1	(0.7)	64.9	(0.7)	41.4	(0.7)	58.6	(0.7)
Singapore		49.6	(0.7)	50.4	(0.7)	41.7	(0.7)	58.3	(0.7)	38.6	(0.7)	61.4	(0.7)
Chinese Taipei		48.1	(0.7)	51.9	(0.7)	40.1	(0.6)	59.9	(0.6)	54.7	(0.8)	45.3	(0.8)
Thailand		51.7	(8.0)	48.3	(8.0)	56.8	(8.0)	43.2	(0.8)	57.3	(8.0)	42.7	(0.8)
Ukraine		47.0	(8.0)	53.0	(8.0)	37.9	(0.9)	62.1	(0.9)	45.1	(8.0)	54.9	(8.0)
United Arab En	nirates	43.5	(0.5)	56.5	(0.5)	38.3	(0.6)	61.7	(0.6)	38.0	(0.5)	62.0	(0.5)
Uruguay		55.9	(0.9) †	44.1	(0.9) †		(0.9) †	58.8	(0.9) †	49.8	(0.9) †	50.2	(0.9) 1
Viet Nam		63.2	(0.9)	36.8	(0.9)	61.1	(0.9)	38.9	(0.9)	68.1	(1.0)	31.9	(1.0)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of cognitive adaptability is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.3.13 [1/4] **Students' attitudes towards immigrants** Based on students' reports

_						Students'	attitudes 1	towards imr	nigrants				
								\	/ariation in	the index <sup>1</sup>			
		Mean		Standard (		Total va		Variation scho	ols <sup>3</sup>	Variatior scho	ols	Proporti variation t between s	that lies schools <sup>4</sup>
	. "	Mean	S.E.	S.D.	S.E.	Variance	S.E.	Variance	S.E.	Variance	S.E.	%	S.E.
	ustralia ustria	0.31	(0.01)	0.97	(0.01)	0.94	(0.01)	0.04	(0.01)	0.90	(0.01)	4.1	(0.6)
		-0.11	(0.02)	1.00	(0.01)	0.99	(0.02)	0.11	(0.01)	0.89	(0.02)	10.7	(1.2)
	anada	0.46	(0.01)	0.98	(0.01)	0.95	(0.01)	0.03	(0.00)	0.91	(0.01)	3.5	(0.5)
	hile	0.22	(0.02) †	1.06	(0.01) †	1.13	(0.02)	0.04	(0.01) †	1.09	(0.02) †	3.4	(0.6) †
	olombia	0.04	(0.02)	0.86	(0.01)	0.74	(0.01) †	0.02	(0.01)	0.71	(0.01)	3.2	(0.8)
	stonia	-0.28	(0.01)	0.81	(0.01)	0.65	(0.02) †	0.02	(0.01)	0.64	(0.02)	2.6	(8.0)
	rance	m	m	m	m	m	m	m	m	m	m	m	m
C	iermany	0.12	(0.02) †	0.96	(0.01) †	0.92	(0.02)	0.09	(0.01) †	0.83	(0.02) †	9.7	(1.3) †
0	reece	-0.06	(0.02)	0.93	(0.01)	0.87	(0.02)	0.04	(0.01)	0.84	(0.02)	4.6	(0.8)
H	lungary	-0.90	(0.02)	0.81	(0.01)	0.65	(0.02) †	0.05	(0.01)	0.60	(0.02)	7.6	(1.3)
I	celand	0.27	(0.02)	1.05	(0.01)	1.10	(0.03)	0.03	(0.01)	1.07	(0.03)	3.0	(1.0)
I	reland	0.33	(0.02)	0.96	(0.01)	0.92	(0.02)	0.05	(0.01)	0.87	(0.02)	5.0	(8.0)
I	srael	m	m	m	m	m	m	m	m	m	m	m	m
I	taly	-0.22	(0.02)	0.91	(0.01)	0.82	(0.02)	0.04	(0.01)	0.78	(0.02)	4.5	(0.9)
K	orea	0.45	(0.01)	0.86	(0.01)	0.74	(0.01) †	0.02	(0.01)	0.71	(0.01)	3.3	(0.8)
L	atvia	-0.44	(0.01)	0.81	(0.01)	0.67	(0.01) †	0.01	(0.01)	0.67	(0.02)	1.9	(8.0)
L	ithuania	0.04	(0.02)	1.00	(0.01)	1.01	(0.02)	0.03	(0.01)	0.96	(0.02)	3.5	(8.0)
N	Mexico	0.23	(0.02) †	1.00	(0.01) †	1.00	(0.02)	0.02	(0.01) †	0.98	(0.02) †	2.2	(0.7) †
N	lew Zealand	0.32	(0.01)	0.94	(0.01)	0.89	(0.02)	0.04	(0.01)	0.84	(0.02)	4.1	(0.8)
P	oland	-0.47	(0.01)	0.84	(0.01)	0.71	(0.02) †	0.01	(0.00)	0.70	(0.02)	1.4	(0.6)
P	ortugal	0.47	(0.01)	0.85	(0.01)	0.70	(0.02) †	0.00	(0.00)	0.70	(0.01)	0.3	(0.5)
S	cotland (United Kingdom)	0.34	(0.02) ‡	0.96	(0.01) ‡	0.93	(0.02)	0.02	(0.01) ‡	0.92	(0.02) ‡	1.7	(0.7) ‡
S	lovak Republic	-0.49	(0.01)	0.82	(0.01)	0.68	(0.02) †	0.03	(0.01)	0.63	(0.02)	4.2	(0.8)
S	lovenia	-0.05	(0.02)	0.92	(0.01)	0.84	(0.02)	0.05	(0.01)	0.79	(0.02)	5.5	(0.8)
S	pain	0.39	(0.01)	0.99	(0.01)	0.98	(0.01)	0.04	(0.00)	0.95	(0.01)	3.6	(0.5)
S	witzerland	0.00	(0.02) †	1.00	(0.01) †	1.03	(0.02)	0.06	(0.01) †	0.96	(0.03) †	5.5	(1.3) †
T	urkey	-0.36	(0.02)	0.93	(0.01)	0.86	(0.01)	0.03	(0.00)	0.83	(0.02)	2.9	(0.6)
C	ECD average	0.02	(0.00)	0.93	(0.00)	0.87	(0.00)	0.04	(0.00)	0.83	(0.00)	4.1	(0.2)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of students' attitudes towards immigrants is calculated from the square of the standard deviation of the index within each country/ economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.3.13 [2/4] **Students' attitudes towards immigrants** Based on students' reports

						Students'	attitudes (	towards imr	nigrants				
								1	/ariation in	the index <sup>1</sup>			
		Mean		Standard (		Total va		Variation scho	ols <sup>3</sup>	Variatior scho	ols	Proporti variation t between s	that lies schools <sup>4</sup>
M AIL	ania	Mean 0.41	S.E. (0.02)	S.D. 0.92	S.E. (0.01)	Variance 0.84	S.E.	Variance 0.05	S.E. (0.01)	Variance 0.78	S.E. (0.02)	5.8	S.E.
ē i	entina	0.41	(0.02)	1.02	(0.01)	1.05	(0.01)	0.05	(0.01)	0.78	(0.02)	4.0	(0.8) (0.8) †
E AIG	cu (Azerbaijan)	-0.11	(0.02) †	1.02	(0.01) †	1.05	(0.02)	0.04	(0.01) †	1.01	(0.02) †	0.3	(0.6) †
	arus	-0.11	(0.02) 1	0.78	(0.01) 1	0.61	(0.02)	0.00	(0.01) 1	0.61	(0.02) 1	2.1	(0.8)
	nia and Herzegovina	-0.22	(0.01)	0.78	(0.01)	0.01	(0.02)	0.01	(0.00)	0.01	(0.01)	5.6	(0.8)
Bra	•	0.07	(0.02)	0.97	(0.01)	0.98	(0.02)	0.00	(0.01) †	0.93	(0.02)	3.0	(0.8) †
	nei Darussalam	0.07	(0.01)	0.97	(0.01)	0.92	(0.02)	0.05	(0.01)	0.59	(0.02)	9.6	(1.7)
	garia	-0.43	(0.01)	0.82	(0.01)	0.85	(0.01) 1	0.00	(0.01)	0.39	(0.02)	2.2	(0.7) †
	ta Rica	0.17	(0.02)	0.92	(0.01)	0.85	(0.02)	0.02	(0.00)	0.94	(0.02)	1.3	(0.7)
	atia	0.17	(0.02)	0.94	(0.01)	0.90	(0.02)	0.01	(0.00)	0.94	(0.02)	2.9	(0.6)
Сур		-0.04	(0.01)	1.00	(0.01)	1.01	(0.02)	0.03	(0.01)	0.98	(0.02)	2.2	(1.1)
71	ninican Republic	-0.04	(0.01)	0.99	(0.01)	0.99	(0.02)	0.02	(0.01)	0.96	(0.03)	3.9	(1.7) ‡
	ng Kong (China)	0.03	(0.03) +	0.79	(0.01)	0.62	(0.01) †	0.01	(0.02) +	0.61	(0.01)	1.7	(0.6)
	onesia	-0.29	(0.01)	0.73	(0.01)	0.53	(0.01) †	0.01	(0.00)	0.52	(0.01)	2.1	(0.7)
lord		-0.09	(0.02)	0.79	(0.01)	0.99	(0.02)	0.01	(0.00)	0.91	(0.01)	8.0	(1.0)
•	akhstan	-0.24	(0.01)	0.91	(0.00)	0.83	(0.01)	0.03	(0.00)	0.82	(0.01)	3.7	(0.5)
Kos		0.08	(0.01)	0.91	(0.01)	0.81	(0.01)	0.06	(0.00)	0.75	(0.01)	7.1	(1.2)
	anon	-0.26	(0.02)	0.88	(0.01)	0.77	(0.02)	0.10	(0.01)	0.67	(0.02)	13.5	(1.7)
	cao (China)	-0.02	(0.01)	0.76	(0.01)	0.58	(0.02) †	0.01	(0.00)	0.55	(0.02)	1.8	(0.8)
	laysia	m	m	m	m	m	m	m	m	m	(0.02) m	m	m
Mal	•	-0.06	(0.02)	0.93	(0.01)	0.87	(0.02)	0.03	(0.01)	0.86	(0.03)	3.6	(1.1)
	ldova	0.00	(0.01)	0.80	(0.01)	0.64	(0.02) †	0.02	(0.00)	0.63	(0.01)	3.1	(0.7)
	ntenegro	-0.04	(0.01)	0.98	(0.01)	0.96	(0.02)	0.01	(0.01)	0.95	(0.02)	1.5	(0.5)
	rocco	-0.17	(0.02) ‡	0.91	(0.01) ‡	0.83	(0.02)	0.06	(0.01) ‡	0.77	(0.02) ‡	7.4	(1.2) ‡
	th Macedonia	0.03	(0.01)	0.95	(0.01)	0.91	(0.02)	0.05	(0.01)	0.86	(0.03)	5.2	(1.0)
	ama	-0.03	(0.03) ‡	0.99	(0.02) ‡	0.97	(0.03)	0.02	(0.01) ‡	0.94	(0.03) ‡	2.3	(1.2) ‡
Per	u	m	m	m	m	m	m	m	m	m	m	m	m
	lippines	-0.14	(0.02)	0.81	(0.01)	0.66	(0.02) †	0.05	(0.01)	0.61	(0.01)	6.8	(1.3)
	nania	-0.20	(0.02)	0.85	(0.01)	0.72	(0.02) †	0.05	(0.01)	0.68	(0.01)	6.4	(1.3)
Rus	sia	-0.29	(0.02)	0.87	(0.01)	0.75	(0.02)	0.01	(0.00)	0.75	(0.02)	1.1	(0.4)
Sau	di Arabia	-0.31	(0.02)	0.93	(0.01)	0.87	(0.02)	0.07	(0.01)	0.80	(0.02)	7.7	(1.4)
Ser	bia	-0.28	(0.02)	0.96	(0.01)	0.92	(0.02)	0.04	(0.01)	0.88	(0.02)	4.0	(0.9)
Sing	gapore	m	m	m	m	m	m	m	m	m	m	m	m
Chi	nese Taipei	0.35	(0.01)	0.90	(0.01)	0.81	(0.01)	0.02	(0.00)	0.79	(0.01)	2.4	(0.5)
Tha	iland	-0.16	(0.01)	0.73	(0.01)	0.53	(0.01) †	0.03	(0.00)	0.51	(0.01)	4.7	(0.8)
Ukr	aine	-0.12	(0.01)	0.86	(0.01)	0.74	(0.02) †	0.02	(0.01)	0.72	(0.02)	2.8	(0.7)
Uni	ted Arab Emirates	m	m	m	m	m	m	m	m	m	m	m	m
Uru	guay	0.12	(0.02) †	1.03	(0.01) †	1.07	(0.02)	0.02	(0.01) †	1.04	(0.02) †	2.1	(0.9) †
	: Nam	-0.26	(0.02)	0.69	(0.01)	0.47	(0.02) ‡	0.03	(0.00)	0.44	(0.01)	5.4	(0.9)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of students' attitudes towards immigrants is calculated from the square of the standard deviation of the index within each country/ economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.3.13 [3/4] **Students' attitudes towards immigrants** Based on students' reports

		F	Percentaç	ge of stud	lents who	reporte	d how mu	ich they	agree witl	n the follo	owing sta	itements	about im	migrants		
	the s	rant child same opp ation that n the cou	ortunities other chi	for Idren	for seve	ral years	live in a c should ha ote in ele	ave the	opportu	grants sh nity to co ustoms ar	ntinue th	eir own			uld have everyone ntry has	
	Disag strongly		Agre strongly		Disagr strongly		Agre strongly		Disagi strongly		Agre		Disagi strongly		Agre strongly	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia Austria	8.5	(0.3)	91.5	(0.3)	15.0	(0.3)	85.0	(0.3)	14.8	(0.4)	85.2	(0.4)	11.3	(0.3)	88.7	(0.3)
Austria	20.4	(0.8)	79.6	(8.0)	34.6	(0.9)	65.4	(0.9)	36.6	(0.9)	63.4	(0.9)	24.4	(0.7)	75.6	(0.7)
Canada	7.9	(0.3)	92.1	(0.3)	12.3	(0.4)	87.7	(0.4)	12.3	(0.4)	87.7	(0.4)	9.3	(0.4)	90.7	(0.4)
Chile	12.6	(0.6) †	87.4	(0.6) †	19.6	(0.7) †	80.4	(0.7) †	21.4	(0.7) †	78.6	(0.7) †	16.0	(0.6) †	84.0	(0.6) †
Colombia	11.3	(0.7)	88.7	(0.7)	24.8	(8.0)	75.2	(0.8)	16.8	(0.6)	83.2	(0.6)	11.6	(0.6) †	88.4	(0.6) †
Estonia	14.5	(0.6)	85.5	(0.6)	38.9	(8.0)	61.1	(0.8)	29.8	(0.7)	70.2	(0.7)	26.3	(0.7)	73.7	(0.7)
France	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Germany	13.9	(0.7) †	86.1	(0.7) †	26.4	(0.9) †	73.6	(0.9) †	27.5	(1.0) †	72.5	(1.0) †	16.6	(0.8) †	83.4	(0.8) †
Greece	15.7	(0.8)	84.3	(8.0)	33.3	(8.0)	66.7	(0.8)	21.4	(0.6)	78.6	(0.6)	21.1	(0.7)	78.9	(0.7)
Hungary	42.5	(0.9)	57.5	(0.9)	60.4	(1.0)	39.6	(1.0)	59.6	(0.9)	40.4	(0.9)	59.4	(1.0)	40.6	(1.0)
Iceland	11.2	(0.7)	88.8	(0.7)	20.5	(8.0)	79.5	(0.8)	17.3	(0.7)	82.7	(0.7)	15.7	(0.7)	84.3	(0.7)
Ireland	9.4	(0.5)	90.6	(0.5)	15.0	(0.5)	85.0	(0.5)	14.3	(0.5)	85.7	(0.5)	11.3	(0.5)	88.7	(0.5)
Israel	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Italy	17.6	(0.8)	82.4	(8.0)	38.0	(0.9)	62.0	(0.9)	29.8	(0.7)	70.2	(0.7)	23.0	(0.7)	77.0	(0.7)
Korea	3.4	(0.2)	96.6	(0.2)	8.6	(0.4)	91.4	(0.4)	8.8	(0.3)	91.2	(0.3)	5.1	(0.3)	94.9	(0.3)
Latvia	21.7	(0.7)	78.3	(0.7)	45.0	(8.0)	55.0	(0.8)	33.6	(0.8)	66.4	(0.8)	34.5	(8.0)	65.5	(0.8)
Lithuania	18.9	(0.6)	81.1	(0.6)	30.1	(0.8)	69.9	(0.8)	21.4	(0.5)	78.6	(0.5)	20.4	(0.6)	79.6	(0.6)
Mexico	11.7	(0.6) †	88.3	(0.6) †	17.8	(0.7) †	82.2	(0.7) †	12.8	(0.6) †	87.2	(0.6) †	11.9	(0.5) †	88.1	(0.5) †
New Zealand	8.2	(0.4)	91.8	(0.4)	14.8	(0.5)	85.2	(0.5)	12.2	(0.5)	87.8	(0.5)	11.8	(0.5)	88.2	(0.5)
Poland	20.0	(0.7)	80.0	(0.7)	45.7	(0.8)	54.3	(8.0)	37.0	(0.7)	63.0	(0.7)	36.1	(0.9)	63.9	(0.9)
Portugal	4.6	(0.4)	95.4	(0.4)	10.5	(0.5)	89.5	(0.5)	9.7	(0.5)	90.3	(0.5)	5.8	(0.4)	94.2	(0.4)
Scotland (United Kingdom)	8.7	(0.5) ‡	91.3	(0.5) ‡	14.6	(0.8) ‡	85.4	(0.8) ‡	13.0	(0.8) ‡	87.0	(0.8) ‡	12.5	(0.9) ‡	87.5	(0.9) ‡
Slovak Republic	27.8	(0.7)	72.2	(0.7)	41.7	(8.0)	58.3	(8.0)	41.4	(0.8)	58.6	(0.8)	28.9	(0.6)	71.1	(0.6)
Slovenia	13.6	(0.5)	86.4	(0.5)	26.4	(0.7)	73.6	(0.7)	26.1	(0.7)	73.9	(0.7)	17.4	(0.6)	82.6	(0.6)
Spain	10.2	(0.3)	89.8	(0.3)	18.3	(0.4)	81.7	(0.4)	16.2	(0.4)	83.8	(0.4)	10.7	(0.3)	89.3	(0.3)
Switzerland	17.5	(0.8) †	82.5	(0.8) †	30.7	(0.9) †	69.3	(0.9) †	29.5	(1.0) †	70.5	(1.0) †	21.3	(0.8) †	78.7	(0.8) †
Turkey	21.7	(0.7)	78.3	(0.7)	48.4	(8.0)	51.6	(0.8)	28.3	(0.7)	71.7	(0.7)	31.9	(0.7)	68.1	(0.7)
OECD average	14.9	(0.1)	85.1	(0.1)	27.7	(0.1)	72.3	(0.1)	23.7	(0.1)	76.3	(0.1)	19.8	(0.1)	80.2	(0.1)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of students' attitudes towards immigrants is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

 $<sup>4. \</sup> This \ measure \ corresponds \ to \ the \ intra-class \ correlation \ (rho), \ multiplied \ by \ 100.$ 

Table VI.B1.3.13 [4/4] **Students' attitudes towards immigrants** Based on students' reports

				Percentac	ne of stud	dents who	reporte	d how mu	ch thev	agree wit	h the follo	owing sta	tements	about im	migrants		
		the s	rant child same opp ation that in the cou	ren shoul ortunities other chi	d have s for ldren	Immigr for seve	ants who	live in a c should ha ote in ele	ountry ave the	Immi	grants sh	ould have entinue th nd lifestyl	e the eir own	Immig	rants sho	uld have everyone	
		Disag strongly	disagree	Agre strongly	y agree	Disagi strongly	disagree	Agre strongly	/ agree	Disagi strongly	disagree	Agre strongly	y agree	Disagr strongly	disagree	Agre strongl	
Albania		9.5	S.E. (0.4)	90.5	S.E. (0.4)	12.1	S.E. (0.4)	% 87.9	S.E. (0.4)	8.3	S.E. (0.4)	91.7	S.E. (0.4)	7.5	S.E. (0.3)	92.5	S.E. (0.3)
Albania Argentina Baku (Azerbaii		18.1	(0.4)	81.9	(0.4)	23.4	(0.4)	76.6	(0.4)	19.3	(0.4)	80.7	(0.4)	19.4	(0.7) †	80.6	(0.7) †
Baku (Azerbai)	an)	22.4	(0.9) †	77.6	(0.9) †	26.0	(0.7) †	74.0	(0.7) †	20.5	(0.6) †	79.5	(0.6) †	18.4	(0.7) †	81.6	(0.7) †
Belarus	aiij	14.0	(0.5)	86.0	(0.5)	27.2	(0.6)	72.8	(0.6)	27.2	(0.6)	72.8	(0.6)	17.2	(0.7)	82.8	(0.5)
Bosnia and He	rzegovina	20.0	(0.7)	80.0	(0.7)	29.0	(0.0)	71.0	(0.0)	21.1	(0.6)	78.9	(0.6)	20.3	(0.6)	79.7	(0.6)
Brazil	rzegovina	15.2	(0.5) †	84.8	(0.5) †	21.0	(0.5) †	79.0	(0.5) †	17.1	(0.5) †	82.9	(0.5) †	15.3	(0.5) †	84.7	(0.5) †
Brunei Daruss	alam	12.8	(0.4)	87.2	(0.4)	23.4	(0.5)	76.6	(0.6)	15.7	(0.4)	84.3	(0.4)	14.7	(0.4)	85.3	(0.4)
Bulgaria	aiaiii	31.8	(1.1) †	68.2	(1.1) †	43.4	(0.0)	56.6	(0.0)	31.7	(0.4)	68.3	(0.4)	32.6	(0.4)	67.4	(0.4)
Costa Rica		11.5	(0.5)	88.5	(0.5)	23.1	(0.7)	76.9	(0.7)	15.4	(0.5)	84.6	(0.5)	14.9	(0.6)	85.1	(0.6)
Croatia		11.4	(0.6)	88.6	(0.6)	25.8	(0.6)	74.2	(0.6)	19.3	(0.6)	80.7	(0.6)	14.4	(0.5)	85.6	(0.5)
Cyprus		20.6	(0.5)	79.4	(0.5)	30.8	(0.0)	69.2	(0.8)	22.0	(0.5)	78.0	(0.5)	20.4	(0.6)	79.6	(0.6)
Dominican Re	aublic	22.3	(1.2) ‡	77.7	(1.2) ‡	36.1	(1.1) ‡	63.9	(1.1) ‡		(1.2) ‡	72.3	(1.2) ‡	26.3	(1.1) ‡	73.7	(1.1) ‡
Hong Kong (Cl		10.1	(0.5)	89.9	(0.5)	12.6	(0.4)	87.4	(0.4)	10.4	(0.4)	89.6	(0.4)	11.8	(0.5)	88.2	(0.5)
Indonesia	iiia <i>j</i>	18.0	(0.7)	82.0	(0.7)	28.5	(0.4)	71.5	(0.4)	23.4	(0.4)	76.6	(0.4)	19.1	(0.7)	80.9	(0.7)
		25.6	(0.7)	74.4	(0.7)	33.5		66.5	(0.8)	19.4		80.6		20.7		79.3	(0.7)
Jordan Kazakhstan							(0.8)				(0.6)		(0.6)		(0.6)		
		22.4	(0.5)	77.6	(0.5)	27.6	(0.5)	72.4	(0.5)	22.9	(0.4)	77.1	(0.4)	20.4	(0.5)	79.6	(0.5)
Kosovo Lebanon		15.5	(0.6)	84.5	(0.6)	23.5	(0.7)	76.5	(0.7)	13.1	(0.5)	86.9	(0.5)	12.1	(0.5)	87.9	(0.5)
		30.1	(1.2)	69.9	(1.2)	42.7	(1.1)	57.3	(1.1)	27.0	(1.0)	73.0	(1.0)	30.4	(1.0)	69.6	(1.0)
Macao (China)		10.1	(0.5)	89.9	(0.5)	20.8	(0.7)	79.2	(0.7)	10.3	(0.6)	89.7	(0.6)	16.7	(0.6)	83.3	(0.6)
Malaysia		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Malta		13.8	(0.6)	86.2	(0.6)	32.2	(0.8)	67.8	(0.8)	21.2	(0.8)	78.8	(0.8)	22.5	(0.8)	77.5	(0.8)
Moldova		10.3	(0.4)	89.7	(0.4)	21.4	(0.6)	78.6	(0.6)	15.3	(0.6)	84.7	(0.6)	12.9	(0.6)	87.1	(0.6)
Montenegro		18.2	(0.6)	81.8	(0.6)	29.1	(0.7)	70.9	(0.7)	18.7	(0.5)	81.3	(0.5)	17.9	(0.6)	82.1	(0.6)
Morocco		24.5	(1.1) ‡	75.5	(1.1) ‡	31.5	(1.0) ‡	68.5	(1.0) ‡		(0.9) ‡	77.2	(0.9) ‡	20.8	(0.9) ‡	79.2	(0.9) ‡
North Macedo	nia	14.9	(0.6)	85.1	(0.6)	34.0	(0.6)	66.0	(0.6)	20.2	(0.7)	79.8	(0.7)	18.3	(0.5)	81.7	(0.5)
Panama		17.7	(1.1) ‡	82.3	(1.1) ‡	29.5	(1.2) ‡	70.5	(1.2) ‡		(1.2) ‡	77.9	(1.2) ‡	23.3	(1.2) ‡	76.7	(1.2) ‡
Peru		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Philippines		17.1	(0.7)	82.9	(0.7)	21.1	(0.7)	78.9	(0.7)	16.8	(0.6)	83.2	(0.6)	15.6	(0.5)	84.4	(0.5)
Romania		19.1	(1.0)	80.9	(1.0)	31.1	(0.8)	68.9	(8.0)	24.5	(0.9)	75.5	(0.9)	24.1	(0.8)	75.9	(0.8)
Russia		20.7	(0.7)	79.3	(0.7)	36.1	(0.7)	63.9	(0.7)	26.2	(0.6)	73.8	(0.6)	21.7	(8.0)	78.3	(0.8)
Saudi Arabia		26.5	(8.0)	73.5	(0.8)	45.7	(0.9)	54.3	(0.9)	27.4	(0.8)	72.6	(0.8)	27.7	(0.7)	72.3	(0.7)
Serbia		23.4	(0.9)	76.6	(0.9)	43.9	(8.0)	56.1	(0.8)	24.3	(0.9)	75.7	(0.9)	27.3	(8.0)	72.7	(0.8)
Singapore		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Chinese Taipei		4.6	(0.3)	95.4	(0.3)	9.7	(0.3)	90.3	(0.3)	5.8	(0.3)	94.2	(0.3)	6.2	(0.3)	93.8	(0.3)
Thailand		11.0	(0.6)	89.0	(0.6)	25.1	(0.6)	74.9	(0.6)	14.6	(0.6)	85.4	(0.6)	18.7	(0.5)	81.3	(0.5)
Ukraine		13.9	(8.0)	86.1	(0.8)	33.3	(0.7)	66.7	(0.7)	22.0	(0.8)	78.0	(0.8)	16.9	(0.7)	83.1	(0.7)
United Arab Er	nirates	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Uruguay		16.6	(0.7) †	83.4	(0.7) †	21.5	(0.7) †	78.5	(0.7) †		(0.8) †	81.0	(0.8) †	15.8	(0.6) †	84.2	(0.6) †
Viet Nam		12.0	(0.7)	88.0	(0.7)	34.5	(0.9)	65.5	(0.9)	22.9	(8.0)	77.1	(8.0)	19.4	(0.7)	80.6	(0.7)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of students' attitudes towards immigrants is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.4.1 [1/6] Awareness of intercultural communication

					Awareness	of intercu	ltural comm	unication				
							1	/ariation in	the index <sup>1</sup>			
	Mean		Standard		Total vai		Variation scho	ols <sup>3</sup>	Variatior scho	ols	Proporti variation t between s	that lies chools <sup>4</sup>
	Mean	S.E.	S.D.	S.E.	Variance	S.E.	Variance	S.E.	Variance	S.E.	%	S.E.
Australia Austria	0.08	(0.01)	1.01	(0.01)	1.01	(0.02)	0.03	(0.01)	0.99	(0.02)	2.6	(0.6)
	-0.04	(0.02)	1.10	(0.01)	1.22	(0.02)	0.06	(0.01)	1.17	(0.02)	4.7	(0.8)
Canada	0.11	(0.01)	1.02	(0.01)	1.04	(0.02)	0.02	(0.00)	1.02	(0.02)	2.0	(0.4)
Chile	0.01	(0.02)	1.10	(0.01)	1.20	(0.03)	0.05	(0.01)	1.14	(0.03)	4.5	(0.8)
Colombia	-0.09	(0.02)	0.90	(0.01)	0.80	(0.02)	0.03	(0.01)	0.77	(0.02)	3.7	(0.7)
Estonia	-0.09	(0.01)	0.87	(0.01)	0.76	(0.02)	0.03	(0.01)	0.74	(0.02)	4.3	(0.8)
France	0.14	(0.02)	1.01	(0.01)	1.01	(0.02)	0.04	(0.01)	0.96	(0.02)	4.4	(8.0)
Germany	0.03	(0.02) †	1.02	(0.01) †	1.05	(0.02)	0.07	(0.01) †	0.98	(0.03) †	6.3	(1.1) 1
Greece	-0.05	(0.02)	0.91	(0.01)	0.82	(0.02)	0.03	(0.01)	0.78	(0.02)	3.7	(0.7)
Hungary	-0.12	(0.01)	0.90	(0.01)	0.79	(0.02)	0.03	(0.01)	0.75	(0.02)	4.1	(0.9)
Iceland	-0.05	(0.02)	1.08	(0.02)	1.16	(0.03)	0.01	(0.01)	1.13	(0.03)	0.7	(0.7)
Ireland	0.05	(0.01)	0.90	(0.01)	0.82	(0.02)	0.03	(0.01)	0.79	(0.02)	3.3	(0.7)
Israel	0.05	(0.02)	1.11	(0.01)	1.23	(0.03)	0.04	(0.01)	1.18	(0.03)	3.6	(0.7)
Italy	0.00	(0.02)	0.95	(0.01)	0.89	(0.02)	0.05	(0.01)	0.84	(0.02)	5.3	(0.9)
Korea	0.37	(0.01)	0.98	(0.01)	0.95	(0.02)	0.04	(0.01)	0.90	(0.02)	4.4	(8.0)
Latvia	-0.29	(0.02)	0.92	(0.01)	0.85	(0.02)	0.02	(0.01)	0.84	(0.02)	2.6	(1.0)
Lithuania	-0.01	(0.02)	1.05	(0.01)	1.10	(0.02)	0.05	(0.01)	1.03	(0.02)	4.5	(0.9)
Mexico	-0.05	(0.02) †	1.00	(0.01) †	0.99	(0.03)	0.03	(0.01) †	0.96	(0.03) †	2.8	(0.7)
New Zealand	0.05	(0.01)	0.96	(0.01)	0.93	(0.02)	0.03	(0.01)	0.89	(0.02)	2.8	(0.7)
Poland	-0.06	(0.02)	0.97	(0.01)	0.95	(0.02)	0.03	(0.01)	0.92	(0.02)	3.6	(8.0)
Portugal	0.23	(0.02)	0.93	(0.01)	0.84	(0.02)	0.02	(0.01)	0.81	(0.02)	2.9	(8.0)
Scotland (United Kingdom)	0.00	(0.02) ‡	0.95	(0.01) ‡	0.91	(0.03)	0.01	(0.01) ‡	0.90	(0.03) ‡	0.9	(0.7)
Slovak Republic	-0.29	(0.02)	0.93	(0.01)	0.86	(0.02)	0.07	(0.01)	0.78	(0.02)	7.8	(1.0)
Slovenia	-0.19	(0.02)	0.95	(0.01)	0.91	(0.02)	0.06	(0.01)	0.84	(0.02)	6.5	(1.3)
Spain	0.09	(0.01)	1.00	(0.01)	1.01	(0.01)	0.02	(0.00)	0.99	(0.01)	2.0	(0.3)
Switzerland	-0.06	(0.02)	0.98	(0.01)	0.98	(0.03)	0.05	(0.01)	0.93	(0.03)	4.8	(1.1)
Turkey	0.07	(0.02)	1.08	(0.01)	1.16	(0.02)	0.07	(0.01)	1.09	(0.02)	6.1	(0.8)
OECD average	0.00	(0.00)	0.98	(0.00)	0.97	(0.00)	0.04	(0.00)	0.93	(0.00)	3.9	(0.2)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

**Note**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

<sup>2.</sup> The total variation in the index of awareness of intercultural communication is calculated from the square of the standard deviation of the index within each country/ economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Apper 42)

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.4.1 [2/6] **Awareness of intercultural communication** Based on students' reports

						Awareness	of intercu	ltural comm	unication				
								,	/ariation in	the index1			
		Mean Mean	index S.E.	Standard (	deviation S.E.	Total vai	riation <sup>2</sup> S.E.	Variation scho Variance		Variation scho Variance		Proporti variation t between s	hat lies
'n	Albania	0.40	(0.02)	1.04	(0.01)	1.08	(0.02)	0.07	(0.01)	0.98	(0.02)	6.7	(1.0)
ner	Argentina	-0.07	(0.02)	1.04	(0.01)	1.07	(0.02)	0.05	(0.01)	1.00	(0.02)	5.2	(0.8)
=	Baku (Azerbaijan)	-0.15	(0.02) †	1.24	(0.01) †	1.54	(0.04)	0.02	(0.01) †	1.51	(0.02)	1.6	(0.7) †
	Belarus	-0.09	(0.02)	0.87	(0.01)	0.76	(0.02)	0.03	(0.01)	0.74	(0.02)	3.9	(1.0)
	Bosnia and Herzegovina	-0.11	(0.02)	1.07	(0.01)	1.12	(0.03)	0.04	(0.01)	1.07	(0.03)	3.7	(0.9)
	Brazil	-0.08	(0.02) †	1.00	(0.01) †	0.98	(0.02)	0.05	(0.01) †	0.92	(0.02) †	5.6	(1.1) †
	Brunei Darussalam	0.03	(0.01)	0.83	(0.01)	0.69	(0.01) †	0.03	(0.01)	0.66	(0.02)	3.8	(0.8)
	Bulgaria	-0.16	(0.02)	1.14	(0.01)	1.30	(0.03)	0.08	(0.01)	1.22	(0.03)	6.0	(1.1)
	Costa Rica	0.07	(0.02)	1.07	(0.01)	1.14	(0.02)	0.04	(0.01)	1.10	(0.02)	3.5	(0.9)
	Croatia	-0.03	(0.01)	0.97	(0.01)	0.94	(0.02)	0.04	(0.01)	0.90	(0.02)	4.8	(0.8)
	Cyprus	-0.13	(0.02)	1.01	(0.01)	1.03	(0.02)	0.01	(0.01)	1.00	(0.03)	1.5	(0.5)
	Dominican Republic	-0.07	(0.03) ‡	1.19	(0.02) ‡	1.41	(0.05)	0.07	(0.02) ‡	1.33	(0.05) ‡	4.8	(1.4) ‡
	Hong Kong (China)	0.10	(0.02)	0.91	(0.01)	0.82	(0.02)	0.02	(0.01)	0.80	(0.02)	2.9	(0.7)
	Indonesia	-0.09	(0.02)	0.82	(0.01)	0.66	(0.02) †	0.02	(0.01)	0.64	(0.02)	3.1	(0.8)
	Jordan	-0.04	(0.02)	1.10	(0.01)	1.21	(0.03)	0.10	(0.01)	1.11	(0.03)	8.6	(1.1)
	Kazakhstan	-0.27	(0.01)	0.97	(0.01)	0.93	(0.02)	0.03	(0.00)	0.91	(0.02)	3.5	(0.4)
	Kosovo	0.16	(0.02)	0.99	(0.01)	0.95	(0.03)	0.06	(0.01)	0.90	(0.03)	6.1	(1.1)
	Lebanon	0.01	(0.03)	1.14	(0.02)	1.23	(0.03)	0.22	(0.03)	1.02	(0.04)	17.6	(2.0)
	Macao (China)	-0.01	(0.01)	0.84	(0.01)	0.70	(0.02) †	0.03	(0.01)	0.67	(0.02)	4.0	(1.0)
	Malaysia	-0.02	(0.02)	0.80	(0.01)	0.65	(0.02) †	0.04	(0.01)	0.61	(0.02)	6.2	(0.9)
	Malta	0.14	(0.02)	1.01	(0.01)	1.02	(0.03)	0.05	(0.01)	0.97	(0.05)	5.0	(1.2)
	Moldova	0.07	(0.02)	0.85	(0.01)	0.73	(0.02) †	0.03	(0.01)	0.70	(0.02)	4.6	(0.9)
	Montenegro	-0.02	(0.01)	1.07	(0.01)	1.15	(0.02)	0.01	(0.00)	1.16	(0.03)	1.0	(0.4)
	Morocco	-0.29	(0.03) †	0.97	(0.01) †	0.95	(0.02)	0.09	(0.01) †	0.86	(0.02) †	9.6	(1.3) †
	North Macedonia	m	m	m	m	m	m	m	m	m	m	m	m
	Panama	-0.04	(0.03) ‡	1.06	(0.02) ‡	1.11	(0.04)	0.02	(0.01) ‡	1.07	(0.04) ‡	2.2	(1.1) ‡
	Peru	0.01	(0.02) †	0.94	(0.01) †	0.87	(0.03)	0.03	(0.01) †	0.85	(0.03) †	3.2	(0.9) †
	Philippines	-0.01	(0.02)	0.94	(0.01)	0.89	(0.02)	0.05	(0.01)	0.84	(0.02)	6.0	(8.0)
	Romania	0.04	(0.02)	0.92	(0.01)	0.83	(0.02)	0.06	(0.01)	0.77	(0.02)	7.2	(1.1)
	Russia	-0.30	(0.02)	1.01	(0.01)	1.01	(0.03)	0.02	(0.01)	1.01	(0.02)	1.6	(0.5)
	Saudi Arabia	-0.09	(0.02)	1.11	(0.01)	1.24	(0.03)	0.12	(0.02)	1.11	(0.03)	9.4	(1.4)
	Serbia	-0.08	(0.02)	1.07	(0.01)	1.15	(0.03)	0.05	(0.01)	1.09	(0.03)	4.5	(0.9)
	Singapore	0.30	(0.01)	0.99	(0.01)	0.99	(0.02)	0.03	(0.01)	0.96	(0.02)	3.0	(1.0)
	Chinese Taipei	0.19	(0.02)	1.05	(0.01)	1.09	(0.02)	0.04	(0.01)	1.04	(0.02)	3.8	(0.8)
	Thailand	-0.25	(0.02)	0.76	(0.01)	0.58	(0.02) †	0.04	(0.01)	0.55	(0.02)	6.1	(1.1)
	Ukraine	-0.18	(0.02)	0.91	(0.01)	0.83	(0.02)	0.03	(0.01)	0.80	(0.02)	3.3	(0.8)
	United Arab Emirates	0.10	(0.01)	1.11	(0.01)	1.22	(0.02)	0.07	(0.01)	1.15	(0.02)	5.9	(0.9)
	Uruguay	-0.06	(0.02) †	1.09	(0.01) †	1.18	(0.03)	0.03	(0.01) †	1.15	(0.03) †	2.6	(0.9) †
	Viet Nam	-0.12	(0.02)	0.75	(0.01)	0.56	(0.02) †	0.03	(0.01)	0.53	(0.02)	5.4	(1.0)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of awareness of intercultural communication is calculated from the square of the standard deviation of the index within each country/ economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.4.1 [3/6] **Awareness of intercultural communication** Based on students' reports

-				Perce	ntage of	students		•		t, when ta they do th			hose nati	ve langua	age is		
		"I carefu	lly observ	e their re	actions"	w	e are und	y check th erstandin correctly	g	"I listen	carefully t	to what tl	ney say"	"I cho	ose my w	ords care	fully"
		Disagi strongly	disagree	Agre strongly	y agree	Disagi strongly	disagree	Agre strongly	agree /	Disagi strongly	disagree	Agre strongl	y agree	Disagr strongly	disagree	Agre strongly	y agree
_	Australia	13.0	S.E. (0.3)	87.0	S.E. (0.3)	% 12.2	S.E. (0.4)	% 87.8	S.E. (0.4)	8.5	S.E. (0.3)	91.5	S.E. (0.3)	14.5	S.E. (0.4)	% 85.5	S.E.
$\sim$	Australia Austria	29.1	(0.8)	70.9	(0.8)	23.7	(0.4)	76.3	(0.4)	18.2	(0.6)	81.8	(0.5)	26.3	(0.4)	73.7	(0.4)
					. ,								` ′		` '		
	Canada Chile	13.7	(0.3)	86.3	(0.3)	12.8	(0.3)	87.2	(0.3)	9.5	(0.3)	90.5	(0.3)	16.7	(0.4)	83.3 74.9	(0.4)
	Colombia	16.3 16.2	(0.5)	83.7 83.8	(0.5)	14.8 15.4	(0.6)	85.2 84.6	(0.6)	13.7	(0.7)	86.3 86.2	(0.7)	25.1 18.6	(0.6)	81.4	(0.6)
	Estonia	18.0	(0.6)	82.0	(0.6)	17.0	(0.6)	83.0	(0.6)	9.2	(0.4)	90.8	(0.0)	18.5	(0.5)	81.5	(0.5)
	rance	12.4	(0.5)	87.6	(0.5)	11.7	(0.5)	88.3	(0.5)	9.2	(0.4)	90.8	(0.4)	20.1	(0.5)	79.9	(0.5)
	Germany	24.3	(0.5)	75.7	(0.3)	18.1	(0.5)	81.9	(0.5)	13.1	(0.6) †	86.9	(0.5)	23.1	(0.0)	76.9	(0.0)
	Greece	16.2	(0.7)	83.8	(0.7) 1	15.9	(0.6)		(0.6)	12.3	(0.6)	87.7	(0.6)	21.8	(0.6)	78.2	(0.6)
	lungary	14.8	(0.6)	85.2	(0.6)	19.3	(0.0)	84.1 80.7	(0.0)	11.5	(0.6)	88.5	(0.6)	24.4	(0.6)	75.6	(0.6)
	celand	23.4	(0.0)	76.6	(0.0)	15.9	(0.7)	84.1	(0.7)	12.7	(0.5)	87.3	(0.5)	17.7	(0.6)	82.3	(0.6)
	reland	13.4	(0.5)	86.6	(0.5)	12.6	(0.4)	87.4	(0.4)	7.3	(0.4)	92.7	(0.4)	15.7	(0.5)	84.3	(0.5)
	srael	23.3	(0.7)	76.7	(0.7)	18.9	(0.4)	81.1	(0.4)	16.1	(0.4)	83.9	(0.4)	20.1	(0.5)	79.9	(0.5)
	taly	16.8	(0.7)	83.2	(0.7)	13.8	(0.0)	86.2	(0.0)	13.0	(0.7)	87.0	(0.7)	18.7	(0.6)	81.3	(0.6)
	(orea	4.7	(0.7)	95.3	(0.7)	7.4	(0.7)	92.6	(0.4)	4.8	(0.3)	95.2	(0.3)	16.4	(0.4)	83.6	(0.4)
	.atvia	27.4	(0.8)	72.6	(0.8)	20.3	(0.4)	79.7	(0.4)	15.8	(0.6)	84.2	(0.6)	23.6	(0.4)	76.4	(0.8)
	ithuania	23.0	(0.7)	77.0	(0.7)	21.9	(0.6)	78.1	(0.6)	15.0	(0.5)	85.0	(0.5)	19.7	(0.6)	80.3	(0.6)
	Mexico	15.7	(0.7)	84.3	(0.7)	14.6	(0.5) †	85.4	(0.5) †	13.5	(0.5) †	86.5	(0.5) †	21.4	(0.6) †	78.6	(0.6) †
	New Zealand	13.8	(0.5)	86.2	(0.5)	12.2	(0.5)	87.8	(0.5)	8.3	(0.4)	91.7	(0.4)	14.9	(0.5)	85.1	(0.5)
	Poland	17.6	(0.7)	82.4	(0.7)	14.2	(0.6)	85.8	(0.6)	12.1	(0.4)	87.9	(0.6)	20.0	(0.7)	80.0	(0.7)
	Portugal	8.5	(0.4)	91.5	(0.4)	6.1	(0.4)	93.9	(0.4)	6.6	(0.4)	93.4	(0.4)	14.0	(0.5)	86.0	(0.5)
	Scotland (United Kingdom)	15.1	(0.7) ‡	84.9	(0.7) ‡	14.6	(0.8) ‡	85.4	(0.4)	8.7	(0.5) ‡	91.3	(0.5) ‡	16.8	(0.7) ‡	83.2	(0.7) ‡
	Slovak Republic	23.7	(0.7)	76.3	(0.7)	20.4	(0.7)	79.6	(0.7)	17.2	(0.6)	82.8	(0.6)	27.7	(0.7)	72.3	(0.7)
	Slovenia	18.8	(0.7)	81.2	(0.7)	17.6	(0.7)	82.4	(0.7)	13.9	(0.5)	86.1	(0.5)	24.9	(0.7)	75.1	(0.7)
	Spain	17.0	(0.4)	83.0	(0.4)	12.2	(0.4)	87.8	(0.4)	11.4	(0.3)	88.6	(0.3)	21.4	(0.4)	78.6	(0.4)
	Switzerland	24.2	(0.9)	75.8	(0.9)	20.6	(0.8)	79.4	(0.8)	14.8	(0.7)	85.2	(0.7)	25.8	(0.9)	74.2	(0.9)
	Turkey	19.4	(0.6)	80.6	(0.6)	16.3	(0.6)	83.7	(0.6)	13.9	(0.5)	86.1	(0.5)	17.7	(0.6)	82.3	(0.6)
	DECD average	17.8	(0.1)	82.2	(0.1)	15.6	(0.1)	84.4	(0.1)	12.0	(0.1)	88.0	(0.1)	20.2	(0.1)	79.8	(0.1)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of awareness of intercultural communication is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.4.1 [4/6] **Awareness of intercultural communication** Based on students' reports

			Perce	ntage of	students				t, when to			hose nat	ive langua	age is		
	"I carefu	ılly obser	ve their re	actions"	w	e are und	y check th erstandin correctly	g	"I listen	carefully	to what tl	ney say"	"I cho	ose my w	ords care	fully"
	strongly	ree or disagree	Agre	y agree	Disagr strongly	disagree	Agre strongly	/ agree		disagree	Agre	y agree	Disagr strongly	disagree	Agre strongl	y agree
2 Albania	13.0	S.E. (0.6)	87.0	S.E. (0.6)	10.3	S.E. (0.5)	% 89.7	S.E. (0.5)	8.7	S.E. (0.5)	91.3	S.E. (0.5)	8.9	S.E. (0.4)	91.1	S.E. (0.4)
Albania Argentina	20.9	(0.7)	79.1	(0.7)	22.3	(0.7)	77.7	(0.7)	15.7	(0.6)	84.3	(0.6)	20.8	(0.6)	79.2	(0.6)
Baku (Azerbaijan)	25.6	(0.8) †	74.4	(0.8) †	25.1	(0.8) †	74.9	(0.8) †	21.6	(0.8) †	78.4	(0.8) †	21.7	(0.7) †	78.3	(0.7) †
Belarus	17.5	(0.6)	82.5	(0.6)	9.7	(0.5)	90.3	(0.5)	9.0	(0.5)	91.0	(0.5)	15.8	(0.5)	84.2	(0.5)
Bosnia and Herzegovina	20.6	(0.6)	79.4	(0.6)	18.5	(0.6)	81.5	(0.6)	15.7	(0.6)	84.3	(0.6)	21.2	(0.6)	78.8	(0.6)
Brazil	17.7	(0.6) †	82.3	(0.6) †	15.9	(0.5) †	84.1	(0.5) †	14.1	(0.5) †	85.9	(0.5) †	20.9	(0.5) †	79.1	(0.5) †
Brunei Darussalam	11.5	(0.4)	88.5	(0.4)	11.8	(0.4)	88.2	(0.4)	7.6	(0.4)	92.4	(0.4)	13.5	(0.4)	86.5	(0.4)
Bulgaria	26.0	(0.9)	74.0	(0.9)	23.4	(0.9)	76.6	(0.9)	21.1	(0.7)	78.9	(0.7)	25.0	(0.8) †	75.0	(0.8) 1
Costa Rica	15.8	(0.6)	84.2	(0.6)	13.7	(0.5)	86.3	(0.5)	11.6	(0.5)	88.4	(0.5)	21.0	(0.7)	79.0	(0.7)
Croatia	17.2	(0.6)	82.8	(0.6)	14.9	(0.5)	85.1	(0.5)	11.2	(0.5)	88.8	(0.5)	21.3	(0.6)	78.7	(0.6)
Cyprus	23.7	(0.6)	76.3	(0.6)	20.5	(0.6)	79.5	(0.6)	17.6	(0.7)	82.4	(0.7)	24.8	(0.6)	75.2	(0.6)
Dominican Republic	22.3	(1.0) ‡	77.7	(1.0) ‡	21.4	(1.2) ‡	78.6	(1.2) ‡		(1.0) ‡	80.8	(1.0) ‡	21.6	(1.0) ‡	78.4	(1.0) ‡
Hong Kong (China)	8.9	(0.5)	91.1	(0.5)	8.9	(0.5)	91.1	(0.5)	7.5	(0.4)	92.5	(0.4)	13.4	(0.5)	86.6	(0.5)
Indonesia	15.1	(0.7)	84.9	(0.7)	14.2	(0.6)	85.8	(0.6)	11.1	(0.5)	88.9	(0.5)	11.9	(0.5)	88.1	(0.5)
Jordan	31.8	(0.8)	68.2	(0.8)	24.1	(0.8)	75.9	(0.8)	18.9	(0.7)	81.1	(0.7)	18.0	(0.6)	82.0	(0.6)
Kazakhstan	28.9	(0.5)	71.1	(0.5)	22.7	(0.5)	77.3	(0.5)	19.0	(0.5)	81.0	(0.5)	22.2	(0.5)	77.8	(0.5)
Kosovo	20.2	(0.7)	79.8	(0.7)	14.4	(0.6)	85.6	(0.6)	11.9	(0.5)	88.1	(0.5)	10.4	(0.5)	89.6	(0.5)
Lebanon	32.0	(1.3)	68.0	(1.3)	27.9	(1.0)	72.1	(1.0)	21.6	(1.1)	78.4	(1.1)	20.9	(0.8)	79.1	(0.8)
Macao (China)	9.9	(0.5)	90.1	(0.5)	16.8	(0.7)	83.2	(0.7)	7.3	(0.5)	92.7	(0.5)	16.6	(0.6)	83.4	(0.6)
Malaysia	15.7	(0.6)	84.3	(0.6)	10.8	(0.5)	89.2	(0.5)	12.0	(0.4)	88.0	(0.4)	13.9	(0.6)	86.1	(0.6)
Malta	13.8	(0.7)	86.2	(0.7)	12.6	(0.6)	87.4	(0.6)	9.4	(0.6)	90.6	(0.6)	15.8	(0.7)	84.2	(0.7)
Moldova	14.0	(0.5)	86.0	(0.5)	10.9	(0.5)	89.1	(0.5)	8.1	(0.5)	91.9	(0.5)	10.6	(0.4)	89.4	(0.4)
Montenegro	20.5	(0.5)	79.5	(0.5)	18.2	(0.5)	81.8	(0.5)	15.4	(0.4)	84.6	(0.4)	19.2	(0.5)	80.8	(0.5)
Morocco	34.9	(1.1) †	65.1	(1.1) †	31.5	(1.0) †	68.5	(1.0) †	25.6	(1.0) †	74.4	(1.0) †	23.7	(1.0) †	76.3	(1.0) †
North Macedonia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Panama	19.5	(0.9) ‡	80.5	(0.9) ‡	18.4	(0.9) ‡	81.6	(0.9) ‡	16.2	(0.9) ‡	83.8	(0.9) ‡	21.9	(1.0) ‡	78.1	(1.0) ‡
Peru	12.7	(0.6) †	87.3	(0.6) †	11.9	(0.5) †	88.1	(0.5) †	12.3	(0.5) †	87.7	(0.5) †	15.8	(0.7) †	84.2	(0.7) 1
Philippines	13.5	(0.6)	86.5	(0.6)	15.6	(0.6)	84.4	(0.6)	11.7	(0.5)	88.3	(0.5)	14.6	(0.5)	85.4	(0.5)
Romania	14.1	(0.0)	85.9	(0.8)	14.4	(0.0)	85.6	(0.8)	12.1	(0.7)	87.9	(0.7)	14.0	(0.7)	86.0	(0.7)
Russia	30.2	(0.7)	69.8	(0.7)	22.4	(0.6)	77.6	(0.6)	18.4	(0.6)	81.6	(0.6)	23.9	(0.7)	76.1	(0.7)
Saudi Arabia	32.7	(0.7)	67.3	(0.8)	22.4	(0.0)	77.0	(0.8)	22.4	(0.7)	77.6	(0.7)	19.3	(0.7)	80.7	(0.7)
Serbia	21.7	(0.8)	78.3	(0.8)	19.1	(0.8)	80.9	(0.8)	16.8	(0.7)	83.2	(0.7)	20.5	(0.7)	79.5	(0.7)
Singapore	6.9	(0.3)	93.1	(0.8)	8.3	(0.7)	91.7	(0.7)	5.4	(0.7)	94.6	(0.7)	11.1	(0.5)	88.9	(0.5)
Chinese Taipei	7.8	(0.3)	92.2	(0.3)	9.1	(0.4)	90.9	(0.4)	7.4	(0.3)	92.6	(0.3)	13.1	(0.5)	86.9	(0.5)
Thailand	21.7	(0.8)	78.3	(0.8)	15.6	(0.4)	84.4	(0.4)	14.0	(0.4)	86.0	(0.4)	15.1	(0.5)	84.1	(0.5)
Ukraine																
United Arab Emirates	25.3	(0.7)	74.7 79.0	(0.7)	21.2	(0.6)	78.8	(0.6)	12.3	(0.5)	87.7	(0.5)	18.8	(0.7)	81.2	(0.7)
United Arab Emirates Uruguay	21.0	(0.4) (0.7) †	79.0	(0.4)	16.4	(0.5)	83.6	(0.5) (0.6) †	15.1 14.7	(0.4) (0.7) †	84.9	(0.4) (0.7) †	16.6	(0.4) (0.7) †	83.4	(0.4)
5 ,	20.3			(0.7) †	17.6	(0.6) †	82.4				85.3		25.4		74.6	(0.7) †
Viet Nam	14.9	(0.7)	85.1	(0.7)	19.6	(0.6)	80.4	(0.6)	8.1	(0.5)	91.9	(0.5)	15.9	(0.6)	84.1	(0.6)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of awareness of intercultural communication is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

 $<sup>4. \</sup> This \ measure \ corresponds \ to \ the \ intra-class \ correlation \ (rho), \ multiplied \ by \ 100.$ 

Table VI.B1.4.1 [5/6] **Awareness of intercultural communication** Based on students' reports

		Perc	entage of stu	idents who		•	t, when talkir they do the fo		le whose nati	ive langua	ige is	
	"I give o	oncrete ex my io	ramples to ex leas"	plain	"I exp	lain thing	s very carefull	y"	I find ways a	around it (	with commu e.g. by using , writing etc.)'	gestures,
	Disagree or disagr		Agree or stro	ngly agree	Disagre strongly d		Agree or stro	ngly agree	Disagre strongly d		Agree or stro	ngly agree
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia Austria	18.4	(0.4)	81.6	(0.4)	17.0	(0.4)	83.0	(0.4)	12.0	(0.4)	88.0	(0.4)
<b>O</b> Austria	25.5	(0.6)	74.5	(0.6)	25.2	(0.7)	74.8	(0.7)	21.9	(0.7)	78.1	(0.7)
Canada	17.4	(0.3)	82.6	(0.3)	17.6	(0.4)	82.4	(0.4)	11.8	(0.4)	88.2	(0.4)
Chile	20.1	(0.6)	79.9	(0.6)	24.1	(0.8)	75.9	(0.8)	17.0	(0.6)	83.0	(0.6)
Colombia	17.0	(0.6)	83.0	(0.6)	19.7	(0.7)	80.3	(0.7)	14.8	(0.6)	85.2	(0.6)
Estonia	19.6	(0.6)	80.4	(0.6)	23.4	(0.7)	76.6	(0.7)	13.6	(0.6)	86.4	(0.6)
France	18.1	(0.5)	81.9	(0.5)	24.1	(0.7)	75.9	(0.7)	12.4	(0.4)	87.6	(0.4)
Germany	22.2	(0.7) †	77.8	(0.7) †	27.4	(0.7) †	72.6	(0.7) †	17.2	(0.7) †	82.8	(0.7) †
Greece	14.7	(0.5)	85.3	(0.5)	24.7	(0.6)	75.3	(0.6)	13.7	(0.6)	86.3	(0.6)
Hungary	24.1	(0.6)	75.9	(0.6)	30.7	(0.8)	69.3	(0.8)	13.8	(0.6)	86.2	(0.6)
Iceland	19.3	(0.6)	80.7	(0.6)	20.4	(0.8)	79.6	(0.8)	17.1	(0.7)	82.9	(0.7)
Ireland	19.9	(0.6)	80.1	(0.6)	13.9	(0.5)	86.1	(0.5)	11.8	(0.5)	88.2	(0.5)
Israel	19.2	(0.7)	80.8	(0.7)	18.9	(0.6)	81.1	(0.6)	15.3	(0.6)	84.7	(0.6)
Italy	16.6	(0.5)	83.4	(0.5)	24.7	(0.5)	75.3	(0.5)	14.7	(0.6)	85.3	(0.6)
Korea	12.8	(0.4)	87.2	(0.4)	14.1	(0.6)	85.9	(0.6)	5.2	(0.4)	94.8	(0.4)
Latvia	21.8	(0.7)	78.2	(0.7)	32.4	(0.8)	67.6	(0.8)	23.9	(8.0)	76.1	(0.8)
Lithuania	21.1	(0.7)	78.9	(0.7)	27.1	(0.6)	72.9	(0.6)	21.0	(0.6)	79.0	(0.6)
Mexico	18.9	(0.6) †	81.1	(0.6) †	21.9	(0.7) †	78.1	(0.7) †	17.3	(0.7) †	82.7	(0.7) †
New Zealand	20.6	(0.6)	79.4	(0.6)	17.8	(0.6)	82.2	(0.6)	13.4	(0.5)	86.6	(0.5)
Poland	15.4	(0.6)	84.6	(0.6)	23.4	(0.7)	76.6	(0.7)	13.9	(0.6)	86.1	(0.6)
Portugal	11.5	(0.5)	88.5	(0.5)	15.6	(0.6)	84.4	(0.6)	8.1	(0.4)	91.9	(0.4)
Scotland (United Kingdom)	18.4	(0.6) ‡	81.6	(0.6) ‡	17.9	(0.9) ‡	82.1	(0.9) ‡	15.3	(0.7) ‡	84.7	(0.7) ‡
Slovak Republic	23.4	(0.7)	76.6	(0.7)	32.1	(0.7)	67.9	(0.7)	20.8	(0.7)	79.2	(0.7)
Slovenia	25.5	(0.6)	74.5	(0.6)	26.3	(0.7)	73.7	(0.7)	16.6	(0.6)	83.4	(0.6)
Spain	16.9	(0.4)	83.1	(0.4)	22.5	(0.4)	77.5	(0.4)	12.2	(0.4)	87.8	(0.4)
Switzerland	21.6	(0.8)	78.4	(0.8)	24.0	(0.7)	76.0	(0.7)	17.5	(0.8)	82.5	(0.8)
Turkey	18.8	(0.6)	81.2	(0.6)	15.4	(0.7)	84.6	(0.7)	16.4	(0.6)	83.6	(0.6)
OECD average	19.2	(0.1)	80.8	(0.1)	22.3	(0.1)	77.7	(0.1)	15.1	(0.1)	84.9	(0.1)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of awareness of intercultural communication is calculated from the square of the standard deviation of the index within each country/ economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.4.1 [6/6] **Awareness of intercultural communication** Based on students' reports

		Perc	entage of stu	dents who			t, when talkir they do the fo		le whose nat	ive langua	ige is	
	"I give o		xamples to ex deas"	plain	"I exp	olain thing	s very careful	ly"	I find ways	around it (	with commur e.g. by using ( , writing etc.)'	gestures,
	Disagree or disagr	ree	Agree or stro		Disagre strongly d	isagree	Agree or stro		Disagre strongly d	isagree	Agree or stroi	
<b>≌</b> Albania	8.3	S.E. (0.5)	91.7	S.E. (0.5)	8.9	S.E. (0.4)	91.1	S.E. (0.4)	9.9	S.E. (0.5)	90.1	S.E. (0.5)
Albania  Argentina  Baku (Azerbaijan)	21.5	(0.5)	78.5	(0.5)	22.9	(0.4)	77.1	(0.4)	17.8	(0.5)	82.2	(0.5)
Baku (Azerbaijan)	21.2	(0.7) †	78.8	(0.7) †	23.3	(0.0)	76.7	(0.0)	19.7	(0.8) †	80.3	(0.8)
Belarus	13.8	(0.4)	86.2	(0.4)	22.6	(0.6)	77.4	(0.6)	11.6	(0.5)	88.4	(0.5)
Bosnia and Herzegovina	18.4	(0.4)	81.6	(0.4)	22.9	(0.7)	77.4	(0.7)	17.9	(0.6)	82.1	(0.6)
Brazil	18.3	(0.5) †	81.7	(0.5) †	21.7	(0.7)	78.3	(0.7)	16.4	(0.5) †	83.6	(0.5)
Brunei Darussalam	16.2		83.8		18.5		81.5		14.9		85.1	
Brunei Darussaiam Bulgaria	21.3	(0.4)	78.7	(0.4) (0.9) †	25.1	(0.5) (0.8) †	74.9	(0.5) (0.8) †	22.3	(0.5)	77.7	(0.5)
Costa Rica	17.9		82.1		21.4				14.7		85.3	
		(0.5)		(0.5)		(0.6)	78.6	(0.6)		(0.6)		(0.6)
Croatia	15.7	(0.4)	84.3	(0.4)	18.8	(0.5)	81.2	(0.5)	12.2	(0.5)	87.8	(0.5)
Cyprus	19.0	(0.6)	81.0	(0.6)	22.1	(0.6)	77.9	(0.6)	18.5	(0.6)	81.5	(0.6)
Dominican Republic	21.0	(0.9) ‡		(0.9) ‡	20.1	(1.0) ‡		(1.0) ‡	19.1	(0.8) ‡	80.9	(0.8)
Hong Kong (China)	15.2	(0.6)	84.8	(0.6)	11.7	(0.5)	88.3	(0.5)	8.1	(0.5)	91.9	(0.5)
Indonesia	12.9	(0.6)	87.1	(0.6)	11.1	(0.5)	88.9	(0.5)	13.8	(0.7)	86.2	(0.7)
Jordan	18.6	(0.5)	81.4	(0.5)	19.3	(0.6)	80.7	(0.6)	20.0	(0.6)	80.0	(0.6)
Kazakhstan	18.4	(0.4)	81.6	(0.4)	21.6	(0.5)	78.4	(0.5)	19.3	(0.5)	80.7	(0.5)
Kosovo	10.9	(0.5)	89.1	(0.5)	10.3	(0.5)	89.7	(0.5)	12.0	(0.5)	88.0	(0.5)
Lebanon	21.3	(0.9)	78.7	(0.9)	22.6	(0.9)	77.4	(0.9)	23.4	(1.0)	76.6	(1.0)
Macao (China)	17.8	(0.7)	82.2	(0.7)	22.5	(0.7)	77.5	(0.7)	10.4	(0.5)	89.6	(0.5)
Malaysia	14.0	(0.5)	86.0	(0.5)	12.3	(0.7)	87.7	(0.7)	14.4	(0.5)	85.6	(0.5)
Malta	14.3	(0.7)	85.7	(0.7)	14.9	(0.7)	85.1	(0.7)	11.1	(0.6)	88.9	(0.6)
Moldova	12.3	(0.5)	87.7	(0.5)	17.3	(0.6)	82.7	(0.6)	12.8	(0.6)	87.2	(0.6)
Montenegro	15.4	(0.5)	84.6	(0.5)	17.9	(0.5)	82.1	(0.5)	15.7	(0.5)	84.3	(0.5)
Morocco	21.6	(1.0) †	78.4	(1.0) †	23.8	(0.8) †	76.2	(0.8) †	22.7	(0.9) †	77.3	(0.9)
North Macedonia	m	m	m	m	m	m	m	m	m	m	m	m
Panama	20.8	(0.9) ‡	79.2	(0.9) ‡	20.5	(0.9) ‡	79.5	(0.9) ‡	18.9	(0.8) ‡	81.1	(0.8)
Peru	15.7	(0.7) †	84.3	(0.7) †	15.1	(0.7) †	84.9	(0.7) †	13.0	(0.6) †	87.0	(0.6) 1
Philippines	14.5	(0.6)	85.5	(0.6)	15.7	(0.6)	84.3	(0.6)	17.7	(0.7)	82.3	(0.7)
Romania	16.3	(0.7)	83.7	(0.7)	16.0	(0.7)	84.0	(0.7)	13.8	(0.8)	86.2	(0.8)
Russia	21.2	(8.0)	78.8	(0.8)	30.9	(0.7)	69.1	(0.7)	20.6	(0.6)	79.4	(0.6)
Saudi Arabia	20.9	(0.7)	79.1	(0.7)	26.0	(0.7)	74.0	(0.7)	23.1	(0.6)	76.9	(0.6)
Serbia	17.1	(0.6)	82.9	(0.6)	19.3	(0.6)	80.7	(0.6)	17.9	(0.6)	82.1	(0.6)
Singapore	15.1	(0.6)	84.9	(0.6)	13.6	(0.5)	86.4	(0.5)	7.7	(0.4)	92.3	(0.4)
Chinese Taipei	12.4	(0.4)	87.6	(0.4)	15.1	(0.5)	84.9	(0.5)	9.6	(0.4)	90.4	(0.4)
Thailand	19.2	(0.7)	80.8	(0.7)	24.0	(0.8)	76.0	(0.8)	17.0	(0.5)	83.0	(0.5)
Ukraine	18.1	(0.6)	81.9	(0.6)	29.2	(0.7)	70.8	(0.7)	16.0	(0.7)	84.0	(0.7)
United Arab Emirates	16.9	(0.5)	83.1	(0.5)	18.3	(0.4)	81.7	(0.4)	15.4	(0.4)	84.6	(0.4)
Uruguay	20.0	(0.7) †		(0.7) †	25.8	(0.7) †		(0.7) †	15.8	(0.6) †		(0.6) 1
Viet Nam	16.2	(0.7)	83.8	(0.7)	23.0	(0.7)	77.0	(0.7)	15.7	(0.7)	84.3	(0.7)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of awareness of intercultural communication is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.5.1 [1/6] Agency regarding global issues

							Global mi	ndedness					
								,	Variation in	the index <sup>1</sup>			
		Mean		Standard		Total var		Variation scho	ols <sup>3</sup>	Variation scho	ols	Proporti variation t between s	hat lies chools <sup>4</sup>
_		Mean	S.E.	S.D.	S.E.	Variance	S.E.	Variance	S.E.	Variance	S.E.	%	S.E.
	Australia Austria	0.09	(0.01)	0.99	(0.01)	0.98	(0.02)	0.03	(0.01)	0.95	(0.02)	3.2	(0.7)
		-0.20	(0.02)	1.03	(0.01)	1.07	(0.03)	0.03	(0.01)	1.04	(0.04)	2.5	(0.6)
	Canada	0.16	(0.01)	1.05	(0.01)	1.10	(0.02)	0.02	(0.00)	1.09	(0.02)	1.6	(0.3)
	Chile	-0.02	(0.02) †	0.98	(0.02) †	0.96	(0.04)	0.02	(0.01) †	0.93	(0.03) †	2.0	(0.5) †
	Colombia	0.17	(0.02)	0.91	(0.02)	0.83	(0.03)	0.02	(0.01)	0.79	(0.02)	3.1	(0.8)
	Estonia	-0.19	(0.01)	0.86	(0.01)	0.75	(0.02) †	0.02	(0.01)	0.74	(0.03)	2.7	(0.7)
	France	-0.05	(0.02)	0.98	(0.02)	0.93	(0.03)	0.03	(0.01)	0.89	(0.03)	3.0	(8.0)
	Germany	-0.27	(0.02) †	0.98	(0.02) †	0.96	(0.03)	0.05	(0.01) †	0.91	(0.03) †	5.3	(1.3) †
	Greece	0.06	(0.02)	0.94	(0.02)	0.88	(0.03)	0.02	(0.01)	0.86	(0.03)	2.6	(0.6)
	Hungary	-0.25	(0.02)	0.86	(0.02)	0.72	(0.03) †	0.03	(0.01)	0.70	(0.03)	3.8	(0.7)
	Iceland	-0.02	(0.02)	1.14	(0.02)	1.28	(0.05)	0.04	(0.01)	1.27	(0.06)	2.9	(1.0)
	Ireland	0.00	(0.01)	0.91	(0.01)	0.83	(0.02)	0.03	(0.01)	0.79	(0.02)	3.9	(8.0)
	Israel	m	m	m	m	m	m	m	m	m	m	m	m
	Italy	-0.10	(0.01)	0.89	(0.02)	0.78	(0.03)	0.01	(0.00)	0.75	(0.03)	0.9	(0.6)
	Korea	0.51	(0.02)	1.09	(0.02)	1.17	(0.03)	0.05	(0.01)	1.12	(0.03)	4.1	(0.8)
	Latvia	-0.24	(0.01)	0.85	(0.01)	0.73	(0.02) †	0.00	(0.00)	0.73	(0.03)	0.5	(0.5)
	Lithuania	0.09	(0.02)	1.14	(0.01)	1.30	(0.03)	0.03	(0.01)	1.26	(0.03)	2.0	(0.6)
	Mexico	0.11	(0.02) †	1.01	(0.02) †	0.98	(0.03)	0.02	(0.01) †	0.96	(0.03) †	2.4	(0.7) †
	New Zealand	0.08	(0.01)	0.93	(0.01)	0.86	(0.02)	0.02	(0.01)	0.83	(0.03)	2.7	(0.6)
	Poland	-0.17	(0.01)	0.89	(0.01)	0.80	(0.03)	0.01	(0.00)	0.79	(0.03)	0.8	(0.5)
	Portugal	0.32	(0.01)	0.85	(0.02)	0.71	(0.02) †	0.01	(0.01)	0.70	(0.02)	1.9	(0.7)
	Scotland (United Kingdom)	-0.05	(0.02) ‡	0.92	(0.02) ‡	0.84	(0.04)	0.02	(0.01) ‡	0.81	(0.03) ‡	2.7	(0.8) ‡
	Slovak Republic	-0.30	(0.01)	0.90	(0.02)	0.81	(0.03)	0.02	(0.01)	0.75	(0.03)	2.8	(0.7)
	Slovenia	-0.10	(0.02)	0.95	(0.01)	0.90	(0.03)	0.03	(0.01)	0.86	(0.03)	3.0	(0.8)
	Spain	0.24	(0.01)	1.01	(0.01)	1.02	(0.02)	0.02	(0.00)	1.01	(0.02)	1.5	(0.3)
	Switzerland	-0.18	(0.02) †	1.01	(0.02) †	1.03	(0.03)	0.04	(0.01) †	0.97	(0.04) †	4.2	(1.1) †
	Turkey	0.28	(0.02)	1.15	(0.02)	1.31	(0.04)	0.04	(0.01)	1.25	(0.04)	2.7	(0.6)
	OECD average	0.00	(0.00)	0.97	(0.00)	0.94	(0.01)	0.03	(0.00)	0.91	(0.01)	2.6	(0.1)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

**Note**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

<sup>2.</sup> The total variation in the index of global mindedness is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.5.1 [2/6] Agency regarding global issues

							Global mi	ndedness					
								,	/ariation in	the index <sup>1</sup>			
		Mean i	index S.E.	Standard (	deviation S.E.	Total vai	riation <sup>2</sup> S.E.	Variation scho		Variatior scho Variance		Proporti variation t between s	hat lies
S	Albania	0.54	(0.02)	1.08	(0.01)	1.16	(0.03)	0.05	(0.01)	1.11	(0.03)	4.5	(0.9)
ner	Argentina	-0.05	(0.02)	0.94	(0.01)	0.88	(0.03)	0.03	(0.01)	0.85	(0.03)	1.8	(0.6) †
=	Baku (Azerbaijan)	0.24	(0.01) †	1.35	(0.01) †	1.82	(0.02)	0.02	(0.01) †	1.81	(0.02) †	0.6	(0.6) †
_	Belarus	-0.10	(0.02) 1	0.91	(0.02) 1	0.83	(0.04)	0.01	(0.01)	0.82	(0.03)	1.2	(0.0) 1
	Bosnia and Herzegovina	-0.10	. ,	1.13	(0.02)	1.25	(0.03)	0.01	(0.01)	1.21	(0.03)	1.7	(0.7)
	Brazil	-0.11	(0.02)	0.96	(0.02)	0.89	(0.04)	0.02	(0.01)	0.87	(0.04)	1.7	. ,
			, ,		. ,		` ′		` '		, ,		(0.6) †
	Brunei Darussalam	0.03	(0.01)	0.75	(0.01)	0.56	(0.02) †	0.01	(0.00)	0.55	(0.02)	2.1	(0.6)
	Bulgaria	-0.07	(0.02) †	1.15	(0.02) †	1.31	(0.05)	0.02	(0.01) †	1.27	(0.04) †	1.4	(0.6) †
	Costa Rica	0.29	(0.02)	1.03	(0.01)	1.06	(0.03)	0.02	(0.01)	1.04	(0.03)	2.3	(0.7)
	Croatia	0.00	(0.01)	0.97	(0.01)	0.93	(0.03)	0.01	(0.00)	0.92	(0.03)	0.7	(0.4)
	Cyprus	0.07	(0.02)	1.08	(0.02)	1.18	(0.03)	0.02	(0.01)	1.15	(0.05)	1.6	(0.5)
	Dominican Republic	0.06	(0.03) ‡	1.24	(0.02) ‡	1.53	(0.06)	0.01	(0.01) ‡	1.51	(0.07) ‡	0.6	(0.9) ‡
	Hong Kong (China)	0.13	(0.02)	0.90	(0.01)	0.82	(0.03)	0.02	(0.00)	0.80	(0.03)	2.2	(0.6)
	Indonesia	-0.02	(0.02)	0.91	(0.02)	0.83	(0.03)	0.02	(0.01)	0.82	(0.03)	2.4	(0.8)
	Jordan	0.24	(0.02)	1.18	(0.01)	1.38	(0.03)	0.06	(0.01)	1.32	(0.04)	4.5	(0.8)
	Kazakhstan	-0.02	(0.01)	1.12	(0.01)	1.24	(0.03)	0.04	(0.01)	1.21	(0.02)	3.3	(0.4)
	Kosovo	0.23	(0.01)	1.02	(0.01)	1.03	(0.03)	0.03	(0.01)	1.00	(0.04)	2.6	(0.8)
	Lebanon	0.09	(0.02)	0.98	(0.01)	0.93	(0.03)	0.12	(0.02)	0.81	(0.03)	12.7	(1.7)
	Macao (China)	0.00	(0.01)	0.74	(0.01)	0.54	(0.02) †	0.01	(0.00)	0.53	(0.03)	1.2	(0.6)
	Malaysia	-0.01	(0.01)	0.79	(0.01)	0.63	(0.02) †	0.03	(0.01)	0.60	(0.02)	4.1	(0.9)
	Malta	0.23	(0.02)	1.01	(0.02)	1.02	(0.04)	0.03	(0.01)	0.99	(0.05)	2.8	(1.0)
	Moldova	-0.10	(0.01)	0.79	(0.01)	0.62	(0.02) †	0.02	(0.01)	0.61	(0.02)	3.2	(0.8)
	Montenegro	-0.03	(0.02)	1.11	(0.01)	1.24	(0.03)	0.01	(0.00)	1.23	(0.04)	0.8	(0.4)
	Morocco	-0.10	(0.02) ‡	1.01	(0.02) ‡	1.02	(0.03)	0.04	(0.01) ‡	0.98	(0.03) ‡	4.0	(0.9) ‡
	North Macedonia	0.16	(0.01)	1.01	(0.01)	1.01	(0.03)	0.04	(0.01)	0.96	(0.04)	3.8	(1.0)
	Panama	0.04	(0.02) ‡	1.05	(0.03) ‡	1.07	(0.06)	0.01	(0.01) ‡	1.03	(0.06) ‡	1.0	(1.1) ‡
	Peru	0.12	(0.02) ‡	0.90	(0.02) ‡	0.80	(0.04)	0.00	(0.01) ‡	0.79	(0.04) ‡	0.6	(0.8) ‡
	Philippines	0.13	(0.01)	0.87	(0.01)	0.75	(0.02)	0.02	(0.01)	0.73	(0.02)	2.8	(0.7)
	Romania	-0.15	(0.02)	0.81	(0.01)	0.66	(0.02) †	0.02	(0.00)	0.65	(0.02)	2.4	(0.7)
	Russia	-0.24	(0.01)	1.02	(0.01)	1.05	(0.03)	0.01	(0.00)	1.06	(0.03)	1.2	(0.4)
	Saudi Arabia	-0.02	(0.02)	1.09	(0.02)	1.15	(0.03)	0.03	(0.01)	1.11	(0.04)	3.0	(0.7)
	Serbia	-0.15	(0.02)	1.10	(0.01)	1.22	(0.03)	0.02	(0.01)	1.19	(0.04)	1.6	(0.6)
	Singapore	0.31	(0.01)	0.93	(0.01)	0.87	(0.02)	0.01	(0.00)	0.86	(0.02)	1.7	(0.4)
	Chinese Taipei	0.29	(0.01)	0.99	(0.01)	0.99	(0.02)	0.01	(0.00)	0.97	(0.03)	1.4	(0.4)
	Thailand	0.08	(0.02)	0.79	(0.01)	0.63	(0.02) †	0.02	(0.00)	0.62	(0.02)	2.6	(0.7)
	Ukraine	-0.16	(0.02)	0.89	(0.02)	0.79	(0.03)	0.02	(0.00)	0.78	(0.03)	1.9	(0.5)
	United Arab Emirates	m	m	m	m	m	m	m	m	m	m	m	m
	Uruguay	-0.07	(0.02) †	1.01	(0.02) †	1.03	(0.04)	0.00	c †	1.01	(0.04) †	0.0	c †
	Viet Nam	-0.15	(0.01)	0.68	(0.02)	0.47	(0.02) ‡	0.02	(0.01)	0.45	(0.02)	4.6	(1.1)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

**Note**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

<sup>2.</sup> The total variation in the index of global mindedness is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.5.1 [3/6] Agency regarding global issues

			Perce	ntage of st	udents who	disagreed	/agreed with	the followi	ng statemen	ts:		
	"I th		self as a citize world"	n	som under,	e people ii I feel a re	oor conditions of the world liv sponsibility to g about it"	e			viour can imp er countries"	act
	Disagre strongly d		Agree or stro	ngly agree	Disagre strongly d		Agree or stro	ngly agree	Disagre strongly di		Agree or stro	ngly agree
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia Austria	17.4	(0.4)	82.6	(0.4)	30.9	(0.5)	69.1	(0.5)	37.9	(0.5)	62.1	(0.5)
5 Austria	39.9	(0.9)	60.1	(0.9)	42.1	(0.8)	57.9	(0.8)	49.4	(0.9)	50.6	(0.9)
Canada	15.5	(0.4)	84.5	(0.4)	29.7	(0.5)	70.3	(0.5)	34.2	(0.5)	65.8	(0.5)
Chile	21.5	(0.7) †	78.5	(0.7) †	28.0	(0.8) †	72.0	(0.8) †	55.0	(0.7) †	45.0	(0.7) †
Colombia	15.9	(0.7)	84.1	(0.7)	20.8	(0.8)	79.2	(0.8)	30.6	(0.7)	69.4	(0.7)
Estonia	24.0	(8.0)	76.0	(0.8)	41.9	(0.7)	58.1	(0.7)	49.0	(0.8)	51.0	(0.8)
France	18.8	(0.6)	81.2	(0.6)	33.4	(0.7)	66.6	(0.7)	44.8	(0.8)	55.2	(0.8)
Germany	38.3	(1.2) †	61.7	(1.2) †	43.8	(1.0) †	56.2	(1.0) †	53.1	(1.0) †	46.9	(1.0) †
Greece	19.2	(0.7)	80.8	(0.7)	32.6	(0.8)	67.4	(0.8)	41.3	(0.9)	58.7	(0.9)
Hungary	39.4	(8.0)	60.6	(0.8)	36.9	(0.7)	63.1	(0.7)	60.0	(0.9)	40.0	(0.9)
Iceland	33.7	(8.0)	66.3	(0.8)	34.9	(0.9)	65.1	(0.9)	40.0	(0.9)	60.0	(0.9)
Ireland	12.8	(0.5)	87.2	(0.5)	36.9	(0.8)	63.1	(0.8)	44.3	(0.8)	55.7	(0.8)
Israel	m	m	m	m	m	m	m	m	m	m	m	m
Italy	21.2	(0.7)	78.8	(0.7)	32.1	(0.8)	67.9	(0.8)	47.4	(0.7)	52.6	(0.7)
Korea	11.2	(0.4)	88.8	(0.4)	19.1	(0.6)	80.9	(0.6)	20.0	(0.5)	80.0	(0.5)
Latvia	28.8	(8.0)	71.2	(0.8)	37.7	(0.9)	62.3	(0.9)	56.4	(0.7)	43.6	(0.7)
Lithuania	26.3	(0.7)	73.7	(0.7)	35.0	(0.6)	65.0	(0.6)	40.7	(0.7)	59.3	(0.7)
Mexico	16.6	(0.6) †	83.4	(0.6) †	24.3	(0.8) †	75.7	(0.8) †	43.2	(0.8) †	56.8	(0.8) †
New Zealand	15.8	(0.5)	84.2	(0.5)	30.6	(0.7)	69.4	(0.7)	38.7	(0.7)	61.3	(0.7)
Poland	30.9	(0.7)	69.1	(0.7)	42.9	(0.8)	57.1	(0.8)	49.4	(0.8)	50.6	(0.8)
Portugal	8.9	(0.5)	91.1	(0.5)	20.1	(0.7)	79.9	(0.7)	30.7	(0.7)	69.3	(0.7)
Scotland (United Kingdom)	18.6	(0.7) ‡	81.4	(0.7) ‡	33.6	(1.1) ‡	66.4	(1.1) ‡	47.3	(1.1) ‡	52.7	(1.1) ‡
Slovak Republic	55.4	(0.7)	44.6	(0.7)	42.3	(0.9)	57.7	(0.9)	54.3	(0.7)	45.7	(0.7)
Slovenia	24.3	(0.7)	75.7	(0.7)	32.1	(0.8)	67.9	(0.8)	52.2	(0.9)	47.8	(0.9)
Spain	11.5	(0.3)	88.5	(0.3)	26.3	(0.4)	73.7	(0.4)	37.9	(0.5)	62.1	(0.5)
Switzerland	34.1	(1.0) †	65.9	(1.0) †	40.2	(1.0) †	59.8	(1.0) †	49.3	(1.1) †	50.7	(1.1) †
Turkey	19.1	(0.7)	80.9	(0.7)	21.1	(0.6)	78.9	(0.6)	36.2	(0.6)	63.8	(0.6)
OECD average	23.8	(0.1)	76.2	(0.1)	32.7	(0.1)	67.3	(0.1)	44.0	(0.2)	56.0	(0.2)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

**Note**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

<sup>2.</sup> The total variation in the index of global mindedness is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Anney 43)

 $<sup>4. \</sup> This \ measure \ corresponds \ to \ the \ intra-class \ correlation \ (rho), \ multiplied \ by \ 100.$ 

Table VI.B1.5.1 [4/6] Agency regarding global issues

			Perce	ntage of st	udents who	disagreed	/agreed with	the follow	ing statemer	nts:		
	"I tl		self as a citize world"	n	som	e people ii . I feel a re	oor condition: n the world liv sponsibility to g about it"	re			viour can imp er countries"	oact
	Disagre strongly d		Agree or stro	ngly agree	Disagre strongly d	isagree	Agree or stro	ngly agree	Disagre strongly d	isagree	Agree or stro	ngly agree
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
된 Argentina S Baku (Azerbaijan)	13.1	(0.6)	86.9	(0.6)	14.0	(0.5)	86.0	(0.5)	25.7	(0.6)	74.3	(0.6)
Argentina	21.6	(0.7) †	78.4	(0.7) †	32.2	(0.7) †		(0.7) †	45.0	(0.8) †	55.0	(0.8) †
, ,	25.5	(0.7) †	74.5	(0.7) †	24.0	(0.7) †		(0.7) †	31.0	(0.8) †	69.0	(0.8) †
Belarus	23.1	(0.7)	76.9	(0.7)	28.0	(0.7)	72.0	(0.7)	49.1	(0.7)	50.9	(0.7)
Bosnia and Herzegovina	27.9	(8.0)	72.1	(0.8)	29.6	(8.0)	70.4	(0.8)	45.7	(0.8)	54.3	(0.8)
Brazil	22.5	(0.7) †	77.5	(0.7) †	22.3	(0.6) †	77.7	(0.6) †	53.7	(0.8) †	46.3	(0.8) †
Brunei Darussalam	25.4	(0.6)	74.6	(0.6)	17.6	(0.5)	82.4	(0.5)	36.5	(0.7)	63.5	(0.7)
Bulgaria	29.4	(1.0) †	70.6	(1.0) †	37.3	(0.9) †	62.7	(0.9) †	42.4	(0.9) †	57.6	(0.9) †
Costa Rica	14.8	(0.5)	85.2	(0.5)	21.8	(0.6)	78.2	(0.6)	33.5	(8.0)	66.5	(0.8)
Croatia	18.7	(0.6)	81.3	(0.6)	28.0	(0.7)	72.0	(0.7)	43.3	(0.7)	56.7	(0.7)
Cyprus	23.7	(0.6)	76.3	(0.6)	27.7	(0.7)	72.3	(0.7)	38.0	(8.0)	62.0	(8.0)
Dominican Republic	24.8	(1.2) ‡	75.2	(1.2) ‡	27.7	(1.3) ‡	72.3	(1.3) ‡	33.6	(1.0) ‡	66.4	(1.0) ‡
Hong Kong (China)	14.3	(0.6)	85.7	(0.6)	21.6	(0.7)	78.4	(0.7)	43.0	(1.1)	57.0	(1.1)
Indonesia	19.8	(0.7)	80.2	(0.7)	26.2	(8.0)	73.8	(0.8)	34.5	(0.8)	65.5	(0.8)
Jordan	23.8	(0.8)	76.2	(0.8)	24.2	(0.7)	75.8	(0.7)	30.5	(0.7)	69.5	(0.7)
Kazakhstan	24.3	(0.5)	75.7	(0.5)	29.3	(0.5)	70.7	(0.5)	37.9	(0.5)	62.1	(0.5)
Kosovo	24.6	(0.7)	75.4	(0.7)	19.1	(0.6)	80.9	(0.6)	26.8	(0.7)	73.2	(0.7)
Lebanon	35.8	(1.3)	64.2	(1.3)	24.8	(1.1)	75.2	(1.1)	36.7	(0.9)	63.3	(0.9)
Macao (China)	19.3	(0.7)	80.7	(0.7)	22.2	(0.8)	77.8	(0.8)	56.0	(0.8)	44.0	(0.8)
Malaysia	23.3	(0.7)	76.7	(0.7)	16.6	(0.6)	83.4	(0.6)	33.9	(0.7)	66.1	(0.7)
Malta	15.1	(0.7)	84.9	(0.7)	26.2	(0.8)	73.8	(0.8)	29.4	(0.8)	70.6	(0.8)
Moldova	17.5	(0.7)	82.5	(0.7)	30.0	(0.8)	70.0	(0.8)	47.6	(0.8)	52.4	(0.8)
Montenegro	23.1	(0.6)	76.9	(0.6)	33.1	(0.7)	66.9	(0.7)	45.5	(0.7)	54.5	(0.7)
Morocco	40.4	(0.9) †	59.6	(0.9) †	32.7	(1.1) ‡		(1.1) ‡	46.2	(0.9) ‡	53.8	(0.9) ‡
North Macedonia	24.5	(0.7)	75.5	(0.7)	18.3	(0.5)	81.7	(0.5)	41.3	(0.9)	58.7	(0.9)
Panama	21.6	(1.1) ‡		(1.1) ‡	25.7	(1.0) ‡		(1.0) ‡	47.5	(1.1) ‡	52.5	(1.1) ‡
Peru	21.0	(0.7) ‡		(0.7) ‡	19.9	(0.7) ‡		(0.7) ‡	32.4	(0.8) ‡	67.6	(0.8) ‡
Philippines	21.8	(0.8)	78.2	(0.8)	19.2	(0.6)	80.8	(0.6)	21.8	(0.6)	78.2	(0.6)
Romania	15.5	(1.0)	84.5	(1.0)	42.5	(0.8)	57.5	(0.8)	49.4	(0.9)	50.6	(0.9)
Russia	32.0	(0.7)	68.0	(0.7)	39.1	(0.6)	60.9	(0.6)	53.5	(0.8)	46.5	(0.8)
Saudi Arabia	23.7	(0.7)	76.3	(0.7)	28.6	(0.7)	71.4	(0.7)	40.7	(0.7)	59.3	(0.7)
Serbia	27.6	(0.9)	72.4	(0.7)	34.5	(0.7)	65.5	(0.7)	50.5	(0.9)	49.5	(0.7)
Singapore Chinese Taipei	12.7	(0.4)	87.3 88.8	(0.4)	18.6 17.6	(0.5)	81.4 82.4	(0.5)	24.0 39.1	(0.5)	76.0 60.9	(0.5)
Thailand	15.6	(0.4)	84.4	(0.4)	17.0	(0.5)	80.2	(0.3)	32.9	(0.7)	67.1	(0.7)
Ukraine												
	20.6	(0.8)	79.4	(0.8)	33.7	(0.7)	66.3	(0.7)	53.8	(0.7)	46.2	(0.7)
United Arab Emirates	m	m (0.0) +	m 70.2	m (0.0) ±	m	m (0.0) +	m cz.o.	m (0.0) ±	m m	m (0.0) +	m 47.5	m (0.0) +
Uruguay	20.8	(0.8) †		(0.8) †	32.2	(0.9) †		(0.9) †	52.5	(0.9) †	47.5	(0.9) †
Viet Nam	38.1	(1.3)	61.9	(1.3)	21.7	(0.9)	78.3	(0.9)	51.0	(0.9)	49.0	(0.9)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

**Note**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

<sup>2.</sup> The total variation in the index of global mindedness is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.5.1 [5/6] Agency regarding global issues

			Perce	ntage of st	udents who	disagreed	/agreed with	the followi	ing statemer	nts:		
	are	known to kplace con	ott companie provide poor ditions for the byees"				thing about th f the world"	ne			er the global mportant to n	ne"
	Disagre strongly d		Agree or stro	naly zaroo	Disagre strongly d		Agree or stro	agly agree	Disagre strongly d		Agree or stro	agly agree
	strongly u	S.E.	Agree of stro	S.E.	%	S.E.	%	S.E.	%	S.E.	Agree of stro	S.E.
Australia	31.4	(0.6)	68.6	(0.6)	36.9	(0.6)	63.1	(0.6)	23.3	(0.5)	76.7	(0.5)
Australia Austria	38.4	(0.8)	61.6	(0.8)	54.2	(0.9)	45.8	(0.9)	31.3	(0.7)	68.7	(0.7)
Canada	26.2	(0.5)	73.8	(0.5)	35.0	(0.6)	65.0	(0.6)	20.6	(0.4)	79.4	(0.4)
Chile	39.8	(0.9) †	60.2	(0.9) †	41.5	(0.8) †	58.5	(0.8) †	15.5	(0.7) †	84.5	(0.7) †
Colombia	37.1	(0.8)	62.9	(0.8)	27.4	(0.8)	72.6	(0.8)	12.3	(0.6)	87.7	(0.6)
Estonia	36.7	(0.7)	63.3	(0.7)	50.4	(0.9)	49.6	(0.9)	28.7	(8.0)	71.3	(0.8)
France	36.6	(8.0)	63.4	(0.8)	47.8	(0.9)	52.2	(0.9)	23.7	(0.7)	76.3	(0.7)
Germany	39.4	(1.0) †	60.6	(1.0) †	59.1	(1.0) †	40.9	(1.0) †	32.6	(1.0) †	67.4	(1.0) †
Greece	31.6	(0.7)	68.4	(0.7)	38.5	(0.8)	61.5	(0.8)	18.6	(0.7)	81.4	(0.7)
Hungary	41.2	(0.9)	58.8	(0.9)	55.8	(0.9)	44.2	(0.9)	16.1	(0.7)	83.9	(0.7)
Iceland	33.9	(8.0)	66.1	(8.0)	43.7	(0.9)	56.3	(0.9)	26.3	(8.0)	73.7	(0.8)
Ireland	30.8	(0.7)	69.2	(0.7)	40.6	(0.7)	59.4	(0.7)	29.2	(8.0)	70.8	(0.8)
Israel	m	m	m	m	m	m	m	m	m	m	m	m
Italy	42.3	(0.8)	57.7	(8.0)	38.8	(0.7)	61.2	(0.7)	28.2	(0.7)	71.8	(0.7)
Korea	11.2	(0.4)	88.8	(0.4)	32.8	(0.7)	67.2	(0.7)	10.6	(0.5)	89.4	(0.5)
Latvia	36.6	(0.7)	63.4	(0.7)	55.1	(0.9)	44.9	(0.9)	28.6	(0.7)	71.4	(0.7)
Lithuania	28.3	(0.7)	71.7	(0.7)	40.9	(0.8)	59.1	(0.8)	19.0	(0.5)	81.0	(0.5)
Mexico	38.2	(0.9) †	61.8	(0.9) †	29.0	(0.8) †	71.0	(0.8) †	14.7	(0.7) †	85.3	(0.7) †
New Zealand	30.3	(0.7)	69.7	(0.7)	38.8	(0.7)	61.2	(0.7)	19.9	(0.6)	80.1	(0.6)
Poland	34.4	(0.6)	65.6	(0.6)	42.2	(0.7)	57.8	(0.7)	23.7	(0.7)	76.3	(0.7)
Portugal	31.5	(0.8)	68.5	(0.8)	25.7	(0.7)	74.3	(0.7)	6.0	(0.4)	94.0	(0.4)
Scotland (United Kingdom)	29.6	(1.0) ‡	70.4	(1.0) ‡	45.6	(1.1) ‡		(1.1) ‡	28.4	(1.0) ‡		(1.0) ‡
Slovak Republic	39.6	(0.7)	60.4	(0.7)	58.0	(0.8)	42.0	(0.8)	35.7	(8.0)	64.3	(8.0)
Slovenia	28.8	(0.7)	71.2	(0.7)	52.1	(0.9)	47.9	(0.9)	21.4	(8.0)	78.6	(8.0)
Spain	31.3	(0.4)	68.7	(0.4)	33.3	(0.4)	66.7	(0.4)	16.5	(0.4)	83.5	(0.4)
Switzerland	41.2	(1.1) †	58.8	(1.1) †	53.9	(1.1) †	46.1	(1.1) †	25.3	(1.0) †		(1.0) †
Turkey	28.6	(0.5)	71.4	(0.5)	29.3	(0.6)	70.7	(0.6)	19.2	(0.6)	80.8	(0.6)
OECD average	33.7	(0.1)	66.3	(0.1)	42.5	(0.2)	57.5	(0.2)	22.1	(0.1)	77.9	(0.1)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

**Note**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

<sup>2.</sup> The total variation in the index of global mindedness is calculated from the square of the standard deviation of the index within each country/economy.

Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.5.1 [6/6] **Agency regarding global issues** Based on students' reports

based off stadents reports			Perce	ntage of st	udents who	disagreed.	/agreed with	the follow	ing statemer	nts:		
	are	known to cplace con	ott companie provide poor ditions for the byees"	s that	"I ca	n do some	thing about tl f the world"			ooking aft	er the global mportant to n	me"
	Disagre strongly d	isagree	Agree or stro		Disagre strongly d	isagree	Agree or stro	3, 3	Disagre strongly d	isagree	Agree or stro	<u> </u>
2 Albania	20.0	S.E. (0.5)	80.0	S.E. (0.5)	26.7	S.E. (0.6)	73.3	S.E. (0.6)	9.6	S.E. (0.4)	90.4	S.E. (0.4)
Albania  Argentina  Baku (Azerbaijan)	43.7	(0.5)	56.3	(0.5)	40.7	(0.0)	59.3	(0.0)	21.6	(0.4)	78.4	(0.4)
Baku (Azerbaijan)	26.9	(0.8) †	73.1	(0.8) †	30.0	(0.9) †		(0.9) †	23.1	(0.6) †	76.9	(0.6) †
Belarus	36.8	(0.7)	63.2	(0.7)	50.6	(0.8)	49.4	(0.8)	29.9	(0.7)	70.3	(0.7)
Bosnia and Herzegovina	31.8	(0.7)	68.2	(0.7)	47.0	(0.8)	53.0	(0.8)	34.5	(0.7)	65.5	(0.7)
Brazil	49.6	(0.7) †	50.4	(0.7) †	36.1	(0.3)	63.9	(0.8)	18.5	(0.7)	81.5	(0.7)
Brunei Darussalam	36.3	(0.6)	63.7	(0.6)	43.1	(0.6)	56.9	(0.6)	23.2	(0.4)	76.8	(0.4)
Bulgaria	33.1	(0.0)	66.9	(0.0)	43.1	(0.8) †	56.9	(0.0)	25.4	(0.4)	74.6	(0.4)
Costa Rica	41.3	(0.6)	58.7	(0.6)	29.6	(0.8)	70.4	(0.8)	9.3	(0.5)	90.7	(0.5)
Croatia			69.0		45.7				25.5			
	31.0	(0.6)		(0.6)		(0.6)	54.3	(0.6)	23.5	(0.6)	74.5 75.5	(0.6)
Cyprus	36.0		64.0	(0.7)	35.1	(0.8)	64.9	(0.8)		(0.6)	79.8	(0.6)
Dominican Republic	44.3	(1.3) ‡	55.7	(1.3) ‡	31.4	(1.1) ‡		(1.1) ‡	20.2	(1.1) ‡		(1.1) ‡
Hong Kong (China)	20.2	(0.6)	79.8	(0.6)	29.4	(0.9)	70.6	(0.9)	15.0	(0.6)	85.0	(0.6)
Indonesia	40.7	(0.8)	59.3	(0.8)	42.2	(0.9)	57.8	(0.9)	15.3	(0.7)	84.7	(0.7)
Jordan	26.3	(0.7)	73.7	(0.7)	33.9	(0.7)	66.1	(0.7)	20.7	(0.6)	79.3	(0.6)
Kazakhstan	35.6	(0.4)	64.4	(0.4)	42.7	(0.5)	57.3	(0.5)	22.3	(0.4)	77.7	(0.4)
Kosovo	26.2	(8.0)	73.8	(0.8)	38.6	(0.7)	61.4	(0.7)	15.3	(0.6)	84.7	(0.6)
Lebanon	35.2	(1.0)	64.8	(1.0)	37.7	(0.8)	62.3	(0.8)	27.2	(0.9)	72.8	(0.9)
Macao (China)	29.3	(0.6)	70.7	(0.6)	46.1	(0.9)	53.9	(0.9)	10.0	(0.5)	90.0	(0.5)
Malaysia	38.3	(8.0)	61.7	(0.8)	52.5	(0.9)	47.5	(0.9)	19.6	(0.6)	80.4	(0.6)
Malta	25.6	(0.9)	74.4	(0.9)	31.7	(0.8)	68.3	(0.8)	18.1	(0.7)	81.9	(0.7)
Moldova	42.9	(0.7)	57.1	(0.7)	54.4	(0.9)	45.6	(0.9)	21.4	(0.7)	78.6	(0.7)
Montenegro	30.5	(0.6)	69.5	(0.6)	43.3	(0.8)	56.7	(0.8)	25.5	(0.6)	74.5	(0.6)
Morocco	35.3	(1.0) ‡	64.7	(1.0) ‡	40.0	(0.9) ‡	60.0	(0.9) ‡	21.3	(0.9) ‡	78.7	(0.9) ‡
North Macedonia	23.3	(0.6)	76.7	(0.6)	48.5	(0.8)	51.5	(0.8)	15.3	(0.5)	84.7	(0.5)
Panama	46.5	(1.1) ‡	53.5	(1.1) ‡	29.1	(0.9) ‡	70.9	(0.9) ‡	19.4	(1.1) ‡	80.6	(1.1) ‡
Peru	54.6	(0.9) ‡	45.4	(0.9) ‡	27.3	(0.8) ‡	72.7	(0.8) ‡	12.1	(0.6) ‡	87.9	(0.6) ‡
Philippines	34.1	(0.7)	65.9	(0.7)	27.0	(0.6)	73.0	(0.6)	16.9	(0.6)	83.1	(0.6)
Romania	45.8	(0.9)	54.2	(0.9)	57.5	(1.0)	42.5	(1.0)	17.0	(0.9)	83.0	(0.9)
Russia	38.3	(0.7)	61.7	(0.7)	54.3	(0.8)	45.7	(0.8)	33.1	(0.7)	66.9	(0.7)
Saudi Arabia	35.4	(0.7)	64.6	(0.7)	47.8	(0.9)	52.2	(0.9)	30.3	(0.7)	69.7	(0.7)
Serbia	31.8	(0.7)	68.2	(0.7)	52.0	(0.9)	48.0	(0.9)	34.7	(0.8)	65.3	(0.8)
Singapore	22.7	(0.5)	77.3	(0.5)	28.7	(0.6)	71.3	(0.6)	13.3	(0.5)	86.7	(0.5)
Chinese Taipei	17.3	(0.5)	82.7	(0.5)	19.4	(0.6)	80.6	(0.6)	11.1	(0.4)	88.9	(0.4)
Thailand	26.8	(0.7)	73.2	(0.7)	31.4	(0.8)	68.6	(0.8)	14.6	(0.6)	85.4	(0.6)
Ukraine	41.7	(0.8)	58.3	(0.8)	49.3	(0.8)	50.7	(0.8)	30.6	(0.7)	69.4	(0.7)
United Arab Emirates	m	(0.0) m	m	(0.0) m	45.5 m	(0.0) m	m	(0.6) m	m	(0.7) m	m	(0.7) m
Uruguay	46.9	(1.1) †	53.1	(1.1) †	39.8	(0.9) †		(0.9) †	20.7	(0.6) †	79.3	(0.6) †
Viet Nam	29.1	(0.9)	70.9	(0.9)	46.4	(0.9)	53.6	(0.9)	26.8	(0.8) 1	79.3	
VICT MAIII	29.1	(0.9)	70.9	(0.9)	40.4	(0.9)	33.0	(0.9)	20.8	(0.7)	/3.2	(0.7)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of global mindedness is calculated from the square of the standard deviation of the index within each country/economy.

Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B1.6.1 [1/2] Performance on the global competence test

	Table VI.B1.0.11172] Periorn	nance v	on the	giobai	comp	etence	test									
			Pe	rformanc	e on the	cognitive	test				Varia	ation in p	erformance	1		
		Me	an	Stano devia		accounti in Matl and Sc p	ge residua ng for pe nematics, ience (i.e. erforman	rformance Reading Relative	Total va	riation <sup>2</sup>	Variation scho		Variation scho		Propor variation between	that lies
		Mean score	S.E.	S.D.	S.E.	Mean score	S.E. S	ignificance <sup>5</sup>	Variance	S.E.	Variance	S.E.	Variance	S.E.	%	S.E.
9	Canada	554	(2.3)	102	(1.3)	18.1	(1.5)	1	10476	(265)	1688	(152)	8798	(197)	16.1	(1.3)
Ö	Canada Chile	466	(2.9)	90	(1.3)	-4.4	(1.5)	-1	7964	(245)	2381	(233)	5522	(149)	30.1	(2.2)
	Colombia	457	(3.3)	88	(1.4)	19.7	(1.3)	1	7805	(243)	2401	(280)	5415	(235)	30.7	(2.9)
	Greece	488	(3.6)	96	(1.9)	9.6	(1.6)	1	8878	(379)	2682	(385)	6232	(222)	30.1	(3.3)
	Israel	496	(3.8)	115	(1.8)	11.2	(1.8)	1	13271	(417)	5637	(533)	7667	(281)	42.4	(2.7)
	Korea	509	(3.0)	96	(1.7)	-24.9	(1.3)	-1	9297	(368)	2896	(371)	6463	(230)	30.9	(2.9)
	Latvia	497	(2.0)	84	(1.6)	-6.4	(1.4)	-1	7058	(268)	1645	(241)	5390	(162)	23.4	(2.7)
	Lithuania	489	(1.9)	96	(1.3)	-9.3	(1.3)	-1	9232	(245)	3057	(343)	5968	(237)	33.9	(2.7)
	Scotland (United Kingdom)	534	(4.9)	107	(3.5)	16.2	(3.9)	1	11494	(760)	958	(299)	10464	(663)	8.4	(2.4)
	Slovak Republic	486	(2.3)	97	(1.5)	1.8	(1.7)	0	9324	(296)	3939	(343)	5390	(155)	42.2	(2.3)
	Spain*	512	(1.6)	97	(0.9)	12.7	(0.9)	1	9451	(176)	1140	(120)	8317	(137)	12.1	(1.2)
ers	Albania Brunei Darussalam Costa Rica	427	(2.5)	78	(1.3)	-11.6	(1.5)	-1	6129	(210)	1546	(191)	4720	(122)	24.7	(2.4)
Ę	Brunei Darussalam	429	(1.3)	95	(1.5)	-13.7	(1.3)	-1	9112	(281)	3489	(935)	5714	(239)	37.9	(6.9)
Ра	Costa Rica	456	(3.7)	86	(2.1)	8.0	(1.7)	1	7350	(359)	2321	(343)	5025	(171)	31.6	(3.3)
	Croatia	506	(2.8)	90	(2.2)	9.5	(1.5)	1	8142	(403)	3352	(374)	4944	(281)	40.4	(2.9)
	Hong Kong (China)	542	(2.8)	97	(1.9)	0.8	(1.5)	0	9386	(360)	2879	(294)	6442	(272)	30.9	(2.2)
	Indonesia	408	(2.4)	70	(2.0)	-0.4	(1.2)	0	4926	(281)	1620	(224)	3408	(222)	32.2	(3.1)
	Kazakhstan	408	(1.6)	75	(1.5)	-14.3	(1.3)	-1	5853	(260)	1705	(188)	4256	(137)	28.6	(2.3)
	Malta	479	(2.1)	107	(1.5)	2.9	(1.6)	0	11372	(316)	2385	(912)	8982	(386)	21.0	(6.9)
	Morocco	402	(3.4)	74	(1.5)	6.1	(1.8)	1	5538	(225)	2258	(171)	3242	(124)	41.1	(2.2)
	Panama	413	(2.9)	83	(2.2)	10.0	(1.6)	1	6748	(384)	2606	(397)	4164	(184)	38.5	(3.6)
	Philippines	371	(3.4)	81	(2.5)	-7.6	(1.8)	-1	6564	(398)	2164	(376)	4387	(156)	33.0	(3.9)
	Russia	480	(2.8)	91	(1.6)	-20.0	(1.2)	-1	8284	(293)	2147	(231)	6288	(182)	25.4	(2.1)
	Serbia	463	(3.2)	99	(1.6)	-1.4	(1.4)	0	9756	(305)	3927	(391)	5871	(164)	40.1	(2.5)
	Singapore	576	(1.8)	106	(1.3)	11.0	(1.1)	1	11331	(287)	3475	(457)	7677	(306)	31.2	(3.1)
	Chinese Taipei	527	(2.9)	92	(1.8)	0.7	(1.9)	0	8528	(327)	2532	(317)	5916	(226)	30.0	(2.9)
	Thailand	423	(3.0)	77	(1.7)	-8.1	(1.5)	-1	5921	(276)	2157	(234)	3905	(149)	35.6	(2.7)
	Overall average	474	(0.6)	91	(0.3)	0.6	(0.3)		8488	(65)	2555	(76)	5947	(47)	30.5	(0.6)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

Notes : Only the 27 countries and economies that conducted the global competence test are shown.

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

<sup>2.</sup> The total variation in student performance is calculated from the square of the standard deviation for all students. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

<sup>5.</sup> Significance shows if relative performance is significantly higher (+1), lower(-1) than the all-country average, or if the difference is non-significant (0).

<sup>\*</sup>In 2018, some regions in Spain conducted their high-stakes exams for tenth-grade students earlier in the year than in the past, which resulted in the testing period for these exams coinciding with the end of the PISA testing window. Because of this overlap, a number of students were negatively disposed towards the PISA test and did not try their best to demonstrate their proficiency. For details, see PISA 2018 Results Volume I, Annex 9.

Table VI.B1.6.1 [2/2] Performance on the global competence test

						Profic	iency on tl	he cognitive to	est				
		Below Le	evel 1	Level		Level	2	Level	3	Level	4	Level	5
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Cana Chile	ada	7.1	(0.5)	12.8	(0.5)	20.6	(0.5)	24.1	(0.5)	20.5	(0.6)	14.9	(0.6)
5 Chile	9	24.8	(1.3)	25.6	(0.9)	25.2	(0.8)	16.5	(0.8)	6.6	(0.5)	1.3	(0.2)
Colo	mbia	27.3	(1.4)	29.3	(0.9)	23.1	(0.9)	13.3	(8.0)	5.6	(0.5)	1.5	(0.3)
Gree	ece	19.0	(1.3)	21.8	(0.8)	25.4	(0.9)	20.3	(1.0)	10.5	(0.6)	3.1	(0.4)
Israe	el	22.8	(1.3)	17.7	(0.9)	19.5	(8.0)	18.7	(0.9)	13.5	(0.7)	7.8	(0.6)
Kore	a	14.2	(0.8)	17.7	(0.8)	24.6	(0.8)	24.7	(0.7)	14.5	(0.8)	4.4	(0.5)
Latv	ia	13.4	(0.8)	22.6	(0.8)	29.2	(0.9)	22.6	(0.9)	10.1	(0.7)	2.2	(0.4)
Lithu	uania	18.9	(0.8)	22.0	(0.7)	25.0	(8.0)	20.0	(0.7)	10.4	(0.6)	3.7	(0.3)
Scot	land (United Kingdom)	10.5	(1.1)	15.7	(1.4)	23.0	(1.1)	22.6	(1.5)	16.3	(1.2)	12.0	(1.4)
Slove	ak Republic	19.7	(0.9)	22.6	(8.0)	25.1	(0.9)	18.8	(0.7)	10.2	(0.6)	3.6	(0.5)
Spai	n*	13.4	(0.5)	18.4	(0.4)	24.5	(0.4)	23.5	(0.5)	14.3	(0.4)	5.8	(0.3)
¥ Alba		38.4	(1.3)	31.2	(0.9)	20.5	(0.8)	8.1	(0.7)	1.7	(0.3)	0.1	(0.1)
Brur Cost	nei Darussalam	43.6	(0.6)	23.5	(0.6)	16.8	(0.6)	10.3	(0.4)	4.7	(0.3)	1.0	(0.2)
Cost	a Rica	27.1	(1.3)	29.1	(1.0)	24.4	(8.0)	13.5	(0.8)	4.9	(8.0)	0.9	(0.2)
Croa	tia	12.8	(1.0)	20.5	(0.8)	26.6	(1.1)	23.3	(1.0)	12.5	(0.7)	4.2	(0.5)
Hon	g Kong (China)	8.6	(0.7)	12.7	(0.7)	21.1	(1.0)	26.9	(0.8)	20.9	(0.8)	9.8	(0.7)
Indo	nesia	47.9	(1.6)	32.6	(1.3)	14.6	(0.8)	4.2	(0.5)	0.7	(0.2)	0.0	(0.0)
Kaza	khstan	49.0	(0.9)	30.9	(0.7)	13.9	(0.6)	4.7	(0.3)	1.2	(0.2)	0.2	(0.1)
Malt	a	24.8	(1.0)	21.2	(0.9)	21.5	(0.9)	18.4	(0.7)	9.4	(0.6)	4.5	(0.4)
More	оссо	52.0	(2.1)	27.8	(1.1)	15.1	(1.1)	4.5	(0.4)	0.6	(0.2)	0.0	(0.0)
Pana	ama	46.5	(1.4)	28.3	(0.9)	16.6	(1.1)	6.7	(0.7)	1.6	(0.4)	0.2	(0.1)
Phili	ppines	69.0	(1.6)	18.0	(0.8)	8.8	(0.6)	3.4	(0.5)	0.8	(0.2)	0.1	(0.1)
Russ	ia	19.8	(1.1)	24.6	(0.8)	26.5	(0.7)	18.5	(0.8)	8.4	(0.6)	2.2	(0.4)
Serb	ia	27.9	(1.3)	24.0	(0.9)	22.8	(0.8)	15.3	(0.8)	7.6	(0.6)	2.3	(0.3)
Sing	apore	6.4	(0.4)	9.7	(0.5)	15.8	(0.5)	21.8	(0.7)	23.9	(0.7)	22.3	(0.8)
Chin	ese Taipei	9.4	(0.7)	15.7	(0.8)	24.9	(0.9)	26.3	(0.9)	17.1	(0.8)	6.7	(0.8)
Thai	land	40.4	(1.6)	32.0	(1.1)	18.4	(0.9)	7.6	(8.0)	1.6	(0.3)	0.1	(0.1)
Ove	rall average	26.5	(0.2)	22.5	(0.2)	21.2	(0.2)	16.2	(0.2)	9.3	(0.1)	4.3	(0.1)

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

**Notes**: Only the 27 countries and economies that conducted the global competence test are shown.

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

<sup>2.</sup> The total variation in student performance is calculated from the square of the standard deviation for all students. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

<sup>5.</sup> Significance shows if relative performance is significantly higher (+1), lower(-1) than the all-country average, or if the difference is non-significant (0).

<sup>\*</sup>In 2018, some regions in Spain conducted their high-stakes exams for tenth-grade students earlier in the year than in the past, which resulted in the testing period for these exams coinciding with the end of the PISA testing window. Because of this overlap, a number of students were negatively disposed towards the PISA test and did not try their best to demonstrate their proficiency. For details, see PISA 2018 Results Volume I, Annex 9.

Table VI.B1.7.1 [1/6] Students engaged in global competence learning activities Based on students' reports

·			P	ercentag	e of stude	nts who	responde	d yes/no	to wheth	ner they l	earn the f	following	at schoo	l:		
		I learn al terconnec ountries' e	tedness				lve conflic our classi		I learn	about di	fferent cu	ltures	on the I	newspap nternet o gether du	r watch th	ne news
	N		Ye		N		Ye		N		Ye		N		Ye	
"	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia Austria	43.5	(0.6)	56.5	(0.6)	34.3	(0.5)	65.7	(0.5)	20.1	(0.4)	79.9	(0.4)	53.5	(0.7)	46.5	(0.7)
	33.7	(0.9)	66.3	(0.9)	34.9	(0.9)	65.1	(0.9)	28.1	(0.8)	71.9	(0.8)	55.7	(1.3)	44.3	(1.3)
Canada	45.5	(0.6)	54.5	(0.6)	34.6	(0.5)	65.4	(0.5)	20.2	(0.5)	79.8	(0.5)	44.8	(0.6)	55.2	(0.6)
Chile	43.2	(0.9) †	56.8	(0.9) †	24.0	(0.9) †	76.0	(0.9) †	20.2	(0.6) †	79.8	(0.6) †	60.3	(1.1) †	39.7	(1.1) †
Colombia	19.4	(0.8) †	80.6	(0.8) †	12.2	(0.7) †	87.8	(0.7) †	11.0	(0.6) †	89.0	(0.6) †	40.6	(1.1) †	59.4	(1.1) †
Estonia	43.5	(0.8)	56.5	(8.0)	42.5	(0.9)	57.5	(0.9)	31.9	(0.8)	68.1	(8.0)	62.2	(0.9)	37.8	(0.9)
France	51.0	(0.8)	49.0	(8.0)	53.6	(0.9)	46.4	(0.9)	24.1	(0.6)	75.9	(0.6)	66.9	(8.0)	33.1	(8.0)
Germany	31.3	(1.0) †	68.7	(1.0) †	35.2	(1.1) †	64.8	(1.1) †	19.1	(0.8) †	80.9	(0.8) †	61.1	(1.2) †	38.9	(1.2) †
Greece	43.5	(0.9)	56.5	(0.9)	33.9	(0.7)	66.1	(0.7)	21.0	(0.7)	79.0	(0.7)	71.6	(0.9)	28.4	(0.9)
Hungary	50.5	(0.9)	49.5	(0.9)	53.1	(1.0)	46.9	(1.0)	41.6	(0.9)	58.4	(0.9)	76.0	(0.9)	24.0	(0.9)
Iceland	45.6	(0.9)	54.4	(0.9)	44.3	(1.0)	55.7	(1.0)	16.3	(0.7)	83.7	(0.7)	49.0	(1.0)	51.0	(1.0)
Ireland	43.1	(0.8)	56.9	(0.8)	39.2	(0.8)	60.8	(0.8)	21.3	(0.8)	78.7	(0.8)	66.1	(8.0)	33.9	(0.8)
Israel	64.0	(1.0) †	36.0	(1.0) †	54.2	(0.9) †	45.8	(0.9) †	36.5	(0.9) †	63.5	(0.9) †	53.1	(1.1) †	46.9	(1.1) †
Italy	50.5	(1.0)	49.5	(1.0)	35.3	(0.7)	64.7	(0.7)	23.0	(8.0)	77.0	(8.0)	51.6	(0.9)	48.4	(0.9)
Korea	38.5	(0.9)	61.5	(0.9)	25.8	(0.6)	74.2	(0.6)	22.3	(0.7)	77.7	(0.7)	48.7	(1.0)	51.3	(1.0)
Latvia	55.6	(0.8)	44.4	(8.0)	33.2	(0.7)	66.8	(0.7)	28.7	(0.7)	71.3	(0.7)	69.0	(8.0)	31.0	(8.0)
Lithuania	35.7	(0.7)	64.3	(0.7)	34.7	(0.8)	65.3	(0.8)	20.3	(0.6)	79.7	(0.6)	64.3	(0.8)	35.7	(0.8)
Mexico	40.3	(1.1) †	59.7	(1.1) †	14.9	(0.6) †	85.1	(0.6) †	19.4	(0.8) †	80.6	(0.8) †	42.6	(0.8) †	57.4	(0.8) †
New Zealand	60.4	(0.8)	39.6	(8.0)	39.2	(0.7)	60.8	(0.7)	24.9	(0.7)	75.1	(0.7)	56.6	(0.9)	43.4	(0.9)
Poland	26.1	(0.8)	73.9	(0.8)	34.5	(0.7)	65.5	(0.7)	19.4	(0.8)	80.6	(8.0)	67.8	(1.0)	32.2	(1.0)
Portugal	45.6	(1.0)	54.4	(1.0)	30.9	(0.9)	69.1	(0.9)	18.6	(0.8)	81.4	(0.8)	66.8	(0.9)	33.2	(0.9)
Scotland (United Kingdom)	60.4	(1.1) ‡	39.6	(1.1) ‡	47.6	(1.2) ‡	52.4	(1.2) ‡	30.3	(1.1) ‡	69.7	(1.1) ‡	54.9	(1.2) ‡	45.1	(1.2) ‡
Slovak Republic	59.1	(0.8)	40.9	(0.8)	31.7	(0.8)	68.3	(0.8)	24.5	(0.7)	75.5	(0.7)	60.4	(0.9)	39.6	(0.9)
Slovenia	58.8	(0.7)	41.2	(0.7)	45.7	(0.8)	54.3	(0.8)	36.3	(0.8)	63.7	(8.0)	74.7	(0.7)	25.3	(0.7)
Spain	47.5	(0.5) †	52.5	(0.5) †	26.9	(0.4) †	73.1	(0.4) †	28.7	(0.5) †	71.3	(0.5) †	58.5	(0.7) †	41.5	(0.7) †
Switzerland	45.9	(1.0) †	54.1	(1.0) †	42.8	(1.1) †	57.2	(1.1) †	29.6	(1.1) †	70.4	(1.1) †	58.5	(1.1) †	41.5	(1.1) †
Turkey	34.4	(0.7)	65.6	(0.7)	21.0	(0.7)	79.0	(0.7)	22.1	(0.7)	77.9	(0.7)	65.9	(1.0)	34.1	(1.0)
OECD average	45.1	(0.2)	54.9	(0.2)	35.6	(0.2)	64.4	(0.2)	24.4	(0.1)	75.6	(0.1)	59.3	(0.2)	40.7	(0.2)

Table VI.B1.7.1 [2/6] **Students engaged in global competence learning activities** Based on students' reports

			P	ercentag	e of stude	nts who	responde	d yes/no	to wheth	er they le	earn the 1	ollowing	at schoo	l:		
		I learn al terconnec ountries' (	tedness			now to sol people in			I learn	about dif	ferent cu	ltures	on the I	newspap nternet o jether du	r watch th	ne news
	N	0	Υe	·S	N	0	Ye	!S	N	0	Ye	es.	N	0	Υe	es .
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Albania	31.1	(0.9)	68.9	(0.9)	15.5	(0.6)	84.5	(0.6)	8.7	(0.4)	91.3	(0.4)	53.8	(0.8)	46.2	(0.8)
Argentina	30.5	(0.6) †	69.5	(0.6) †	26.8	(0.8) †	73.2	(0.8) †	21.5	(0.6) †	78.5	(0.6) †	47.6	(0.9) †	52.4	(0.9) †
Baku (Azerbaijan)	28.1	(0.7) †	71.9	(0.7) †	24.1	(0.8) †	75.9	(0.8) †	20.5	(0.7) †	79.5	(0.7) †	37.4	(0.8) †	62.6	(0.8) †
Belarus	50.9	(0.9)	49.1	(0.9)	31.7	(0.8)	68.3	(8.0)	35.2	(0.8)	64.8	(8.0)	60.3	(1.1)	39.7	(1.1)
Bosnia and Herzegovina	50.0	(1.0)	50.0	(1.0)	33.6	(0.8)	66.4	(0.8)	21.2	(0.7)	78.8	(0.7)	57.0	(0.7)	43.0	(0.7)
Brazil	29.2	(0.7) †	70.8	(0.7) †	33.6	(0.9) †	66.4	(0.9) †	14.4	(0.5) †	85.6	(0.5) †	51.1	(0.8) †	48.9	(0.8) 1
Brunei Darussalam	51.0	(0.7)	49.0	(0.7)	28.3	(0.6)	71.7	(0.6)	19.4	(0.5)	80.6	(0.5)	54.7	(0.6)	45.3	(0.6)
Bulgaria	36.7	(0.9) †	63.3	(0.9) †	33.7	(0.9) †	66.3	(0.9) †	25.5	(0.7) †	74.5	(0.7) †	57.3	(1.1) †	42.7	(1.1) 1
Costa Rica	38.8	(8.0)	61.2	(0.8)	23.0	(0.7)	77.0	(0.7)	9.6	(0.4)	90.4	(0.4)	55.6	(8.0)	44.4	(0.8)
Croatia	39.3	(8.0)	60.7	(0.8)	33.2	(0.7)	66.8	(0.7)	18.4	(0.6)	81.6	(0.6)	68.4	(8.0)	31.6	(0.8)
Cyprus	50.9	(0.9)	49.1	(0.9)	39.7	(0.8)	60.3	(0.8)	27.7	(0.7)	72.3	(0.7)	59.0	(0.9)	41.0	(0.9)
Dominican Republic	18.9	(1.2) ‡	81.1	(1.2) ‡	17.2	(1.0) ‡	82.8	(1.0) ‡	10.1	(0.9) ‡	89.9	(0.9) ‡	28.7	(1.4) ‡	71.3	(1.4) ‡
Hong Kong (China)	30.9	(0.9)	69.1	(0.9)	24.5	(0.7)	75.5	(0.7)	20.1	(0.7)	79.9	(0.7)	28.4	(0.8)	71.6	(8.0)
Indonesia	23.6	(0.9)	76.4	(0.9)	13.2	(0.6)	86.8	(0.6)	13.4	(0.6)	86.6	(0.6)	26.5	(0.9)	73.5	(0.9)
Jordan	24.4	(0.7)	75.6	(0.7)	20.3	(0.7)	79.7	(0.7)	16.0	(0.6)	84.0	(0.6)	40.8	(0.8)	59.2	(8.0)
Kazakhstan	39.0	(0.5)	61.0	(0.5)	43.6	(0.5)	56.4	(0.5)	24.8	(0.5)	75.2	(0.5)	40.6	(0.5)	59.4	(0.5)
Kosovo	24.5	(0.7)	75.5	(0.7)	25.2	(0.8)	74.8	(8.0)	13.9	(0.6)	86.1	(0.6)	47.6	(0.9)	52.4	(0.9)
Lebanon	40.0	(1.1)	60.0	(1.1)	26.0	(1.0)	74.0	(1.0)	19.0	(0.9)	81.0	(0.9)	53.4	(1.2)	46.6	(1.2)
Macao (China)	43.5	(0.8)	56.5	(0.8)	25.6	(0.7)	74.4	(0.7)	21.6	(0.7)	78.4	(0.7)	47.0	(0.7)	53.0	(0.7)
Malaysia	41.2	(8.0)	58.8	(8.0)	22.5	(0.7)	77.5	(0.7)	21.1	(0.7)	78.9	(0.7)	39.8	(1.0)	60.2	(1.0)
Malta	55.1	(0.9)	44.9	(0.9)	32.4	(8.0)	67.6	(8.0)	21.9	(0.6)	78.1	(0.6)	68.2	(0.9)	31.8	(0.9)
Moldova	54.5	(1.0)	45.5	(1.0)	28.4	(8.0)	71.6	(8.0)	19.7	(0.7)	80.3	(0.7)	66.7	(0.9)	33.3	(0.9)
Montenegro	35.6	(0.6)	64.4	(0.6)	33.0	(0.6)	67.0	(0.6)	18.1	(0.5)	81.9	(0.5)	57.3	(0.7)	42.7	(0.7)
Morocco	30.6	(1.0) ‡	69.4	(1.0) ‡	38.8	(0.9) ‡	61.2	(0.9) ‡	26.8	(1.0) ‡	73.2	(1.0) ‡	55.5	(1.1) ‡	44.5	(1.1) ‡
North Macedonia	50.7	(0.6)	49.3	(0.6)	25.6	(0.6)	74.4	(0.6)	17.3	(0.5)	82.7	(0.5)	65.3	(0.7)	34.7	(0.7)
Panama	33.0	(1.5) ‡	67.0	(1.5) ‡	24.0	(1.1) ‡	76.0	(1.1) ‡	13.9	(0.8) ‡	86.1	(0.8) ‡	49.4	(1.7) ‡	50.6	(1.7) ‡
Peru	29.9	(0.9) ‡	70.1	(0.9) ‡	15.0	(0.8) ‡	85.0	(0.8) ‡	8.3	(0.6) ‡	91.7	(0.6) ‡	46.6	(1.1) ‡	53.4	(1.1) ‡
Philippines	17.7	(0.6)	82.3	(0.6)	11.0	(0.4)	89.0	(0.4)	11.5	(0.4)	88.5	(0.4)	26.0	(0.7)	74.0	(0.7)
Romania	48.7	(1.4)	51.3	(1.4)	34.1	(0.7)	65.9	(0.7)	26.6	(0.8)	73.4	(8.0)	56.3	(1.0)	43.7	(1.0)
Russia	49.8	(1.0)	50.2	(1.0)	38.2	(1.0)	61.8	(1.0)	36.1	(0.8)	63.9	(8.0)	71.0	(0.9)	29.0	(0.9)
Saudi Arabia	29.5	(0.8)	70.5	(0.8)	27.9	(0.7)	72.1	(0.7)	22.9	(0.8)	77.1	(8.0)	51.6	(0.9)	48.4	(0.9)
Serbia	50.5	(1.0)	49.5	(1.0)	42.7	(0.8)	57.3	(8.0)	29.3	(0.7)	70.7	(0.7)	65.8	(0.9)	34.2	(0.9)
Singapore	18.4	(0.6)	81.6	(0.6)	20.5	(0.4)	79.5	(0.4)	7.4	(0.4)	92.6	(0.4)	24.3	(0.6)	75.7	(0.6)
Chinese Taipei	33.0	(0.7)	67.0	(0.7)	19.8	(0.5)	80.2	(0.5)	13.6	(0.5)	86.4	(0.5)	45.1	(0.8)	54.9	(8.0)
Thailand	20.0	(0.7)	80.0	(0.7)	12.5	(0.5)	87.5	(0.5)	9.5	(0.5)	90.5	(0.5)	21.7	(0.7)	78.3	(0.7)
Ukraine	49.4	(1.0)	50.6	(1.0)	35.2	(0.9)	64.8	(0.9)	25.7	(0.8)	74.3	(8.0)	69.4	(0.9)	30.6	(0.9)
United Arab Emirates	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Uruguay	40.4	(0.9) †	59.6	(0.9) †	28.4	(1.0) †	71.6	(1.0) †	19.3	(0.9) †	80.7	(0.9) †	49.3	(1.2) †	50.7	(1.2) †
Viet Nam	32.2	(1.0)	67.8	(1.0)	16.9	(0.8)	83.1	(0.8)	15.3	(0.9)	84.7	(0.9)	43.3	(1.0)	56.7	(1.0)

Table VI.B1.7.1 [3/6] **Students engaged in global competence learning activities** Based on students' reports

			Pe	ercentag	e of stude	nts who	responde	d yes/no	to wheth	er they l	earn the f	ollowing	at schoo	l:		
	to give r	en invited ny person internatio	al opinio				ents cele through l year		discussi	ons abou	in classro t world ev ılar instru	ents as			issues tog es in smal class	
	N		Ye		N		Ye		N		Ye		N		Ye	
<b>♀</b> Australia	% 56.5	S.E. (0.6)	43.5	S.E. (0.6)	49.9	S.E. (0.7)	50.1	S.E. (0.7)	39.6	S.E. (0.6)	60.4	S.E. (0.6)	47.0	S.E. (0.5)	53.0	S.E. (0.5)
Australia Austria	49.3	. ,	50.7	. ,	69.9	` ′	30.1	, ,	46.5	. ,	53.5	. ,	50.4	(0.5)	49.6	
	49.3	(0.9)	52.3	(0.9)		(0.8)		(0.8)		(0.8)		(0.8)		(0.8)		(0.8)
Canada Chile	47.7	` ′		. ,	54.0	` ′	46.0 44.8	. ,	37.4 53.9	(1.0) †	62.6	` '	45.8 48.8	` '	54.2 51.2	(0.7)
Colombia	45.2	(0.9) † (0.9) †	52.1 54.8	(0.9) † (0.9) †	55.2 31.8	(1.1) † (0.8) †	68.2	(1.1) † (0.8) †	36.4	(0.8) †	46.1 63.6	(1.0) † (0.8) †	29.9	(0.9) † (0.8) †	70.1	(0.9) 1
Estonia	60.8	(1.1)	39.2	` ,	65.0	(0.8)	35.0	(0.8) 1	41.6		58.4	(0.8)	54.4		45.6	(1.0)
	62.4	(0.8)		(1.1)				(0.9)	41.0	(0.8)		(0.8)	56.3	(1.0)		(0.9)
France	52.3	` ′	37.6 47.7	. ,	74.4 75.3	(0.8)	25.6 24.7	(0.8)	42.1	(0.9)	58.1 57.9	(0.9)	50.5	` ′	43.7 49.5	(0.9)
Germany	47.2	(1.1) †	52.8	(1.1) †		` ′	42.9	` ′	35.9	. ,		` '	49.8	(1.1) ‡	50.2	. ,
Greece	70.1	(0.9)	29.9	(0.9)	57.1 60.0	(0.9)	40.0	(0.9)	62.0	(0.8)	64.1 38.0	(0.8)	71.5	(0.8)	28.5	(0.8)
Hungary Iceland	55.1	(0.9)		(0.9)		(0.9)		(0.9)	33.6	(0.8)		(0.8)	46.9	(0.8)		(0.8)
Ireland	57.1	` ′	44.9	. ,	56.1 61.4	` '	43.9 38.6	, ,	38.3	. ,	66.4 61.7	(0.9)	58.7	` ′	53.1 41.3	(0.9)
	53.5	(0.8)	42.9 46.5	(0.8) (1.0) †	50.9	(0.9)	49.1	(0.9)	37.8	(0.8)	62.2	(0.8) †	59.4	(0.8) (0.9) †	40.6	(0.8)
Israel	41.9	(1.0) † (0.7)	58.1	(0.7)	70.9	(1.1) †	29.1	(1.1) † (0.9)	41.2	(0.8) †	58.8	(0.8)	53.7	(0.9) 1	46.3	(0.9)
Italy	48.6	` ′		(0.7)	57.5	(0.9)		(0.9)	58.4	(0.8)		(0.8)	49.0			(1.0)
Korea		(0.9)	51.4	. ,		(0.9)	42.5	. ,		. ,	41.6	. ,		(1.0)	51.0	, ,
Latvia	59.6	(0.7)	40.4	(0.7)	67.0	(0.8)	33.0	(0.8)	52.3	(0.8)	47.7	(0.8)	55.7	(0.8)	44.3	(0.8)
Lithuania	53.0	(0.8)	47.0	(0.8)	44.7	(0.9)	55.3	(0.9)	35.0	(0.7)	65.0	(0.7)	48.4	(0.8)	51.6	(0.8)
Mexico	42.4	(0.9) †	57.6	(0.9) †	45.6	(0.9) †	54.4	(0.9) †	40.9	(1.0) †	59.1	(1.0) †	36.2	(0.9) †	63.8	(0.9) †
New Zealand	62.9	(0.9)	37.1	(0.9)	54.7	(1.0)	45.3	(1.0)	43.9	(0.9)	56.1	(0.9)	52.9	(0.8)	47.1	(0.8)
Poland	48.8	(1.0)	51.2	(1.0)	57.3	(0.9)	42.7	(0.9)	49.4	(0.9)	50.6	(0.9)	55.5	(0.9)	44.5	(0.9)
Portugal	49.1	(1.0)	50.9	(1.0)	62.9	(0.9)	37.1	(0.9)	35.4	(0.9)	64.6	(0.9)	39.2	(0.8)	60.8	(0.8)
Scotland (United Kingdom)	59.1	(1.1) ‡	40.9	(1.1) ‡	62.4	(1.1) ‡	37.6	(1.1) ‡	44.4	(1.0) ‡	55.6	(1.0) ‡	57.3	(1.1) ‡	42.7	(1.1) ‡
Slovak Republic	53.8	(0.7)	46.2	(0.7)	67.4	(0.9)	32.6	(0.9)	57.0	(0.7)	43.0	(0.7)	61.1	(0.8)	38.9	(0.8)
Slovenia	69.8	(0.7)	30.2	(0.7)	68.9	(0.8)	31.1	(0.8)	63.8	(0.8)	36.2	(0.8)	67.4	(0.8)	32.6	(0.8)
Spain	49.3	(0.5) †	50.7	(0.5) †	63.2	(0.6) †	36.8	(0.6) †	43.6	(0.5) †	56.4	(0.5) †	47.0	(0.4) †	53.0	(0.4) †
Switzerland	56.4	(1.2) †	43.6	(1.2) †	70.6	(1.0) †	29.4	(1.0) †	44.0	(1.2) †	56.0	(1.2) †	52.5	(1.2) †	47.5	(1.2) †
Turkey	65.3	(1.1)	34.7	(1.1)	51.4	(1.0)	48.6	(1.0)	41.0	(0.8)	59.0	(0.8)	53.6	(1.0)	46.4	(1.0)
OECD average	54.3	(0.2)	45.7	(0.2)	59.5	(0.2)	40.5	(0.2)	44.3	(0.2)	55.7	(0.2)	51.8	(0.2)	48.2	(0.2)

Table VI.B1.7.1 [4/6] **Students engaged in global competence learning activities** Based on students' reports

· · · · · · · · · · · · · · · · · · ·			P	ercentag	e of stude	nts who	responde	d yes/no	to wheth	er they le	earn the f	ollowing	at schoo	l:		
	to give r	en invited ny persor internatio	nal opinio				ents cele through l year		discussi	rticipate i ons about f the regu	t world ev	ents as		se global classmate during	es in smal	
	N	0	Ye	:S	N	0	Ye	!S	N	0	Ye	:S	N	0	Ye	es
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Albania	48.9	(0.9)	51.1	(0.9)	23.7	(0.6)	76.3	(0.6)	24.4	(0.6)	75.6	(0.6)	24.5	(8.0)	75.5	(8.0)
Argentina	49.9	(0.8) †	50.1	(0.8) †	55.4	(0.9) †	44.6	(0.9) †	38.7	(0.7) †	61.3	(0.7) †	44.8	(0.8) †	55.2	(0.8)
Baku (Azerbaijan)	30.5	(0.7) †	69.5	(0.7) †	29.1	(0.7) †	70.9	(0.7) †	29.6	(0.7) †	70.4	(0.7) †	28.2	(0.8) †	71.8	(0.8)
Belarus	46.6	(0.9)	53.4	(0.9)	46.2	(1.0)	53.8	(1.0)	48.1	(1.0)	51.9	(1.0)	55.4	(0.9)	44.6	(0.9)
Bosnia and Herzegovina	55.5	(0.9)	44.5	(0.9)	48.5	(0.8)	51.5	(0.8)	45.3	(0.8)	54.7	(0.8)	49.7	(0.9)	50.3	(0.9)
Brazil	53.4	(0.8) †	46.6	(0.8) †	50.4	(0.9) †	49.6	(0.9) †	43.7	(0.8) †	56.3	(0.8) †	42.4	(0.9) †	57.6	(0.9)
Brunei Darussalam	69.2	(0.6)	30.8	(0.6)	61.4	(0.6)	38.6	(0.6)	50.3	(8.0)	49.7	(8.0)	48.8	(0.7)	51.2	(0.7)
Bulgaria	44.9	(1.1) †	55.1	(1.1) †	42.9	(1.0) †	57.1	(1.0) †	42.5	(0.9) †	57.5	(0.9) †	45.4	(0.8) †	54.6	(0.8)
Costa Rica	53.0	(8.0)	47.0	(8.0)	46.5	(1.0)	53.5	(1.0)	47.3	(0.8)	52.7	(8.0)	43.4	(1.0)	56.6	(1.0)
Croatia	55.2	(8.0)	44.8	(8.0)	62.9	(8.0)	37.1	(0.8)	44.8	(0.7)	55.2	(0.7)	53.5	(8.0)	46.5	(0.8)
Cyprus	47.9	(8.0)	52.1	(8.0)	53.2	(0.7)	46.8	(0.7)	46.1	(0.9)	53.9	(0.9)	51.2	(8.0)	48.8	(8.0)
Dominican Republic	23.9	(1.1) ‡	76.1	(1.1) ‡	24.4	(1.0) ‡	75.6	(1.0) ‡	20.8	(1.0) ‡	79.2	(1.0) ‡	26.1	(1.3) ‡	73.9	(1.3)
Hong Kong (China)	48.9	(0.9)	51.1	(0.9)	53.9	(1.2)	46.1	(1.2)	32.1	(0.9)	67.9	(0.9)	33.2	(0.9)	66.8	(0.9)
Indonesia	36.0	(0.9)	64.0	(0.9)	32.4	(0.9)	67.6	(0.9)	26.1	(0.9)	73.9	(0.9)	29.8	(0.9)	70.2	(0.9)
Jordan	44.7	(1.0)	55.3	(1.0)	35.0	(0.8)	65.0	(0.8)	29.6	(0.8)	70.4	(8.0)	34.1	(0.7)	65.9	(0.7)
Kazakhstan	43.4	(0.6)	56.6	(0.6)	36.8	(0.6)	63.2	(0.6)	35.4	(0.6)	64.6	(0.6)	36.9	(0.6)	63.1	(0.6)
Kosovo	51.8	(0.9)	48.2	(0.9)	36.7	(0.8)	63.3	(0.8)	32.9	(0.7)	67.1	(0.7)	37.3	(0.9)	62.7	(0.9)
Lebanon	40.3	(1.0)	59.7	(1.0)	42.1	(1.0)	57.9	(1.0)	31.6	(0.9)	68.4	(0.9)	40.1	(0.9)	59.9	(0.9)
Macao (China)	57.4	(0.7)	42.6	(0.7)	59.9	(0.9)	40.1	(0.9)	53.1	(0.7)	46.9	(0.7)	54.9	(0.9)	45.1	(0.9)
Malaysia	64.6	(1.0)	35.4	(1.0)	56.4	(0.9)	43.6	(0.9)	42.4	(0.9)	57.6	(0.9)	48.0	(0.8)	52.0	(0.8)
Malta	57.5	(0.9)	42.5	(0.9)	57.1	(0.9)	42.9	(0.9)	40.3	(0.9)	59.7	(0.9)	48.4	(0.9)	51.6	(0.9)
Moldova	65.4	(1.1)	34.6	(1.1)	48.6	(1.0)	51.4	(1.0)	35.7	(0.7)	64.3	(0.7)	48.2	(0.9)	51.8	(0.9)
Montenegro	48.0	(0.7)	52.0	(0.7)	41.3	(0.6)	58.7	(0.6)	32.7	(0.6)	67.3	(0.6)	42.6	(0.6)	57.4	(0.6)
Morocco	47.9	(1.0) ‡	52.1	(1.0) ‡	45.4	(1.0) ‡	54.6	(1.0) ‡	46.7	(1.0) ‡	53.3	(1.0) ‡	45.1	(0.9) ‡	54.9	(0.9)
North Macedonia	72.6	(0.7)	27.4	(0.7)	61.2	(0.8)	38.8	(8.0)	31.3	(0.8)	68.7	(8.0)	38.0	(0.8)	62.0	(8.0)
Panama	41.7	(1.5) ‡	58.3	(1.5) ‡	39.6	(1.5) ‡	60.4	(1.5) ‡	38.7	(1.3) ‡	61.3	(1.3) ‡	36.6	(1.3) ‡	63.4	(1.3)
Peru	31.9	(1.0) ‡	68.1	(1.0) ‡	39.0	(1.1) ‡	61.0	(1.1) ‡	35.9	(1.1) ‡	64.1	(1.1) ‡	33.6	(1.1) ‡	66.4	(1.1)
Philippines	32.4	(0.9)	67.6	(0.9)	27.3	(8.0)	72.7	(8.0)	17.7	(0.5)	82.3	(0.5)	23.0	(0.7)	77.0	(0.7)
Romania	65.9	(1.3)	34.1	(1.3)	52.9	(0.9)	47.1	(0.9)	51.8	(0.9)	48.2	(0.9)	61.0	(1.2)	39.0	(1.2)
Russia	59.8	(1.1)	40.2	(1.1)	57.6	(1.0)	42.4	(1.0)	46.3	(1.0)	53.7	(1.0)	49.0	(1.0)	51.0	(1.0)
Saudi Arabia	55.4	(1.0)	44.6	(1.0)	48.4	(1.0)	51.6	(1.0)	42.9	(0.9)	57.1	(0.9)	44.9	(8.0)	55.1	(8.0)
Serbia	48.8	(0.8)	51.2	(8.0)	58.0	(1.0)	42.0	(1.0)	47.5	(0.8)	52.5	(8.0)	52.1	(0.9)	47.9	(0.9)
Singapore	39.8	(0.7)	60.2	(0.7)	22.0	(0.5)	78.0	(0.5)	32.3	(0.7)	67.7	(0.7)	33.9	(0.6)	66.1	(0.6)
Chinese Taipei	60.0	(0.9)	40.0	(0.9)	54.0	(0.9)	46.0	(0.9)	49.6	(0.8)	50.4	(8.0)	54.1	(0.9)	45.9	(0.9)
Thailand	45.7	(1.2)	54.3	(1.2)	30.5	(8.0)	69.5	(0.8)	32.2	(0.9)	67.8	(0.9)	29.1	(8.0)	70.9	(8.0)
Ukraine	56.0	(0.8)	44.0	(0.8)	57.0	(0.8)	43.0	(0.8)	50.6	(0.8)	49.4	(0.8)	53.6	(0.8)	46.4	(0.8)
United Arab Emirates	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Uruguay	52.2	(1.2) †	47.8	(1.2) †	59.0	(1.3) †	41.0	(1.3) †	42.8	(1.0) †	57.2	(1.0) †	44.8	(1.1) †	55.2	(1.1) 1
Viet Nam	56.4	(1.1)	43.6	(1.1)	56.4	(1.1)	43.6	(1.1)	44.7	(1.0)	55.3	(1.0)	47.3	(1.1)	52.7	(1.1)

**Note**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

Table VI.B1.7.1 [5/6] **Students engaged in global competence learning activities** Based on students' reports

				of students wh they learn the					Number of activit	
	I learn how pe differer		erent cultures of on some issue			ow to commun		ple	Mea	n
	No		Yes		No		Yes			
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	Mean	S.E.
Australia Austria	30.3	(0.6)	69.7	(0.6)	40.4	(0.6)	59.6	(0.6)	5.86	(0.04) 1
	32.2	(0.7)	67.8	(0.7)	45.2	(0.8)	54.8	(8.0)	5.52	(0.05)
Canada	30.3	(0.5)	69.7	(0.5)	39.5	(0.5)	60.5	(0.5)	6.01	(0.04)
Chile	32.9	(0.9) †	67.1	(0.9) †	46.4	(0.8) †	53.6	(0.8) †	5.66	(0.07) 1
Colombia	25.7	(1.4)	74.3	(1.4)	28.8	(0.7) †	71.2	(0.7) †	7.28	(0.05) 1
Estonia	44.5	(0.9)	55.5	(0.9)	46.3	(0.8)	53.7	(8.0)	5.05	(0.06)
France	46.5	(0.9)	53.5	(0.9)	43.6	(0.7)	56.4	(0.7)	4.78	(0.05) †
Germany	43.7	(1.0) †	56.3	(1.0) †	48.4	(0.9) ‡	51.6	(0.9) ‡	5.39	(0.06) ‡
Greece	29.7	(0.7)	70.3	(0.7)	37.9	(0.7)	62.1	(0.7)	5.74	(0.05)
Hungary	63.2	(0.9)	36.8	(0.9)	63.1	(0.9)	36.9	(0.9)	3.85	(0.06)
Iceland	31.6	(8.0)	68.4	(0.8)	39.3	(0.9)	60.7	(0.9)	5.83	(0.06) †
Ireland	38.2	(8.0)	61.8	(8.0)	43.5	(0.9)	56.5	(0.9)	5.33	(0.05)
Israel	42.8	(1.0) †	57.2	(1.0) †	49.0	(1.0) †	51.0	(1.0) †	4.95	(0.07) †
Italy	39.2	(0.7)	60.8	(0.7)	36.9	(0.9)	63.1	(0.9)	5.57	(0.05) †
Korea	39.8	(0.9)	60.2	(0.9)	43.4	(0.8)	56.6	(0.8)	5.68	(0.06)
Latvia	47.4	(1.0)	52.6	(1.0)	39.0	(8.0)	61.0	(0.8)	4.93	(0.05)
Lithuania	36.3	(0.7)	63.7	(0.7)	42.8	(0.7)	57.2	(0.7)	5.85	(0.05)
Mexico	26.5	(0.8) †	73.5	(0.8) †	33.2	(0.8) †	66.8	(0.8) †	6.59	(0.06) †
New Zealand	34.4	(0.8)	65.6	(0.8)	39.4	(0.7)	60.6	(0.7)	5.31	(0.05)
Poland	37.4	(0.8)	62.6	(0.8)	36.3	(0.8)	63.7	(0.8)	5.68	(0.06)
Portugal	29.4	(0.7)	70.6	(0.7)	33.0	(0.7)	67.0	(0.7)	5.88	(0.06)
Scotland (United Kingdom)	43.7	(1.2) ‡	56.3	(1.2) ‡	47.3	(1.3) ‡	52.7	(1.3) ‡	4.91	(0.08) ‡
Slovak Republic	40.9	(0.8)	59.1	(0.8)	40.5	(0.8)	59.5	(0.8)	5.01	(0.05)
Slovenia	55.8	(0.8)	44.2	(0.8)	52.6	(0.8)	47.4	(0.8)	4.02	(0.05)
Spain	36.6	(0.4) †	63.4	(0.4) †	38.9	(0.5)	61.1	(0.5)	5.59	(0.03) †
Switzerland	36.7	(1.1) †	63.3	(1.1) †	45.8	(1.0) †	54.2	(1.0) †	5.18	(0.08) †
Turkey	34.9	(0.8)	65.1	(0.8)	29.1	(0.7)	70.9	(0.7)	5.79	(0.06)
OECD average	38.2	(0.2)	61.8	(0.2)	41.8	(0.2)	58.2	(0.2)	5.45	(0.01)

**Note**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

Table VI.B1.7.1 [6/6] **Students engaged in global competence learning activities** Based on students' reports

					ho responded following at s				Number of I activiti	
			ferent cultures ( s on some issue			ow to commur om different b	nicate with peo ackgrounds	ple	Mear	1
	No		Yes		No		Yes			
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	Mean	S.E.
Albania Argentina Baku (Azerbaijan)	18.1	(0.6)	81.9	(0.6)	17.6	(0.6)	82.4	(0.6)	7.35	(0.04)
Argentina	27.2	(0.6) †	72.8	(0.6) †	31.1	(0.8) †	68.9	(0.8) †	6.28	(0.04) †
-	28.8	(0.9) †	71.2	(0.9) †	36.9	(0.9) †	63.1	(0.9) †	7.30	(0.06) ‡
Belarus	34.3	(0.8)	65.7	(0.8)	46.3	(0.7)	53.7	(0.7)	5.44	(0.07)
Bosnia and Herzegovina	36.4	(0.7)	63.6	(0.7)	31.8	(0.7)	68.2	(0.7)	5.67	(0.06)
Brazil	28.9	(0.7) †	71.1	(0.7) †	45.6	(0.9) †	54.4	(0.9) †	6.17	(0.06)
Brunei Darussalam	30.2	(0.6)	69.8	(0.6)	25.2	(0.6)	74.8	(0.6)	5.61	(0.04) 1
Bulgaria	31.7	(0.9) †	68.3	(0.9) †	36.7	(1.0) †	63.3	(1.0) †	6.01	(0.07) 1
Costa Rica	27.5	(0.7)	72.5	(0.7)	29.7	(0.7)	70.3	(0.7)	6.24	(0.05)
Croatia	39.6	(0.7)	60.4	(0.7)	38.6	(8.0)	61.4	(0.8)	5.44	(0.05)
Cyprus	40.1	(0.7)	59.9	(0.7)	40.0	(0.7)	60.0	(0.7)	5.45	(0.05) 1
Dominican Republic	28.9	(1.4) ‡	71.1	(1.4) ‡	49.8	(2.1) ‡	50.2	(2.1) ‡	7.92	(0.08)
Hong Kong (China)	27.9	(0.8)	72.1	(8.0)	31.3	(0.8)	68.7	(0.8)	6.70	(0.07)
Indonesia	23.3	(0.8)	76.7	(8.0)	20.8	(0.7)	79.2	(0.7)	7.58	(0.05)
Jordan	23.3	(0.6)	76.7	(0.6)	23.5	(0.7)	76.5	(0.7)	7.14	(0.05)
Kazakhstan	33.1	(0.6)	66.9	(0.6)	35.4	(0.5)	64.6	(0.5)	6.33	(0.05) 1
Kosovo	23.6	(0.6)	76.4	(0.6)	23.7	(0.7)	76.3	(0.7)	6.85	(0.05)
Lebanon	33.7	(0.9)	66.3	(0.9)	31.4	(0.9)	68.6	(0.9)	6.44	(0.06)
Macao (China)	38.4	(0.7)	61.6	(0.7)	32.6	(0.9)	67.4	(0.9)	5.67	(0.04)
Malaysia	27.3	(0.7)	72.7	(0.7)	24.7	(0.7)	75.3	(0.7)	6.13	(0.05)
Malta	31.2	(0.7)	68.8	(0.7)	31.0	(0.7)	69.0	(0.7)	5.58	(0.05)
Moldova	37.2	(0.8)	62.8	(8.0)	22.2	(0.7)	77.8	(0.7)	5.73	(0.05)
Montenegro	31.6	(0.6)	68.4	(0.6)	30.5	(0.6)	69.5	(0.6)	6.34	(0.04)
Morocco	38.2	(0.9) ‡	61.8	(0.9) ‡	35.2	(1.0) ‡	64.8	(1.0) ‡	5.91	(0.07) ‡
North Macedonia	31.9	(0.7)	68.1	(0.7)	24.9	(0.6)	75.1	(0.6)	5.82	(0.04)
Panama	24.3	(1.2) ‡	75.7	(1.2) ‡	46.1	(1.2) ‡	53.9	(1.2) ‡	6.66	(0.09) ‡
Peru	20.3	(0.9) ‡	79.7	(0.9) ‡	32.3	(1.0) ‡	67.7	(1.0) ‡	7.09	(0.07) ‡
Philippines	17.6	(0.5)	82.4	(0.5)	14.5	(0.6)	85.5	(0.6)	8.04	(0.04)
Romania	41.9	(0.9)	58.1	(0.9)	34.4	(0.9)	65.6	(0.9)	5.25	(0.07)
Russia	44.9	(1.0)	55.1	(1.0)	45.8	(1.0)	54.2	(1.0)	4.99	(0.08)
Saudi Arabia	28.6	(0.7)	71.4	(0.7)	25.8	(0.6)	74.2	(0.6)	6.21	(0.05)
Serbia	39.6	(0.7)	60.4	(0.7)	42.6	(0.8)	57.4	(0.8)	5.20	(0.06) 1
Singapore	10.8	(0.4)	89.2	(0.4)	13.9	(0.4)	86.1	(0.4)	7.77	(0.03)
Chinese Taipei	22.6	(0.6)	77.4	(0.6)	23.3	(0.6)	76.7	(0.6)	6.25	(0.05)
Thailand	22.1	(0.6)	77.9	(0.6)	22.5	(0.7)	77.5	(0.7)	7.55	(0.06)
Ukraine	49.4	(0.8)	50.6	(0.8)	39.8	(0.6)	60.2	(0.6)	5.13	(0.05)
United Arab Emirates	m	(0.0) m	m	m	m	m	m	(0.0) m	5.15 m	(0.03) m
Uruguay	32.1	(1.0) †	67.9	(1.0) †	49.9	(1.0) †	50.1	(1.0) †	5.86	(0.08) 1
Viet Nam	36.9	(1.0) 1	63.1	(1.0) 1	22.1	(1.0)	77.9	(1.0)	6.29	(0.03) 1

**Note**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

Table VI.B1.8.1 [1/8] **Access to learning activities, by students' gender** Based on students' reports

			· ·	Access to learnir	ng activities, by	students' gender	•		
	Numb	er of learning ac	tivities		ut the interconne untries' econom			ow to solve conf eople in our clas	
	Boys	Girls	Girls - boys	Boys	Girls	Girls - boys	Boys	Girls	Girls - boys
	Mean index S.E.	Mean index S.E.	Dif. S.E.	% S.E.	% S.E.	% dif. S.E.	% S.E.	% S.E.	% dif. S.E.
Australia  Austria	5.78 (0.06) †	5.94 (0.05) †	<b>0.16</b> (0.08) †	59.1 (0.8)	53.8 (0.9)	<b>-5.3</b> (1.2)	65.0 (0.8)	66.5 (0.7)	1.5 (1.1)
5 Austria	5.64 (0.06) †	5.41 (0.08)	<b>-0.23</b> (0.09) †	69.8 (1.1)	63.1 (1.1)	<b>-6.7</b> (1.4)	62.6 (1.1)	67.3 (1.2)	<b>4.7</b> (1.4)
Canada	6.07 (0.06)	5.96 (0.04)	-0.11 (0.06)	58.0 (0.8)	51.1 (0.7)	<b>-7.0</b> (0.9)	66.4 (0.8)	64.5 (0.6)	<b>-2.0</b> (0.9)
Chile	5.63 (0.09) †	5.69 (0.08) †	0.06 (0.11) †	56.9 (1.2) †	56.7 (1.0) †	-0.1 (1.4) †	73.0 (1.1) †	78.9 (1.0) †	<b>5.9</b> (1.2) 1
Colombia	7.22 (0.05) †	7.34 (0.07) †	0.12 (0.08) †	79.6 (1.0) †	81.5 (1.1) †	1.9 (1.3) †	85.8 (0.9) †	89.8 (0.8) †	<b>4.0</b> (1.0) 1
Estonia	5.09 (0.08)	5.01 (0.07)	-0.08 (0.09)	57.0 (1.2)	56.0 (1.1)	-1.0 (1.5)	56.6 (1.1)	58.4 (1.1)	1.8 (1.4)
France	4.81 (0.05) †	4.74 (0.07)	-0.07 (0.08) †	51.6 (1.0)	46.4 (1.1)	<b>-5.2</b> (1.4)	46.0 (1.1)	46.8 (1.2)	0.8 (1.5)
Germany	5.53 (0.08) ‡	5.24 (0.08) ‡	<b>-0.28</b> (0.11) ‡	69.6 (1.2) †	67.7 (1.3) †	-1.8 (1.5) †	63.1 (1.5) †	66.7 (1.4) †	<b>3.6</b> (1.7)
Greece	5.81 (0.07)	5.68 (0.06)	-0.13 (0.09)	61.3 (1.1)	51.8 (1.1)	<b>-9.5</b> (1.3)	64.5 (1.1)	67.6 (0.9)	<b>3.1</b> (1.4)
Hungary	3.94 (0.08)	3.76 (0.09)	-0.18 (0.12)	49.6 (1.2)	49.5 (1.3)	-0.1 (1.8)	45.6 (1.1)	48.2 (1.5)	2.7 (1.8)
Iceland	5.92 (0.09) †	5.74 (0.08) †	-0.19 (0.13) †	58.3 (1.4)	50.6 (1.4)	<b>-7.8</b> (2.1)	57.4 (1.3)	54.1 (1.3)	-3.3 (1.8)
Ireland	5.20 (0.07)	5.45 (0.07)	<b>0.25</b> (0.09)	58.9 (1.0)	55.0 (1.1)	<b>-3.9</b> (1.5)	57.8 (1.1)	63.8 (1.1)	<b>6.0</b> (1.5)
Israel	4.95 (0.10) †	4.95 (0.08) †	0.00 (0.11) †	41.7 (1.4) †	30.9 (1.3)	-10.9 (1.7) †	45.6 (1.2) †	45.9 (1.2)	0.2 (1.6) 1
Italy	5.56 (0.06) †	5.57 (0.06) †	0.00 (0.09) †	55.8 (1.3)	42.8 (1.3)	<b>-13.0</b> (1.6)	62.0 (1.0)	67.6 (1.0)	<b>5.5</b> (1.5)
Korea	5.88 (0.07)	5.46 (0.09)	<b>-0.42</b> (0.10)	63.0 (1.0)	59.8 (1.2)	<b>-3.2</b> (1.4)	76.1 (0.8)	72.2 (0.9)	<b>-3.8</b> (1.2)
Latvia	4.90 (0.07)	4.95 (0.07)	0.05 (0.10)	46.1 (1.2)	42.8 (1.2)	-3.3 (1.8)	62.1 (1.0)	71.2 (1.0)	<b>9.0</b> (1.5)
Lithuania	5.81 (0.07)	5.89 (0.07)	0.09 (0.10)	64.8 (0.9)	63.9 (1.1)	-0.9 (1.4)	63.2 (1.0)	67.4 (1.0)	<b>4.1</b> (1.3)
Mexico	6.52 (0.08) †	6.64 (0.08) †	0.12 (0.10) †	62.2 (1.2) †	57.2 (1.5) †	- <b>5.0</b> (1.7) †	81.8 (0.9) †	88.4 (0.7) †	<b>6.6</b> (1.1) 1
New Zealand	5.22 (0.07)	5.40 (0.07)	<b>0.18</b> (0.09)	44.5 (1.1)	34.8 (1.0)	<b>-9.8</b> (1.4)	59.4 (1.0)	62.1 (1.1)	2.6 (1.5)
Poland	5.74 (0.07)	5.63 (0.08)	-0.11 (0.09)	73.2 (1.0)	74.7 (1.0)	1.5 (1.3)	64.8 (1.1)	66.1 (1.0)	1.4 (1.5)
Portugal	5.88 (0.08)	5.88 (0.07)	0.00 (0.09)	57.2 (1.2)	51.6 (1.3)	<b>-5.5</b> (1.4)	65.8 (1.1)	72.4 (1.2)	<b>6.6</b> (1.3)
Scotland (United Kingdom)	4.87 (0.12) ‡	4.95 (0.11) ‡	0.08 (0.15) ‡	42.9 (1.5) ‡	36.5 (1.5) ‡	- <b>6.4</b> (2.0) ‡	51.7 (1.6) ‡	53.1 (1.4) ‡	1.5 (1.8) ‡
Slovak Republic	5.15 (0.07)	4.88 (0.07)	<b>-0.27</b> (0.10)	47.9 (1.2)	34.0 (1.2)	<b>-13.9</b> (1.8)	63.1 (1.0)	73.3 (1.1)	<b>10.2</b> (1.4)
Slovenia	4.31 (0.07)	3.74 (0.06)	<b>-0.58</b> (0.09)	47.4 (0.9)	35.0 (1.2)	<b>-12.4</b> (1.6)	50.4 (1.1)	58.3 (1.1)	<b>7.9</b> (1.4)
Spain	5.70 (0.05) †	5.49 (0.04) †	<b>-0.21</b> (0.06) †	53.7 (0.7) †	51.3 (0.8) †	<b>-2.4</b> (1.0) †	72.1 (0.6) †	74.0 (0.5) †	<b>1.9</b> (0.8) 1
Switzerland	5.24 (0.10) †	5.10 (0.09) †	-0.14 (0.11) †	55.4 (1.4) †	52.7 (1.4) †	-2.7 (1.9) †	55.5 (1.3) †	59.0 (1.5) †	<b>3.5</b> (1.6)
Turkey	5.98 (0.07)	5.60 (0.09)	<b>-0.37</b> (0.09)	68.5 (0.9)	62.6 (1.0)	<b>-5.9</b> (1.2)	74.1 (0.9)	83.9 (0.8)	<b>9.8</b> (1.2)
OECD average	5.49 (0.01)	5.41 (0.01)	<b>-0.08</b> (0.02)	57.6 (0.2)	52.4 (0.2)	<b>-5.2</b> (0.3)	62.7 (0.2)	66.2 (0.2)	<b>3.5</b> (0.3)

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

Table VI.B1.8.1 [2/8] Access to learning activities, by students' gender Based on students' reports

				Access to learni	ng activities, by	students' gender			
	Numb	er of learning act	ivities		ut the interconne ountries' econom			ow to solve conf eople in our clas	
	Boys	Girls	Girls - boys	Boys	Girls	Girls - boys	Boys	Girls	Girls - boys
	Mean index S.E.	Mean index S.E.	Dif. S.E.	% S.E.	% S.E.	% dif. S.E.	% S.E.	% S.E.	% dif. S.E.
Albania	7.36 (0.06)	7.35 (0.05)	-0.01 (0.07)	70.5 (1.1)	67.3 (1.1)	<b>-3.2</b> (1.3)	82.0 (0.9)	87.1 (0.7)	<b>5.1</b> (1.1)
Albania Argentina	6.19 (0.06) †	6.37 (0.05) †	<b>0.18</b> (0.07) †	69.7 (0.9) 1	69.3 (0.9) †	-0.4 (1.3) †	70.0 (1.0) †	76.4 (0.9) †	<b>6.3</b> (1.2) †
Baku (Azerbaijan)	7.41 (0.07) ‡	7.19 (0.09) †	<b>-0.23</b> (0.11) ‡	77.0 (0.9) 1	66.9 (1.2) †	<b>-10.1</b> (1.5) †	75.6 (1.1) †	76.1 (1.1) †	0.5 (1.5) †
Belarus	5.28 (0.08)	5.61 (0.08)	<b>0.33</b> (0.08)	50.8 (1.2)	47.2 (1.1)	<b>-3.6</b> (1.5)	65.6 (1.0)	71.2 (1.0)	<b>5.6</b> (1.3)
Bosnia and Herzegovina	5.83 (0.07) †	5.51 (0.08)	<b>-0.31</b> (0.10) †	53.2 (1.2)	46.7 (1.4)	<b>-6.5</b> (1.6)	63.8 (0.9)	68.9 (1.2)	<b>5.1</b> (1.5)
Brazil	6.22 (0.07) †	6.13 (0.07) †	-0.09 (0.08) †	71.5 (0.7) 1	70.1 (1.0) †	-1.4 (1.2) †	64.9 (1.0) †	68.0 (1.2) †	<b>3.1</b> (1.3) †
Brunei Darussalam	5.67 (0.05) †	5.56 (0.05) †	-0.11 (0.08) †	51.6 (1.1)	46.4 (1.0)	<b>-5.2</b> (1.4)	68.7 (0.8)	74.6 (0.9)	<b>5.9</b> (1.2)
Bulgaria	6.10 (0.08) †	5.92 (0.09) †	-0.19 (0.12) †	68.2 (1.0) 1	58.1 (1.2)	<b>-10.1</b> (1.3) †	63.6 (1.3) †	69.1 (1.2)	<b>5.6</b> (1.7) †
Costa Rica	6.24 (0.06)	6.24 (0.07)	0.00 (0.07)	59.6 (0.9)	62.7 (1.1)	<b>3.1</b> (1.2)	74.6 (0.8)	79.2 (0.9)	<b>4.6</b> (1.0)
Croatia	5.63 (0.07)	5.25 (0.07)	<b>-0.37</b> (0.09)	61.9 (1.1)	59.5 (1.0)	-2.5 (1.3)	64.5 (1.0)	68.9 (1.0)	<b>4.5</b> (1.4)
Cyprus	5.52 (0.07) †	5.38 (0.07) †	-0.13 (0.09) †	57.1 (1.1)	41.3 (1.1)	<b>-15.8</b> (1.5)	57.4 (1.2) †	63.1 (1.2)	<b>5.6</b> (1.7) †
Dominican Republic	7.99 (0.10) ‡	7.85 (0.11) ‡	-0.14 (0.14) ‡	82.2 (1.6)	80.0 (1.3) ‡	-2.3 (1.7) ‡	81.3 (1.5) ‡	84.2 (1.2) ‡	2.9 (1.8) ‡
Hong Kong (China)	6.60 (0.09)	6.80 (0.08)	<b>0.19</b> (0.10)	70.1 (1.0)	68.1 (1.2)	-2.0 (1.3)	74.8 (1.0)	76.3 (1.0)	1.5 (1.3)
Indonesia	7.57 (0.07)	7.60 (0.06)	0.02 (0.07)	77.0 (1.0)	75.9 (1.1)	-1.1 (1.2)	84.3 (0.8)	89.2 (0.7)	<b>4.9</b> (1.1)
Jordan	6.93 (0.05)	7.32 (0.07)	<b>0.39</b> (0.09)	78.5 (0.9)	72.8 (1.0)	<b>-5.7</b> (1.3)	73.2 (1.0)	85.8 (0.9)	<b>12.6</b> (1.3)
Kazakhstan	6.30 (0.06) †	6.37 (0.06)	0.06 (0.07) †	62.5 (0.6)	59.5 (0.7)	<b>-3.0</b> (0.9)	59.7 (0.7)	53.0 (0.8)	<b>-6.6</b> (1.1)
Kosovo	7.17 (0.07)	6.55 (0.06)	<b>-0.62</b> (0.09)	79.4 (1.0)	71.7 (1.0)	<b>-7.7</b> (1.4)	74.2 (1.1)	75.5 (1.1)	1.3 (1.4)
Lebanon	6.32 (0.07)	6.53 (0.06)	0.21 (0.08)	62.5 (1.2)	57.9 (1.4)	<b>-4.6</b> (1.4)	70.0 (1.4)	77.5 (1.1)	<b>7.4</b> (1.4)
Macao (China)	5.64 (0.07)	5.70 (0.06)	0.06 (0.10)	57.9 (1.2)	55.2 (1.0)	-2.7 (1.6)	73.1 (1.0)	75.8 (1.1)	2.8 (1.4)
Malaysia	6.09 (0.07)	6.16 (0.05)	0.06 (0.06)	59.1 (1.0)	58.5 (1.1)	-0.6 (1.4)	75.4 (1.0)	79.5 (0.8)	<b>4.1</b> (1.0)
Malta	5.69 (0.09) †	5.48 (0.06)	<b>-0.22</b> (0.11) †	50.7 (1.4)	39.3 (1.2)	<b>-11.4</b> (1.9)	63.1 (1.2)	72.0 (1.1)	<b>8.9</b> (1.6)
Moldova	5.62 (0.06)	5.84 (0.06)	<b>0.21</b> (0.07)	46.0 (1.1)	45.0 (1.2)	-1.0 (1.3)	66.6 (0.9)	76.6 (1.0)	<b>10.0</b> (1.2)
Montenegro	6.40 (0.06) †	6.27 (0.05)	-0.13 (0.07) †	68.0 (0.9)	60.7 (0.9)	<b>-7.3</b> (1.2)	64.2 (0.8)	69.8 (0.8)	<b>5.6</b> (1.2)
Morocco	6.01 (0.08) ‡	5.79 (0.09) ‡	-0.22 (0.11) ‡	72.4 (1.2)	65.9 (1.5) ‡		59.9 (1.3) ‡	62.8 (1.4) ‡	
North Macedonia	5.73 (0.04)	5.91 (0.05)	0.18 (0.06)	51.0 (0.9)	47.5 (1.1)	<b>-3.4</b> (1.5)	71.0 (0.9)	78.2 (1.0)	<b>7.2</b> (1.5)
Panama	6.77 (0.11) ‡	6.56 (0.13) ‡	-0.21 (0.14) ‡	69.7 (1.8)	64.2 (1.9)		73.9 (1.5) ‡	78.1 (1.5) ‡	
Peru	7.18 (0.07) ‡	6.98 (0.10) ‡	-0.20 (0.12) ‡	72.0 (1.4)	68.0 (1.3) ‡		84.8 (1.2) ‡	85.1 (1.1) ‡	
Philippines	7.94 (0.05)	8.13 (0.05)	<b>0.19</b> (0.05)	82.7 (0.9)	81.9 (0.7)	-0.8 (1.0)	86.2 (0.6)	91.6 (0.5)	<b>5.5</b> (0.8)
Romania	5.28 (0.08)	5.23 (0.10)	-0.05 (0.10)	53.8 (1.5)	48.6 (1.7)	<b>-5.2</b> (1.6)	61.4 (0.9)	70.7 (1.2)	<b>9.3</b> (1.5)
Russia	5.05 (0.10)	4.93 (0.09)	-0.13 (0.10)	54.7 (0.9)	45.9 (1.4)	<b>-8.8</b> (1.3)	58.3 (1.4)	65.2 (1.1)	<b>6.9</b> (1.5)
Saudi Arabia	6.34 (0.08)	6.08 (0.07)	<b>-0.26</b> (0.11)	71.0 (1.3)	69.9 (1.0)	-1.1 (1.6)	70.2 (0.8)	74.1 (1.0)	<b>3.9</b> (1.2)
Serbia	5.34 (0.08) †	5.07 (0.08) †	<b>-0.27</b> (0.09) †	53.0 (1.3)	46.2 (1.2)	- <b>6.8</b> (1.6) †	55.4 (1.0) †	59.3 (1.0)	<b>3.9</b> (1.4) †
Singapore	7.63 (0.04)	7.92 (0.05)	<b>0.29</b> (0.06)	81.6 (0.8)	81.6 (0.7)	-0.1 (0.9)	78.9 (0.6)	80.0 (0.7)	1.1 (1.0)
Chinese Taipei	6.36 (0.06)	6.14 (0.07)	<b>-0.22</b> (0.08)	69.7 (0.9)	64.4 (1.0)	<b>-5.3</b> (1.3)	79.7 (0.7)	80.7 (0.7)	1.0 (0.9)
Thailand	7.41 (0.07)	7.67 (0.07)	<b>0.27</b> (0.08)	78.2 (0.9)	81.6 (0.9)	<b>3.4</b> (1.0)	82.9 (0.8)	91.5 (0.5)	<b>8.6</b> (0.8)
Ukraine	4.99 (0.07)	5.27 (0.07)	<b>0.27</b> (0.00)	51.2 (1.1)	50.0 (1.2)	-1.2 (1.3)	61.5 (1.2)	68.3 (1.1)	<b>6.9</b> (1.5)
United Arab Emirates	m m	m m	m m	m m	m m	m m	m m	m m	m m
Uruguay	5.92 (0.11) †	5.81 (0.09) †	-0.12 (0.13) †	62.9 (1.4) 1	56.8 (1.1) †		67.7 (1.3) †	74.8 (1.3) †	<b>7.2</b> (1.7) †
Viet Nam	6.22 (0.07)	6.35 (0.07)	<b>0.12</b> (0.13) 1	66.0 (1.4)	69.5 (1.1)	<b>3.5</b> (1.4)	81.8 (1.0)	84.2 (0.9)	<b>2.5</b> (1.1)

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

Table VI.B1.8.1 [3/8] Access to learning activities, by students' gender Based on students' reports

						,	Access t	o learnir	ng activi	ties, by s	students	' gender						
		I learn	about di	ifferent c	ultures				or watc	rs, look f h the ne classes				often inv onal opir				
	Во	oys	Gi	rls	Girls	- boys	Во	oys	Gi	rls	Girls	- boys	Вс	oys		rls	Girls	- boys
	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Australia Austria	77.4	(0.7)	82.6	(0.5)	5.2	(0.9)	47.1	(0.9)	46.0	(8.0)	-1.1	(1.1)	44.2	(0.9)	42.7	(8.0)	-1.5	(1.2)
Austria	72.2	(1.0)	71.7	(1.3)	-0.5	(1.7)	46.3	(1.3)	42.4	(1.9)	-3.9	(2.0)	53.0	(1.0)	48.6	(1.4)	-4.4	(1.7)
Canada	78.7	(0.7)	80.7	(0.6)	2.0	(8.0)	54.8	(8.0)	55.5	(0.9)	0.7	(1.1)	53.4	(0.9)	51.2	(8.0)	-2.3	(1.0)
Chile	78.4	(1.0) †	81.3	(0.9) †	2.9	(1.3) †	40.5	(1.3) †	38.9	(1.3) †	-1.7	(1.5) †	52.8	(1.2) †	51.5	(1.2) †	-1.3	(1.5) †
Colombia	88.0	(0.8) †	90.0	(0.7) †	2.0	(1.0) †	59.5	(1.3) †	59.2	(1.3) †	-0.3	(1.5) †	55.9	(1.2) †	53.8	(1.2) †	-2.1	(1.6) 1
Estonia	67.5	(1.1)	68.7	(1.1)	1.2	(1.5)	37.6	(1.2)	38.0	(1.2)	0.4	(1.5)	41.7	(1.4)	36.7	(1.3)	-5.0	(1.6)
France	74.7	(0.9)	77.1	(0.9)	2.5	(1.3)	34.9	(1.0)	31.3	(1.1)	-3.6	(1.5)	39.3	(1.0)	35.9	(1.0)	-3.4	(1.4)
Germany	79.7	(1.2) †	82.2	(1.0) †	2.5	(1.6) †	42.2	(1.4) †	35.1	(1.8) †	-7.2	(2.0) †	50.0	(1.3) ‡	45.1	(1.7) †	-4.9	(1.9)
Greece	76.6	(1.1)	81.4	(8.0)	4.8	(1.4)	34.2	(1.2)	22.7	(1.0)	-11.5	(1.2)	55.2	(1.2)	50.5	(1.0)	-4.6	(1.4)
Hungary	55.6	(1.2)	61.2	(1.3)	5.6	(1.7)	27.4	(1.1)	20.8	(1.2)	-6.6	(1.5)	32.9	(1.0)	27.1	(1.2)	-5.8	(1.4)
Iceland	79.9	(1.0)	87.3	(0.9)	7.5	(1.4)	49.6	(1.3)	52.2	(1.4)	2.6	(1.9)	49.9	(1.4)	40.1	(1.3)	-9.9	(2.0)
Ireland	78.1	(1.0)	79.2	(0.9)	1.2	(1.1)	34.0	(0.9)	33.7	(1.3)	-0.3	(1.5)	40.8	(1.2)	44.9	(1.1)	4.1	(1.6)
Israel	62.9	(1.2) †	64.1	(1.2)	1.2	(1.5) †	45.6	(1.4) †	48.1	(1.3) †	2.5	(1.7) †	47.0	(1.4) †	46.1	(1.2)	-0.9	(1.7)
Italy	73.0	(1.2)	81.3	(0.9)	8.3	(1.4)	47.7	(1.2)	49.2	(1.3)	1.5	(1.8)	57.4	(1.0)	58.7	(1.0)	1.3	(1.5)
Korea	77.3	(1.0)	78.1	(1.1)	0.9	(1.4)	51.3	(1.1)	51.2	(1.4)	0.0	(1.5)	54.8	(0.9)	47.6	(1.4)	-7.1	(1.6)
Latvia	67.7	(1.1)	74.8	(1.0)	7.1	(1.5)	32.6	(1.1)	29.4	(1.1)	-3.2	(1.5)	41.7	(1.1)	39.2	(1.1)	-2.5	(1.7)
Lithuania	75.6	(0.9)	83.7	(0.8)	8.1	(1.3)	38.8	(1.1)	32.4	(1.2)	-6.4	(1.5)	50.3	(1.1)	43.6	(1.1)	-6.7	(1.5)
Mexico	78.4	(1.0) †	82.8	(1.1) †	4.4	(1.5) †	56.3	(1.1) †	58.5	(1.2) †	2.2	(1.7) †	58.2	(1.2) †	57.1	(1.2) †	-1.0	(1.6) †
New Zealand	72.0	(1.1)	78.1	(0.8)	6.1	(1.3)	43.1	(1.0)	43.6	(1.3)	0.6	(1.5)	37.6	(1.2)	36.5	(1.1)	-1.1	(1.5)
Poland	78.0	(1.0)	83.1	(0.9)	5.1	(1.3)	36.8	(1.3)	27.8	(1.1)	-9.0	(1.4)	54.8	(1.2)	47.7	(1.3)	-7.1	(1.5)
Portugal	79.2	(1.0)	83.6	(1.0)	4.4	(1.2)	35.4	(1.4)	31.0	(1.0)	-4.4	(1.6)	51.7	(1.3)	50.1	(1.2)	-1.6	(1.4)
Scotland (United Kingdom)	68.2	(1.6) ‡	71.0	(1.5) ‡	2.8	(2.2) ‡	43.9	(1.6) ‡	46.3	(1.6) ‡	2.5	(2.0) ‡	41.9	(1.4) ‡	39.8	(1.5) ‡	-2.1	(1.8) ‡
Slovak Republic	71.7	(1.0)	79.1	(0.9)	7.4	(1.3)	41.8	(1.2)	37.5	(1.1)	-4.2	(1.6)	48.9	(0.9)	43.6	(1.2)	-5.3	(1.6)
Slovenia	61.2	(1.1)	66.3	(1.0)	5.1	(1.5)	31.2	(0.9)	19.4	(1.0)	-11.8	(1.3)	37.3	(1.1)	22.9	(1.0)	-14.4	(1.6)
Spain	72.9	(0.6) †	69.8	(0.6) †	-3.2	(0.7) †	42.4	(0.8) †	40.5	(0.8) †	-1.9	(0.9) †	53.1	(0.7) †	48.2	(0.7) †	-5.0	(0.9) 1
Switzerland	68.3	(1.4) †	72.8	(1.3) †	4.5	(1.8) †	44.0	(1.2) †	38.7	(1.5) †	-5.3	(1.7) †	47.0	(1.4) †	39.9	(1.5) †	-7.1	(1.8) 1
Turkey	74.8	(0.8)	81.0	(0.8)	6.2	(1.0)	40.4	(1.2)	27.8	(1.2)	-12.6	(1.3)	42.1	(1.2)	27.3	(1.3)	-14.8	(1.4)
OECD average	73.6	(0.2)	77.5	(0.2)	3.9	(0.3)	42.2	(0.2)	39.2	(0.2)	-3.0	(0.3)	47.9	(0.2)	43.6	(0.2)	-4.3	(0.3)

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

Table VI.B1.8.1 [4/8] **Access to learning activities, by students' gender** Based on students' reports

	·							Access t	o learnin	ıg activi	ties, by s	students	' gender						
			I learn	about d	ifferent c	ultures			read ne Internet	or watc					often invi onal opir				
			oys		irls		- boys	Во	,	Gi			- boys		oys		irls		- boys
S	Albania	89.0	S.E. (0.6)	93.5	S.E. (0.5)	% dif.	S.E. (0.7)	51.7	S.E. (1.0)	40.8	S.E. (1.0)	% dif.	S.E. (1.3)	55.9	S.E. (1.1)	46.4	S.E. (1.2)	% dif.	S.E. (1.4)
<u> </u>	Argentina	77.9	(1.0) †	79.1	(0.7) †	1.1	(1.2) †	49.5	(1.0)	55.2	(1.0)	5.8	(1.5) †	52.9	(1.1)	47.2	(1.1) †	-5.7	(1.4)
77	Baku (Azerbaijan)	76.9	(0.9) †	81.9	(0.8) †	5.0	(1.1) †	66.2	(1.3) †	59.1	(1.2) †	-7.1	(1.7) †	73.3	(1.0) †	65.9	(1.1) †	-7.4	(1.4) 1
	Belarus	57.7	(1.0)	72.4	(1.0)	14.8	(1.1)	39.3	(1.1)	40.1	(1.4)	0.8	(1.2)	52.5	(1.0)	54.2	(1.0)	1.7	(1.4)
	Bosnia and Herzegovina	75.7	(0.8)	81.9	(1.1)	6.3	(1.2)	46.7	(1.0)	39.2	(1.0)	- <b>7.5</b>	(1.4)	49.6	(1.0)	39.5	(1.1)	-10.1	(1.3)
	Brazil	83.2	(0.8) †	87.9	(0.6) †	4.7	(0.9) †	50.5	(0.9) †	47.3	(1.2) †	-3.2	(1.3) †	50.9	(0.9) †	42.5	(1.0) †	-8.4	(1.2)
	Brunei Darussalam	78.2	(0.9)	83.0	(0.0) 1	4.7	(1.2)	46.4	(1.0)	44.2	(0.9)	-2.2	(1.4)	34.9	(0.9)	26.7	(0.9)	-8.1	(1.4)
		70.7					(1.7) †	47.9	` ′ .	37.3	. ,		` '	59.0	(1.2) †		. ,		. ,
	Bulgaria Costa Rica	89.2	(1.1) †	78.4 91.5	(1.1)	7.8	(0.8)	44.7	(1.2) †	44.1	(1.5)	<b>-10.5</b> -0.6	(1.6) †	49.0	(1.2) 1	51.0 45.1	(1.4)	-7.9 -3.9	(1.5) 1
	Croatia	79.5	(0.0)	83.6	(0.5)	4.1	(1.1)	36.7	(1.0)		(1.0)	-10.0	(1.5)	49.0		40.5	(0.9)	-8.7	(1.4)
			` ′		` '		(1.1)	45.3	` ′	26.7	. ,		` ′	54.1	(1.1)	50.1	. ,	-4.0	. ,
	Cyprus	70.7	(1.1) †	73.7	(1.0)	3.0	. ,		(1.2) †	36.8	(1.0)	-8.5	(1.3) †		(1.1) †		(1.1)		(1.4) 1
	Dominican Republic	89.0	(1.2) ‡	90.9	(1.1) ‡	2.0	(1.5) ‡	74.0	(1.5) ‡	68.4	(2.1) ‡	-5.6	(2.5) ‡	75.4	(1.5) ‡	76.7	(1.4) ‡		(1.9)
	Hong Kong (China)	76.7	(0.9)	83.2	(0.9)	6.6	(1.2)	68.7	(1.0)	74.7	(1.1)	6.0	(1.5)	52.9	(1.3)	49.2	(1.1)	-3.6	(1.6)
	Indonesia	84.7	(0.7)	88.4	(0.7)	3.8	(1.0)	72.6	(1.2)	74.3	(1.1)	1.7	(1.3)	66.4	(1.2)	61.7	(1.4)	-4.7	(1.8)
	Jordan	78.8	(0.8)	88.8	(0.8)	10.0	(1.1)	59.3	(1.0)	59.1	(1.3)	-0.3	(1.6)	63.3	(1.0)	47.8	(1.6)	-15.5	(1.8)
	Kazakhstan 	70.0	(0.7)	80.5	(0.6)	10.6	(1.0)	60.2	(0.8)	58.7	(0.7)	-1.5	(1.0)	58.8	(0.8)	54.3	(0.8)	-4.5	(1.0)
	Kosovo	84.8	(0.9)	87.4	(8.0)	2.6	(1.2)	59.9	(1.3)	45.4	(1.1)	-14.5	(1.6)	59.4	(1.3)	37.5	(1.2)	-22.0	(1.7)
	Lebanon	78.2	(1.2)	83.4	(0.9)	5.2	(1.3)	46.1	(1.5)	47.1	(1.3)	1.0	(1.5)	58.3	(1.3)	61.0	(1.2)	2.7	(1.5)
	Macao (China)	75.7	(1.0)	81.2	(0.9)	5.5	(1.4)	51.0	(1.0)	55.0	(1.1)	4.0	(1.4)	44.7	(1.0)	40.5	(1.1)	-4.2	(1.6)
	Malaysia	74.8	(1.0)	82.7	(8.0)	7.9	(1.0)	61.7	(1.2)	58.7	(1.2)	-2.9	(1.4)	39.8	(1.2)	31.3	(1.1)	-8.5	(1.3)
	Malta	73.6	(1.0)	82.3	(1.0)	8.7	(1.6)	40.9	(1.3)	23.2	(1.0)	-17.6	(1.6)	48.3	(1.4)	37.1	(1.1)	-11.2	(1.8)
	Moldova	76.4	(0.9)	84.1	(1.0)	7.7	(1.1)	35.3	(1.1)	31.3	(1.2)	-4.0	(1.3)	38.9	(1.3)	30.3	(1.3)	-8.6	(1.5)
	Montenegro	78.4	(8.0)	85.4	(0.7)	6.9	(1.0)	47.9	(0.9)	37.5	(0.9)	-10.4	(1.3)	57.4	(1.0)	46.6	(0.9)	-10.7	(1.2)
	Morocco	71.1	(1.2) ‡	75.8	(1.3) ‡	4.8	(1.5) ‡	49.3	(1.3) ‡	38.8	(1.3) ‡	-10.5	(1.6) ‡	54.6	(1.4) ‡	49.1	(1.2) ‡	-5.5	(1.8)
	North Macedonia	79.9	(0.7)	85.8	(0.8)	5.9	(1.1)	33.5	(8.0)	36.0	(1.0)	2.6	(1.2)	30.2	(0.8)	24.4	(1.0)	-5.8	(1.2)
	Panama	85.6	(1.2) ‡	86.6	(1.2) ‡	1.0	(1.7) ‡	54.0	(1.9) ‡	47.0	(2.1) ‡	-7.0	(2.4) ‡	61.1	(1.7) ‡	55.3	(2.2) ‡	-5.8	(2.5)
	Peru	91.5	(0.8) ‡	91.8	(0.8) ‡	0.3	(1.1) ‡	55.9	(1.5) ‡	50.5	(1.4) ‡	-5.4	(2.0) ‡	71.2	(1.2) ‡	64.5	(1.5) ‡	-6.7	(1.7)
	Philippines	85.8	(0.7)	90.9	(0.5)	5.1	(0.9)	72.0	(1.0)	75.8	(8.0)	3.8	(1.1)	70.6	(1.0)	64.8	(1.1)	-5.8	(1.2)
	Romania	69.2	(0.9)	77.8	(1.0)	8.7	(1.2)	44.3	(1.2)	43.2	(1.5)	-1.1	(1.8)	38.7	(1.3)	29.3	(1.6)	-9.5	(1.5)
	Russia	60.2	(1.0)	67.4	(1.1)	7.3	(1.3)	34.1	(1.1)	24.1	(1.2)	-10.0	(1.6)	44.5	(1.3)	36.1	(1.3)	-8.4	(1.5)
	Saudi Arabia	75.1	(1.2)	79.0	(0.9)	3.8	(1.5)	56.1	(1.2)	40.7	(1.4)	-15.4	(1.9)	55.0	(1.4)	34.2	(1.3)	-20.8	(1.9)
	Serbia	68.8	(1.0) †	72.5	(0.9)	3.7	(1.3) †	39.7	(1.1) †	28.9	(1.1)	-10.8	(1.4) †	52.7	(1.0) †	49.7	(1.1)	-3.0	(1.4)
	Singapore	90.4	(0.6)	94.9	(0.5)	4.5	(0.7)	72.7	(0.8)	78.9	(8.0)	6.2	(1.1)	62.0	(8.0)	58.2	(1.0)	-3.8	(1.3)
	Chinese Taipei	84.6	(0.7)	88.1	(0.5)	3.4	(8.0)	53.9	(0.9)	55.8	(1.1)	1.8	(1.4)	44.7	(1.2)	35.4	(1.2)	-9.3	(1.6)
	Thailand	86.2	(0.7)	94.2	(0.5)	8.0	(8.0)	74.3	(1.0)	81.8	(8.0)	7.5	(1.1)	60.2	(1.2)	49.2	(1.5)	-11.0	(1.5)
	Ukraine	69.3	(0.9)	79.7	(1.1)	10.4	(1.4)	30.2	(1.1)	31.0	(1.1)	0.8	(1.4)	46.4	(1.2)	41.5	(1.0)	-4.9	(1.4)
	United Arab Emirates	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Uruguay	77.7	(1.3) †	83.3	(1.1) †	5.6	(1.5) †	51.4	(1.4) †	50.1	(1.5) †	-1.4	(1.8) †	51.6	(1.6) †	44.7	(1.5) †	-6.9	(2.1) 1
	Viet Nam	82.1	(1.3)	87.1	(1.0)	5.0	(1.3)	53.5	(1.1)	59.7	(1.3)	6.3	(1.4)	45.8	(1.3)	41.5	(1.3)	-4.3	(1.5)

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

Table VI.B1.8.1 [5/8] **Access to learning activities, by students' gender** Based on students' reports

-	asca on stadents reports							Access t	o learnir	ıg activi	ties, by s	tudents	' gender						
			rticipate iversity t						cicipate i events a						nalyse glo ssmates i				
		Во	oys	Gi	rls		- boys		ys	Gi			- boys		oys		rls		- boys
_		%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
<u>ن</u> و	Australia Austria	46.8	(0.9)	53.5	(0.9)	6.7	(1.2)	59.6	(8.0)	61.3	(8.0)	1.7	(1.2)	52.6	(0.8)	53.4	(8.0)	0.8	(1.2)
		34.6	(1.2)	25.9	(1.1)	-8.7	(1.7)	57.2	(1.1)	50.1	(1.0)	-7.2	(1.4)	50.1	(1.0)	49.2	(1.2)	-1.0	(1.6)
	Canada	44.6	(8.0)	47.3	(0.9)	2.7	(1.1)	64.0	(0.7)	61.2	(0.7)	-2.9	(1.0)	56.0	(0.9)	52.6	(8.0)	-3.4	(1.0)
	Chile	44.8	(1.4) †	44.8	(1.4) †	0.0	(1.7) †	46.7	(1.3) †	45.4	(1.2) †	-1.3	(1.6) †	50.4	(1.3) †	52.0	(1.2) †	1.5	(1.8) †
(	Colombia	66.3	(1.0) †	70.1	(1.0) †	3.8	(1.2) †	64.8	(1.1) †	62.4	(1.0) †	-2.4	(1.4) †	69.9	(1.0) †	70.3	(1.2) †	0.3	(1.6) †
- 1	Estonia	34.6	(1.2)	35.4	(1.2)	0.9	(1.4)	58.4	(1.1)	58.4	(1.2)	0.0	(1.6)	46.6	(1.3)	44.6	(1.2)	-2.0	(1.5)
1	France	27.7	(0.9)	23.5	(1.1)	-4.2	(1.3)	57.4	(1.0)	58.8	(1.2)	1.4	(1.4)	43.1	(1.0)	44.4	(1.3)	1.3	(1.5)
(	Germany	27.1	(1.4) ‡	22.0	(1.2) †	-5.1	(1.9) ‡	62.0	(1.6) ‡	53.3	(1.4) †	-8.7	(1.8) ‡	50.4	(1.6) ‡	48.4	(1.6) †	-1.9	(2.2) ‡
(	Greece	45.2	(1.2)	40.7	(1.0)	-4.5	(1.4)	63.6	(1.0)	64.7	(1.0)	1.1	(1.3)	51.8	(1.2)	48.6	(1.0)	-3.2	(1.6)
	Hungary	39.4	(1.1)	40.6	(1.3)	1.2	(1.6)	42.4	(1.2)	33.9	(1.1)	-8.5	(1.7)	31.4	(1.2)	25.8	(1.1)	-5.5	(1.6)
	Iceland	47.4	(1.4)	40.6	(1.3)	-6.8	(1.9)	65.5	(1.4)	67.1	(1.2)	1.6	(2.0)	55.1	(1.3)	51.2	(1.3)	-4.0	(1.9)
	[reland	35.4	(1.1)	41.8	(1.3)	6.4	(1.6)	60.2	(1.1)	63.2	(1.1)	2.9	(1.5)	40.6	(1.1)	42.1	(1.1)	1.5	(1.4)
	Israel	48.0	(1.3) †	50.1	(1.3) †	2.2	(1.6) †	61.7	(1.3) †	62.6	(1.0) †	0.9	(1.6) †	41.7	(1.3) †	39.6	(1.1) †	-2.0	(1.6) †
	<b>Italy</b>	32.2	(1.3)	25.9	(1.1)	-6.3	(1.6)	59.1	(1.0)	58.6	(1.2)	-0.5	(1.4)	48.0	(1.1)	44.4	(1.2)	-3.6	(1.5)
	Korea	47.5	(1.1)	37.0	(1.1)	-10.4	(1.4)	45.7	(1.1)	37.1	(1.1)	-8.6	(1.4)	53.4	(1.2)	48.4	(1.5)	-5.0	(1.8)
	Latvia	34.1	(1.0)	32.0	(1.1)	-2.1	(1.4)	49.9	(1.2)	45.6	(1.1)	-4.3	(1.6)	46.3	(1.1)	42.5	(1.2)	-3.8	(1.7)
	Lithuania	53.0	(1.1)	57.7	(1.2)	4.7	(1.5)	64.0	(1.0)	66.0	(0.9)	2.0	(1.3)	52.9	(1.1)	50.3	(1.1)	-2.6	(1.5)
	Mexico	53.0	(1.2) †	55.7	(1.2) †	2.8	(1.6) †	58.1	(1.2) †	60.2	(1.4) †	2.1	(1.6) †	63.6	(1.2) †	64.0	(1.3) †	0.5	(1.7) †
-	New Zealand	41.3	(1.1)	49.1	(1.2)	7.8	(1.4)	53.8	(1.2)	58.4	(1.1)	4.7	(1.4)	46.4	(0.9)	47.8	(1.1)	1.3	(1.3)
Ī	Poland	41.8	(1.1)	43.6	(1.2)	1.8	(1.2)	55.4	(1.1)	45.9	(1.2)	-9.4	(1.3)	46.4	(1.1)	42.7	(1.2)	-3.7	(1.6)
1	Portugal	39.6	(1.2)	34.6	(1.2)	-4.9	(1.5)	65.7	(1.1)	63.4	(1.1)	-2.3	(1.3)	60.6	(1.1)	60.9	(1.2)	0.3	(1.7)
	Scotland (United Kingdom)	36.7	(1.6) ‡	38.5	(1.7) ‡	1.8	(2.6) ‡	55.4	(1.5) ‡	55.8	(1.4) ‡	0.4	(2.1) ‡	43.4	(1.5) ‡	42.1	(1.6) ‡	-1.3	(2.1) ‡
	Slovak Republic	36.8	(1.2)	28.5	(1.0)	-8.3	(1.4)	49.0	(1.0)	37.1	(1.0)	-11.9	(1.4)	44.1	(1.0)	33.8	(1.0)	-10.3	(1.3)
	Slovenia	35.1	(1.0)	27.1	(1.1)	-8.0	(1.4)	42.7	(1.1)	29.6	(1.2)	-13.1	(1.6)	39.1	(1.1)	26.0	(1.1)	-13.0	(1.5)
:	Spain	39.2	(0.8) †	34.4	(0.6) †	-4.9	(0.8) †	56.8	(0.7) †	56.0	(0.7) †	-0.9	(0.9) †	54.4	(0.6) †	51.6	(0.7) †	-2.8	(1.0) †
	Switzerland	33.2	(1.3) †	25.0	(1.1) †	-8.2	(1.4) †	58.2	(1.5) †	53.7	(1.5) †	-4.6	(2.0) †	47.3	(1.5) †	47.7	(1.5) †	0.4	(1.9) †
	Turkey	53.5	(1.1)	43.6	(1.4)	-9.9	(1.6)	61.1	(1.0)	56.8	(1.3)	-4.3	(1.5)	52.5	(1.1)	40.3	(1.4)	-12.2	(1.5)
	OECD average	41.4	(0.2)	39.6	(0.2)	-1.8	(0.3)	57.0	(0.2)	54.3	(0.2)	-2.7	(0.3)	49.6	(0.2)	46.8	(0.2)	-2.7	(0.3)

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

Table VI.B1.8.1 [6/8] Access to learning activities, by students' gender Based on students' reports

						Į.	Access t	o learnir	ng activi	ties, by s	tudents	' gender	ſ					
				s celebra out the so						om disci the regu				nalyse glo ssmates				
	В	oys		irls		- boys		oys		rls		- boys		bys		rls		- boys
V Albania	76.1	S.E. (0.8)	76.5	S.E. (0.9)	% dif.	S.E. (1.2)	74.4	S.E. (0.9)	76.7	S.E. (0.8)	% dif.	S.E. (1.2)	73.4	S.E. (1.1)	77.7	S.E. (1.0)	% dif.	S.E. (1.2)
- Argentina	43.6	(1.1) †	45.6	(1.3) †	2.0	(1.7) †	61.0	(1.0) †	61.5	(1.1) †	0.4	(1.4) †	55.3	(1.0) †	55.1	(1.0)	-0.2	(1.4) †
Bakn (Azerpaijan) 表 Albania	70.9	(1.0) †	71.0	(1.1) †	0.2	(1.5) †	73.3	(1.0) †	67.6	(1.0) †	-5.7	(1.5) †	72.7	(1.2) †	70.9	(1.0) †	-1.8	(1.5) †
Belarus	52.6	(1.2)	55.1	(1.3)	2.5	(1.3)	51.7	(1.2)	52.2	(1.1)	0.5	(1.2)	44.9	(1.1)	44.4	(1.2)	-0.5	(1.3)
Bosnia and Herzegovina	53.3	(1.0)	49.7	(1.1)	-3.6	(1.3)	58.4	(1.1)	51.1	(1.1)	<b>-7.3</b>	(1.5)	54.8	(1.2)	45.8	(1.2)	-9.0	(1.6)
Brazil	50.6	(1.2) †	48.7	(1.0) †	-1.9	(1.2) †	57.3	(1.1) †	55.2	(1.0) †	-2.1	(1.3) †	58.0	(1.1) †	57.2	(1.1) †	-0.8	(1.4) †
Brunei Darussalam	44.3	(0.9)	32.9	(0.8)	-11.4	(1.3)	50.6	(1.0)	48.9	(1.1)	-1.8	(1.5)	50.0	(0.9)	52.4	(1.0)	2.3	(1.4)
Bulgaria	56.6	(1.3) †	57.7	(1.4)	1.1	(1.8) †	59.9	(1.2) †	55.0	(1.4)	-4.9	(1.9) †	56.2	(1.1) †	53.0	(1.3)	-3.2	(1.8) †
Costa Rica	53.1	(1.1)	54.0	(1.2)	0.9	(1.3)	55.5	(1.0)	50.0	(1.0)	-5.6	(1.2)	57.7	(1.0)	55.5	(1.5)	-2.2	(1.5)
Croatia	42.7	(1.0)	31.7	(1.1)	-11.1	(1.4)	57.8	(1.0)	52.7	(1.0)	-5.2	(1.4)	49.0	(1.1)	44.2	(1.0)	-4.8	(1.4)
Cyprus	47.3	(1.1) †	46.4	(1.1)	-1.0	(1.7) †	54.8	(1.2) †	53.0	(1.1)	-1.7	(1.5) †	50.7	(1.0) †	47.0	(1.0)	-3.7	(1.3) †
Dominican Republic	75.6	(1.6) ‡	75.7	(1.6) ‡	0.1	(2.4) ‡	78.1	(1.3) ‡	80.2	(1.4) ‡	2.1	(1.9) ‡	73.3	(1.8) ‡	74.5	(1.8) ‡	1.2	(2.6) ‡
Hong Kong (China)	48.8	(1.4)	43.3	(1.4)	-5.5	(1.6)	66.1	(1.1)	69.7	(1.1)	3.6	(1.4)	64.2	(1.1)	69.5	(1.1)	5.3	(1.2)
Indonesia	69.7	(1.2)	65.7	(1.1)	-4.0	(1.5)	74.2	(1.1)	73.7	(1.1)	-0.5	(1.4)	70.0	(1.1)	70.4	(1.1)	0.3	(1.3)
Jordan	62.6	(1.1)	67.3	(1.1)	4.7	(1.5)	67.9	(1.1)	72.8	(1.1)	4.9	(1.4)	62.4	(0.9)	69.3	(1.0)	6.9	(1.3)
Kazakhstan	61.8	(0.7)	64.7	(0.7)	2.8	(0.9)	64.5	(0.7)	64.6	(0.8)	0.1	(1.0)	62.2	(0.7)	64.0	(0.8)	1.7	(1.0)
Kosovo	67.3	(1.2)	59.6	(1.0)	-7.8	(1.6)	70.7	(1.1)	63.7	(1.0)	- <b>7.1</b>	(1.5)	66.1	(1.2)	59.6	(1.2)	-6.5	(1.6)
Lebanon	57.7	(1.3)	58.1	(1.4)	0.5	(1.8)	67.0	(1.3)	69.7	(1.0)	2.7	(1.5)	58.5	(1.3)	61.2	(1.0)	2.7	(1.5)
Macao (China)	40.4	(1.2)	39.7	(1.1)	-0.7	(1.5)	47.6	(1.0)	46.1	(1.1)	-1.4	(1.5)	43.5	(1.2)	46.7	(1.2)	3.1	(1.5)
Malaysia	46.1	(1.0)	41.4	(1.3)	-4.7	(1.4)	57.5	(1.2)	57.7	(1.1)	0.2	(1.5)	52.0	(1.0)	52.0	(1.1)	0.0	(1.3)
Malta	46.4	(1.3)	39.7	(1.2)	-6.7	(1.7)	59.0	(1.4)	60.3	(1.2)	1.2	(1.8)	52.7	(1.5)	50.6	(1.2)	-2.0	(2.0)
Moldova	50.3	(1.2)	52.4	(1.2)	2.0	(1.3)	62.6	(0.9)	66.0	(1.1)	3.5	(1.5)	52.4	(1.2)	51.2	(1.0)	-1.2	(1.3)
Montenegro	60.0	(0.9)	57.4	(0.8)	-2.6	(1.2)	66.0	(0.9)	68.7	(0.8)	2.7	(1.2)	58.5	(0.8)	56.4	(0.9)	-2.1	(1.3)
Morocco	55.9	(1.2) ‡	52.9	(1.7) ‡	-3.0	(2.0) ‡	56.7	(1.2) ‡	49.2	(1.6) ‡	-7.5	(2.0) ‡	56.9	(1.4) ‡	52.6	(1.4) ‡	-4.3	(2.2) ‡
North Macedonia	40.1	(1.0)	37.4	(1.1)	-2.7	(1.4)	68.0	(1.0)	69.5	(1.0)	1.5	(1.3)	60.5	(0.9)	63.7	(1.1)	3.3	(1.3)
Panama	62.9	(1.8) ‡	57.8	(2.0) ‡	-5.1	(2.4) ‡	63.4	(1.7) ‡	59.1	(2.0) ‡	-4.2	(2.5) ‡	65.1	(1.8) ‡	61.5	(1.7) ‡	-3.6	(2.3) ‡
Peru	61.1	(1.4) ‡	60.9	(1.6) ‡	-0.2	(2.1) ‡	63.5	(1.4) ‡	64.8	(1.5) ‡	1.3	(2.0) ‡	66.6	(1.4) ‡	66.3	(1.7) ‡	-0.3	(2.1) ‡
Philippines	74.4	(0.9)	71.1	(1.0)	-3.3	(1.1)	81.0	(0.8)	83.4	(0.8)	2.4	(1.1)	75.9	(0.9)	78.0	(0.8)	2.2	(1.0)
Romania	47.3	(1.1)	46.9	(1.4)	-0.4	(1.7)	49.7	(1.2)	46.6	(1.2)	-3.2	(1.5)	41.3	(1.3)	36.6	(1.6)	-4.7	(1.8)
Russia	43.2	(1.2)	41.7	(1.1)	-1.5	(1.3)	54.3	(1.2)	53.1	(1.2)	-1.2	(1.3)	51.3	(1.2)	50.7	(1.3)	-0.6	(1.5)
Saudi Arabia	55.2	(1.3)	48.0	(1.4)	-7.2	(1.9)	59.5	(1.3)	54.7	(1.2)	-4.8	(1.9)	55.5	(1.2)	54.7	(1.1)	-0.8	(1.5)
Serbia	45.9	(1.2) †	38.1	(1.2)	-7.8	(1.4) †	55.3	(1.1) †	49.8	(1.1)	-5.5	(1.5) †	49.8	(1.1) †	46.0	(1.3)	-3.9	(1.6) †
Singapore	74.0	(0.8)	82.2	(0.7)	8.2	(1.1)	67.8	(0.9)	67.5	(1.0)	-0.3	(1.3)	64.6	(0.7)	67.7	(0.9)	3.0	(1.1)
Chinese Taipei	48.9	(1.2)	43.2	(1.0)	-5.6	(1.1)	53.9	(1.1)	47.0	(1.0)	-6.8	(1.4)	47.8	(1.0)	44.0	(1.3)	-3.8	(1.4)
Thailand	70.7	(1.0)	68.4	(1.1)	-2.2	(1.4)	67.4	(1.2)	68.1	(1.0)	0.7	(1.3)	69.2	(0.9)	72.3	(1.0)	3.1	(1.2)
Ukraine	41.1	(1.1)	45.0	(1.1)	4.0	(1.4)	48.4	(1.1)	50.4	(1.0)	2.1	(1.4)	45.6	(1.1)	47.2	(1.2)	1.6	(1.6)
United Arab Emirates	m	(1.1) m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Uruguay	43.3	(1.6) †	39.0	(1.6) †	-4.3	(1.9) †	59.0	(1.8) †	55.7	(1.2) †	-3.3	(2.1) †	54.8	(1.4) †	55.5	(1.4) †	0.7	(1.8) †
Viet Nam	46.8	(1.3)	40.6	(1.3)	-6.3	(1.3)	55.1	(1.1)	55.4	(1.3)	0.2	(1.4)	53.2	(1.3)	52.2	(1.4)	-1.0	(1.4)

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

Table VI.B1.8.1 [7/8] **Access to learning activities, by students' gender** Based on students' reports

<u>Based off students</u>	Теропо				A	ccess to lear	ning activi	ties, by stude	nts' gender				
		I lea		ople from dit t perspective		ures can have issues	2			w to commu m different k			
		Boy	s	Girl	s	Girls - I	ooys	Boys	s	Girl	s	Girls - I	ooys
		%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Australia Austria		66.2	(0.9)	73.2	(0.7)	7.0	(1.1)	58.9	(8.0)	60.4	(0.8)	1.5	(1.1)
Austria		64.7	(1.0)	70.7	(1.1)	6.0	(1.5)	54.2	(1.1)	55.5	(1.2)	1.3	(1.6)
Canada		68.1	(0.7)	71.2	(0.7)	3.1	(0.8)	61.3	(0.8)	59.6	(0.7)	-1.7	(1.1)
Chile		64.4	(1.4) †	69.9	(1.0) †	5.5	(1.6) †	54.8	(1.2) †	52.3	(1.2) †	-2.5	(1.6) †
Colombia		72.6	(1.6)	76.0	(1.4)	3.3	(1.2)	70.9	(1.0) †	71.4	(1.0) †	0.5	(1.3) †
Estonia		55.3	(1.3)	55.6	(1.0)	0.2	(1.5)	54.6	(1.3)	52.9	(1.2)	-1.7	(1.8)
France		52.8	(1.1)	54.2	(1.1)	1.4	(1.3)	54.2	(1.1)	58.6	(1.1)	4.5	(1.6)
Germany		55.5	(1.4) †	57.4	(1.6) †	1.9	(2.2) †	53.9	(1.2) ‡	49.1	(1.4) †	-4.9	(1.9) ‡
Greece		67.5	(0.9)	73.1	(0.9)	5.6	(1.2)	59.2	(1.0)	65.0	(0.9)	5.8	(1.4)
Hungary		38.4	(1.1)	35.2	(1.3)	-3.3	(1.7)	36.5	(1.3)	37.3	(1.2)	0.9	(1.7)
Iceland		66.9	(1.2)	69.7	(1.2)	2.8	(1.9)	61.8	(1.5)	59.6	(1.3)	-2.3	(2.0)
Ireland		60.4	(1.2)	63.1	(1.0)	2.7	(1.5)	55.0	(1.2)	58.0	(1.1)	3.0	(1.5)
Israel		55.2	(1.4) †	59.0	(1.0) †	3.8	(1.6) †	50.3	(1.3) †	51.5	(1.3) †	1.2	(1.7) †
Italy		59.0	(1.0)	62.8	(1.1)	3.9	(1.5)	60.7	(1.2)	65.6	(1.2)	4.9	(1.6)
Korea		60.7	(1.0)	59.7	(1.5)	-1.0	(1.7)	57.5	(1.0)	55.6	(1.1)	-1.9	(1.5)
Latvia		50.3	(1.3)	54.8	(1.2)	4.6	(1.6)	58.8	(1.1)	63.0	(1.1)	4.2	(1.5)
Lithuania		61.3	(1.0)	66.2	(1.0)	4.8	(1.4)	57.7	(0.9)	56.7	(0.9)	-1.1	(1.3)
Mexico		71.6	(1.2) †	75.3	(1.0) †	3.7	(1.5) †	67.3	(1.2) †	66.3	(1.0) †	-1.0	(1.6) †
New Zealand		61.4	(1.1)	69.8	(1.0)	8.4	(1.4)	60.7	(1.1)	60.6	(1.1)	-0.2	(1.6)
Poland		60.2	(1.1)	64.9	(1.0)	4.7	(1.4)	61.0	(1.1)	66.3	(1.1)	5.3	(1.4)
Portugal		67.9	(1.1)	73.4	(0.8)	5.5	(1.4)	66.2	(1.0)	67.8	(0.9)	1.6	(1.3)
Scotland (United K	ingdom)	54.2	(1.4) ‡	58.2	(1.6) ‡	4.0	(1.9) ‡	50.6	(1.7) ‡	54.6	(1.6) ‡	3.9	(2.0) ‡
Slovak Republic		56.1	(1.1)	62.0	(1.2)	5.9	(1.7)	56.0	(1.1)	63.0	(1.1)	7.1	(1.6)
Slovenia		45.5	(1.1)	42.9	(1.2)	-2.6	(1.6)	46.5	(1.1)	48.4	(1.2)	1.8	(1.6)
Spain		63.4	(0.6) †	63.4	(0.6) †	0.1	(0.9) †	62.0	(0.7)	60.2	(0.6)	-1.8	(0.8)
Switzerland		60.3	(1.5) †	66.7	(1.3) †	6.5	(1.7) †	53.2	(1.3) †	55.3	(1.3) †	2.1	(1.7) †
Turkey		64.1	(0.8)	66.1	(1.2)	2.0	(1.4)	68.5	(0.9)	73.2	(1.0)	4.8	(1.4)
OECD average		60.1	(0.2)	63.5	(0.2)	3.4	(0.3)	57.5	(0.2)	58.8	(0.2)	1.3	(0.3)

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

Table VI.B1.8.1 [8/8] Access to learning activities, by students' gender Based on students' reports

					A	ccess to learr	ning activiti	es, by stude	nts' gender				
		I le		ple from dif perspective		ures can have issues	2			w to commu n different b			
		Воу		Girls		Girls - I	,	Boy		Girl		Girls - b	
10	Albania	% 70.6	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
e e	Albania	79.6	(0.9)	84.3	(0.7)	4.7	(1.1)	80.4	(0.9)	84.4	(0.6)	4.1	(1.0)
artı	Argentina	69.7	(1.0) †	75.9	(0.8) †	6.2	(1.2) †	67.3	(1.1) †	70.5	(1.0) †	3.3	(1.5) †
	Baku (Azerbaijan)	71.0	(1.1) †	71.5	(1.2) †	0.6	(1.4) †	60.9	(1.1) †	65.4	(1.2) †	4.4	(1.5) †
	Belarus	61.8	(1.1)	70.0	(1.0)	8.2	(1.2)	52.9	(1.0)	54.5	(1.1)	1.5	(1.4)
	Bosnia and Herzegovina	63.0	(0.9)	64.2	(1.0)	1.2	(1.2)	66.0	(1.0)	70.3	(1.0)	4.3	(1.3)
	Brazil	68.1	(0.9) †	73.9	(0.9) †	5.8	(1.2) †	54.8	(1.0) †	54.0	(1.1) †	-0.8	(1.1) †
	Brunei Darussalam	68.4	(1.0)	71.2	(0.8)	2.8	(1.3)	73.2	(0.8)	76.4	(0.8)	3.2	(1.1)
	Bulgaria	66.3	(1.2) †	70.4	(1.3)	4.1	(1.8) †	62.0	(1.4) †	64.6	(1.4)	2.5	(1.9) †
	Costa Rica	70.0	(0.9)	74.8	(1.0)	4.8	(1.3)	71.9	(0.8)	68.7	(1.2)	-3.2	(1.4)
	Croatia	60.5	(0.9)	60.2	(1.1)	-0.3	(1.3)	61.5	(1.0)	61.3	(1.1)	-0.1	(1.4)
	Cyprus	57.2	(1.0)	62.6	(1.0)	5.4	(1.4)	57.6	(1.1) †	62.3	(0.9)	4.7	(1.5) †
	Dominican Republic	70.0	(1.6) ‡	72.3	(1.6) ‡	2.3	(1.7) ‡	52.9	(2.4) ‡	47.3	(2.3) ‡	-5.5	(2.1) ‡
	Hong Kong (China)	70.1	(1.0)	74.2	(1.0)	4.1	(1.2)	67.2	(1.3)	70.3	(1.0)	3.1	(1.5)
	Indonesia	76.7	(1.0)	76.8	(1.0)	0.1	(1.2)	78.2	(1.0)	80.3	(1.0)	2.1	(1.4)
	Jordan	72.3	(8.0)	80.8	(0.7)	8.5	(1.1)	69.2	(1.0)	83.5	(0.9)	14.3	(1.3)
	Kazakhstan	65.4	(0.9)	68.3	(0.7)	2.9	(1.0)	63.2	(0.7)	66.0	(0.7)	2.9	(1.0)
	Kosovo	75.8	(0.9)	77.0	(1.0)	1.2	(1.5)	75.0	(1.1)	77.6	(0.9)	2.6	(1.4)
	Lebanon	65.7	(1.1)	66.9	(1.2)	1.2	(1.5)	66.6	(1.4)	70.3	(1.1)	3.7	(1.5)
	Macao (China)	61.1	(1.2)	62.0	(1.0)	0.8	(1.8)	68.2	(1.2)	66.5	(1.1)	-1.7	(1.6)
	Malaysia	69.4	(0.9)	75.9	(0.9)	6.5	(1.1)	72.7	(1.0)	77.7	(0.9)	5.0	(1.2)
	Malta	65.7	(1.2)	71.8	(1.1)	6.1	(1.7)	64.9	(1.1)	72.9	(1.0)	7.9	(1.7)
	Moldova	60.6	(0.9)	65.1	(1.1)	4.5	(1.2)	74.3	(0.9)	81.4	(1.0)	7.1	(1.3)
	Montenegro	67.7	(0.9)	69.0	(0.8)	1.3	(1.1)	65.1	(0.9)	74.1	(0.9)	9.0	(1.3)
	Morocco	61.2	(1.3) ‡	62.5	(1.3) ‡	1.3	(1.9) ‡	62.2	(1.3) ‡	67.9	(1.3) ‡	5.7	(1.7) ‡
	North Macedonia	64.1	(1.0)	72.5	(1.0)	8.4	(1.3)	74.0	(0.9)	76.4	(8.0)	2.4	(1.1)
	Panama	74.6	(1.6) ‡	76.9	(1.5) ‡	2.3	(2.1) ‡	55.3	(1.6) ‡	52.6	(1.7) ‡	-2.8	(2.4) ‡
	Peru	79.6	(1.3) ‡	79.7	(1.2) ‡	0.1	(1.7) ‡	70.0	(1.1) ‡	65.1	(1.6) ‡	-4.9	(1.9) ‡
	Philippines	80.1	(0.7)	84.6	(0.6)	4.5	(0.8)	82.6	(0.8)	88.1	(0.6)	5.5	(8.0)
	Romania	57.9	(1.2)	58.3	(1.3)	0.4	(1.6)	64.6	(1.0)	66.6	(1.4)	2.0	(1.5)
	Russia	53.8	(1.3)	56.3	(1.1)	2.5	(1.4)	52.9	(1.2)	55.4	(1.2)	2.5	(1.4)
	Saudi Arabia	68.7	(1.1)	74.1	(0.8)	5.4	(1.3)	68.6	(1.0)	79.9	(0.8)	11.2	(1.2)
	Serbia	59.0	(1.0) †	61.8	(1.0)	2.7	(1.4) †	56.0	(0.9) †	58.8	(1.0)	2.7	(1.2) †
	Singapore	86.1	(0.6)	92.4	(0.4)	6.4	(0.7)	84.2	(0.6)	88.1	(0.6)	3.9	(0.8)
	Chinese Taipei	75.8	(0.9)	79.1	(0.8)	3.3	(1.2)	77.1	(0.7)	76.4	(0.8)	-0.7	(1.0)
	Thailand	75.2	(0.9)	80.3	(0.8)	5.1	(1.0)	75.7	(0.8)	79.1	(1.0)	3.4	(1.3)
	Ukraine	49.3	(1.1)	52.0	(1.2)	2.7	(1.6)	57.8	(1.0)	62.7	(1.0)	4.9	(1.5)
	United Arab Emirates	m	m	m	m	m	m	m	m	m	m	m	m
	Uruguay	64.4	(1.3) †	70.9	(1.3) †	6.5	(1.7) †	52.3	(1.3) †	48.2	(1.5) †	-4.1	(1.8) †
	Viet Nam	60.1	(1.4)	65.9	(1.4)	5.8	(1.6)	77.2	(1.2)	78.6	(1.1)	1.5	(1.2)

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

Table VI.B1.8.2 [ $^{1/22}$ ] Access to learning activities, by students' socio-economic status Based on students' reports

### Number of learning activities

		Bottom qu		Second qu		Third qua		Top qua		Top - Bottom	·
_		Mean index	S.E.	Dif.	S.E.						
2	Australia Austria	5.33	(80.0)	5.73	(0.07)	5.99	(0.07)	6.38	(0.06)	1.04	(0.10)
0		5.32	(0.10) †	5.36	(0.09)	5.46	(0.09)	5.96	(0.10)	0.64	(0.13) †
	Canada	5.63	(0.07)	5.92	(0.06)	5.98	(0.06)	6.49	(0.06)	0.86	(0.09)
	Chile	5.73	(0.11) †	5.75	(0.11) †	5.67	(0.10) †	5.54	(0.10) †	-0.18	(0.14) †
	Colombia	7.18	(0.09) †	7.14	(0.09) †	7.35	(0.07)	7.41	(0.08)	0.24	(0.13) †
	Estonia	4.77	(0.10)	4.85	(0.11)	5.16	(0.09)	5.42	(0.09)	0.64	(0.13)
	France	4.66	(0.10) †	4.78	(0.10) †	4.76	(0.08)	4.86	(0.09)	0.19	(0.13) †
	Germany	5.25	(0.12) ‡	5.37	(0.10) †	5.23	(0.11) †	5.68	(0.10) †	0.43	(0.15) ‡
	Greece	5.70	(0.10)	5.80	(0.09)	5.66	(0.08)	5.79	(0.08)	0.09	(0.13)
	Hungary	3.77	(0.12)	3.74	(0.10)	3.87	(0.10)	3.99	(0.10)	0.22	(0.16)
	Iceland	5.54	(0.14) †	5.65	(0.14) †	5.99	(0.13)	6.12	(0.10)	0.58	(0.17) †
	Ireland	5.12	(0.10)	5.31	(0.10)	5.37	(0.10)	5.47	(0.10)	0.35	(0.16)
	Israel	5.23	(0.13) †	4.89	(0.11) †	4.61	(0.09)	5.16	(0.13) †	-0.07	(0.18) †
	Italy	5.67	(0.10) †	5.58	(0.08) †	5.56	(0.09)	5.45	(0.09)	-0.22	(0.14) †
	Korea	5.34	(0.09)	5.58	(0.12)	5.67	(0.11)	6.14	(0.11)	0.80	(0.14)
	Latvia	4.72	(0.09)	5.06	(0.08)	4.95	(0.09)	4.99	(0.10)	0.28	(0.12)
	Lithuania	5.73	(0.09)	5.83	(0.10)	5.73	(0.09)	6.13	(0.09)	0.40	(0.13)
	Mexico	6.55	(0.11) ‡	6.51	(0.11) †	6.49	(0.10) †	6.74	(0.11)	0.19	(0.17) ‡
	New Zealand	4.92	(0.09)	5.25	(0.09)	5.31	(0.10)	5.73	(0.10)	0.81	(0.13)
	Poland	5.67	(0.10)	5.92	(0.10)	5.56	(0.11)	5.60	(0.10)	-0.07	(0.13)
	Portugal	6.17	(0.08)	5.81	(0.10)	5.96	(0.10)	5.60	(0.11)	-0.58	(0.14)
	Scotland (United Kingdom)	4.42	(0.14) ‡	5.00	(0.14) ‡	4.84	(0.12) ‡	5.54	(0.15) ‡	1.12	(0.19) ‡
	Slovak Republic	4.77	(0.10) †	5.07	(0.09)	4.96	(0.09)	5.21	(0.09)	0.44	(0.13) †
	Slovenia	3.76	(0.08)	4.10	(0.10)	4.00	(0.09)	4.22	(0.11)	0.46	(0.13)
	Spain	5.72	(0.06) †	5.64	(0.05) †	5.56	(0.06) †	5.49	(0.07) †	-0.23	(0.08) †
	Switzerland	5.24	(0.14) †	5.18	(0.14) †	5.11	(0.12) †	5.16	(0.11) †	-0.07	(0.17) †
	Turkey	5.65	(0.09)	5.97	(0.08)	5.91	(0.09)	5.63	(0.14)	-0.02	(0.16)
	OECD average	5.32	(0.02)	5.44	(0.02)	5.43	(0.02)	5.63	(0.02)	0.31	(0.03)

The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

**Notes**: Values that are statistically significant are indicated in bold (see Annex A3).

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

Table VI.B1.8.2 [2/22] Access to learning activities, by students' socio-economic status Based on students' reports

### Number of learning activities

		Bottom qu	ıarter	Second qu	ıarter	Third qua	arter	Top qua	rter	Top - Bottom	quarter
		Mean index	S.E.	Dif.	S.E.						
ers	Albania	7.17	(0.08)	7.16	(0.08)	7.52	(0.07)	7.58	(0.07)	0.41	(0.09)
Partners	Argentina	6.06	(0.07) †	6.36	(0.07) †	6.31	(0.08) †	6.38	(0.07)	0.32	(0.10) †
Ра	Baku (Azerbaijan)	6.84	(0.14) ‡	7.30	(0.10) ‡	7.44	(0.11) †	7.58	(0.12) †	0.74	(0.19) ‡
	Belarus	5.26	(0.11)	5.48	(0.11)	5.39	(0.09)	5.63	(0.11)	0.37	(0.14)
	Bosnia and Herzegovina	5.55	(0.10) †	5.59	(0.10)	5.81	(0.09)	5.70	(0.11)	0.15	(0.15) †
	Brazil	5.92	(0.13) ‡	6.07	(0.09) †	6.28	(0.08) †	6.35	(0.10) †	0.43	(0.17) ‡
	Brunei Darussalam	5.47	(0.08) †	5.67	(0.07) †	5.63	(0.07) †	5.66	(0.07)	0.19	(0.10) †
	Bulgaria	6.03	(0.14) †	6.11	(0.14) †	5.89	(0.11) †	6.03	(0.10) †	0.00	(0.16) †
	Costa Rica	6.21	(0.08)	6.18	(0.07)	6.21	(0.09)	6.35	(0.12)	0.14	(0.14)
	Croatia	5.31	(0.09)	5.50	(0.10)	5.57	(0.09)	5.36	(0.09)	0.05	(0.12)
	Cyprus	5.25	(0.14) †	5.43	(0.09) †	5.26	(0.11) †	5.84	(0.11) †	0.58	(0.18) †
	Dominican Republic	8.12	(0.17) ‡	8.02	(0.17) ‡	7.87	(0.13) ‡	7.82	(0.15) ‡	-0.30	(0.23) ‡
	Hong Kong (China)	6.21	(0.10)	6.66	(0.09)	6.92	(0.10)	7.00	(0.13)	0.79	(0.16)
	Indonesia	7.53	(0.10)	7.55	(0.08)	7.64	(0.09)	7.63	(80.0)	0.10	(0.12)
	Jordan	6.90	(0.10)	7.22	(0.06)	7.17	(80.0)	7.23	(0.10)	0.32	(0.15)
	Kazakhstan	5.99	(0.09) †	6.27	(0.07) †	6.35	(80.0)	6.69	(0.07)	0.70	(0.10) †
	Kosovo	6.61	(80.0)	6.82	(0.10)	6.96	(0.11)	7.00	(0.09)	0.39	(0.12)
	Lebanon	6.52	(0.11)	6.43	(0.08)	6.39	(80.0)	6.40	(0.09)	-0.11	(0.14)
	Macao (China)	4.94	(0.09)	5.40	(0.09)	6.03	(80.0)	6.32	(0.09)	1.37	(0.12)
	Malaysia	6.03	(0.08)	6.09	(0.07)	6.16	(0.07)	6.23	(0.09)	0.21	(0.12)
	Malta	5.66	(0.12) †	5.70	(0.11)	5.58	(0.10)	5.44	(0.11)	-0.22	(0.16) †
	Moldova	5.67	(0.08)	5.80	(0.09)	5.90	(80.0)	5.57	(0.10)	-0.10	(0.12)
	Montenegro	6.10	(0.09) †	6.63	(0.08)	6.44	(0.08)	6.19	(0.08)	0.09	(0.12) †
	Morocco	5.60	(0.16) ‡	5.94	(0.13) ‡	5.97	(0.10) ‡	6.01	(0.12) ‡	0.41	(0.20) ‡
	North Macedonia	5.76	(0.07)	5.75	(0.08)	5.94	(0.07)	5.82	(0.07)	0.06	(0.10)
	Panama	6.91	(0.18) ‡	6.77	(0.14) ‡	6.68	(0.14) ‡	6.45	(0.16) ‡	-0.45	(0.24) ‡
	Peru	7.47	(0.17) ‡	7.35	(0.12) ‡	7.02	(0.09) †	6.89	(0.12) †	-0.58	(0.22) ‡
	Philippines	7.81	(0.08)	8.13	(0.06)	8.15	(0.06)	8.05	(0.07)	0.24	(0.10)
	Romania	5.40	(0.11)	5.34	(0.10)	5.31	(0.10)	4.97	(0.11)	-0.43	(0.14)
	Russia	5.01	(0.10)	4.85	(0.14)	4.88	(0.12)	5.23	(0.10)	0.22	(0.11)
	Saudi Arabia	6.26	(0.10)	6.23	(0.10)	6.14	(0.09)	6.19	(0.08)	-0.07	(0.12)
	Serbia	5.22	(0.10) †	5.31	(0.09) †	5.30	(0.10) †	4.99	(0.11) †	-0.23	(0.13) †
	Singapore	7.58	(0.07)	7.82	(0.06)	7.82	(0.05)	7.88	(0.08)	0.30	(0.09)
	Chinese Taipei	5.73	(0.11)	6.11	(0.08)	6.33	(0.07)	6.83	(0.07)	1.10	(0.13)
	Thailand	7.49	(0.10)	7.44	(0.08)	7.69	(0.09)	7.58	(0.08)	0.09	(0.13)
	Ukraine	4.78	(0.11)	5.08	(0.08)	5.20	(0.09)	5.41	(0.09)	0.63	(0.14)
	United Arab Emirates	m	m	m	m	m	m	m	m	m	m
	Uruguay	5.91	(0.13) ‡	5.92	(0.12) †	5.65	(0.13) †	5.95	(0.12) †	0.04	(0.17) ‡
	Viet Nam	6.07	(0.09)	6.27	(0.09)	6.40	(0.12)	6.40	(0.12)	0.34	(0.14)

The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

**Notes**: Values that are statistically significant are indicated in bold (see Annex A3).

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

Table VI.B1.8.2 [3/22] Access to learning activities, by students' socio-economic status

Based on students' reports

Access to learning activities, by quarter of students' socio-economic status

#### I learn about the interconnectedness of countries' economies

		Bottom qu %	arter S.E.	Second qua	arter S.E.	Third qua %	rter S.E.	Top quar	ter S.E.	Top - Bottom	
⊇ Australia		53.4	(1.0)	54.7	(1.2)	58.2	(1.2)	59.6	(1.2)	% dif.	S.E. (1.5)
Australia Austria		63.9	(1.0)	64.6	(1.6)	63.7	(1.5)	73.2	(1.4)	9.3	(2.1)
Canada		55.1		53.6	(0.8)	52.5	(1.0)	56.7	(1.4)	1.6	
Chile		60.4	(1.1) (1.8) †	59.4	(1.7) †	55.8	(1.6) †	52.3	(1.0)	-8.2	(1.5) (2.4) †
Colombia		78.2	(1.8) †	79.8	(1.4)	82.7	(1.6) 1	81.1	(1.4) 1	- <b>8.2</b> 3.0	(2.4) 1
Estonia		54.9		79.8 55.8		56.4		58.9		4.1	
			(1.5)		(1.4)		(1.5)		(1.6)		(2.3)
France		51.9	(1.6)	51.7	(1.4)	45.9	(1.7)	46.7	(1.4)	-5.1	(2.1)
Germany		66.3	(2.1) †	68.3	(1.7) †	69.7	(1.8) †	71.2	(1.7) †	4.9	(2.7) †
Greece		58.8	(1.4)	55.7	(1.5)	55.2	(1.4)	56.5	(1.6)	-2.3	(2.1)
Hungary		49.6	(1.6)	49.5	(1.4)	49.4	(1.5)	49.6	(1.6)	0.0	(2.0)
Iceland		54.0	(1.9) †	53.2	(2.0)	55.5	(2.0)	54.8	(1.7)	0.8	(2.6) †
Ireland		57.7	(1.3)	57.9	(1.6)	56.3	(1.3)	55.5	(1.4)	-2.1	(1.8)
Israel		48.6	(1.6)	35.9	(1.5)	28.5	(1.6)	31.0	(2.1) †	-17.6	(2.8) †
Italy		53.4	(2.0)	51.3	(1.5)	49.2	(1.6)	44.3	(1.6)	-9.1	(2.7)
Korea		58.3	(1.3)	59.7	(1.8)	61.8	(1.3)	66.3	(1.5)	8.0	(1.9)
Latvia		42.7	(1.4)	44.3	(1.4)	44.0	(1.6)	46.8	(1.6)	4.1	(2.1)
Lithuania		66.2	(1.6)	64.2	(1.3)	61.0	(1.3)	65.9	(1.4)	-0.3	(2.1)
Mexico		59.8	(1.8) ‡	59.7	(1.6) †	61.3	(1.7) †	58.1	(2.0)	-1.7	(2.8) ‡
New Zealan	d	36.7	(1.6)	39.0	(1.4)	37.9	(1.5)	43.9	(1.3)	7.2	(2.0)
Poland		72.3	(1.6)	76.4	(1.3)	74.2	(1.3)	73.2	(1.4)	0.9	(2.0)
Portugal		63.8	(1.6)	57.8	(1.6)	52.4	(1.6)	44.1	(1.7)	-19.7	(2.3)
Scotland (U	nited Kingdom)	39.1	(1.9) ‡	39.2	(2.3) ‡	35.4	(1.8) ‡	46.2	(2.4) ‡	7.1	(3.1) ‡
Slovak Repu	blic	44.7	(1.7)	41.9	(1.3)	38.5	(1.3)	38.7	(1.3)	-6.0	(2.0)
Slovenia		39.9	(1.6)	44.4	(1.5)	38.2	(1.3)	42.3	(1.7)	2.4	(2.6)
Spain		56.9	(0.9) †	53.3	(1.0)	51.6	(0.9)	48.7	(0.9)	-8.2	(1.2) †
Switzerland		51.6	(1.8) †	53.2	(2.0) †	54.8	(2.0) †	56.7	(1.5) †	5.1	(2.4) †
Turkey		65.1	(1.1)	66.8	(1.0)	66.9	(1.2)	63.5	(1.7)	-1.6	(2.1)
OECD avera	ige	55.7	(0.3)	55.2	(0.3)	54.0	(0.3)	55.0	(0.3)	-0.6	(0.4)

The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

**Notes**: Values that are statistically significant are indicated in bold (see Annex A3).

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

Table VI.B1.8.2 [3/22] Access to learning activities, by students' socio-economic status Based on students' reports

#### I learn about the interconnectedness of countries' economies

		Bottom qu	arter	Second qu	arter	Third qua	rter	Top quar	ter	Top - Bottom	quarter
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
srs	Albania	66.8	(1.5)	69.5	(1.5)	69.3	(1.4)	69.9	(1.5)	3.1	(1.9)
Partners	Argentina	64.9	(1.7) †	71.3	(1.2) †	71.8	(1.3)	69.4	(1.2)	4.5	(2.2) †
Pa	Baku (Azerbaijan)	70.1	(1.7) †	71.6	(1.4) †	72.8	(1.4) †	73.2	(1.4) †	3.1	(2.1) †
	Belarus	47.4	(1.4)	49.6	(1.5)	46.7	(1.6)	52.6	(1.5)	5.2	(1.9)
	Bosnia and Herzegovina	51.9	(1.4)	47.9	(1.8)	52.3	(1.5)	47.9	(1.5)	-4.0	(2.0)
	Brazil	66.9	(1.5) †	69.3	(1.3) †	70.3	(1.2) †	75.4	(1.2)	8.5	(1.9) †
	Brunei Darussalam	49.0	(1.5) †	49.7	(1.4)	50.9	(1.2)	46.3	(1.4)	-2.7	(2.0) †
	Bulgaria	63.2	(1.6) †	62.7	(1.6)	63.8	(1.9)	64.1	(1.5)	0.9	(2.2) †
	Costa Rica	62.6	(1.4)	63.1	(1.3)	61.9	(1.4)	57.1	(1.9)	-5.6	(2.6)
	Croatia	60.1	(1.3)	61.2	(1.2)	61.7	(1.3)	59.8	(1.4)	-0.3	(1.9)
	Cyprus	50.3	(1.8) †	48.5	(1.6)	46.9	(1.6)	50.8	(1.5)	0.5	(2.2) †
	Dominican Republic	82.5	(2.0) ‡	85.5	(1.8) ‡	83.9	(1.9) ‡	75.7	(2.1) ‡	-6.8	(2.7) ‡
	Hong Kong (China)	65.3	(1.2)	70.1	(1.5)	71.4	(1.7)	69.3	(1.5)	4.0	(1.8)
	Indonesia	76.3	(1.4)	76.0	(1.6)	76.7	(1.5)	76.9	(1.6)	0.6	(2.0)
	Jordan	74.3	(1.4)	76.6	(1.1)	76.2	(1.2)	74.9	(1.5)	0.6	(1.9)
	Kazakhstan	56.5	(0.9)	60.3	(1.1)	61.3	(1.0)	65.6	(1.0)	9.1	(1.3)
	Kosovo	72.4	(1.3)	75.6	(1.4)	75.5	(1.6)	78.5	(1.4)	6.1	(1.8)
	Lebanon	57.6	(2.3)	60.6	(1.9)	60.8	(1.5)	59.9	(1.9)	2.3	(2.9)
	Macao (China)	49.8	(1.8)	55.8	(1.5)	61.2	(1.6)	59.5	(1.6)	9.7	(2.5)
	Malaysia	59.8	(1.3)	61.3	(1.4)	59.2	(1.3)	54.8	(2.0)	-5.0	(2.3)
	Malta	49.2	(2.1)	45.3	(2.0)	42.3	(1.9)	43.5	(1.9)	-5.8	(3.1)
	Moldova	43.0	(1.9)	46.2	(1.6)	46.9	(1.5)	45.5	(1.9)	2.5	(2.7)
	Montenegro	61.9	(1.4)	70.4	(1.1)	64.4	(1.2)	60.8	(1.3)	-1.1	(1.9)
	Morocco	65.4	(1.6) ‡	69.9	(1.6) ‡	69.2	(1.5) †	71.8	(1.8) †	6.4	(2.5) ‡
	North Macedonia	49.8	(1.5)	51.6	(1.5)	51.9	(1.5)	44.2	(1.6)	-5.6	(2.3)
	Panama	67.8	(2.8) ‡	69.6	(2.6) ‡	68.3	(2.3) ‡	63.3	(2.6) ‡	-4.5	(3.7) ‡
	Peru	74.9	(2.7) ‡	69.0	(2.1) ‡	69.8	(1.6) †	69.5	(1.7) †	-5.4	(3.3) ‡
	Philippines	79.6	(1.0)	81.0	(1.0)	85.3	(8.0)	83.1	(1.2)	3.5	(1.4)
	Romania	57.8	(2.1)	54.5	(1.9)	50.8	(1.6)	42.1	(1.9)	-15.7	(2.7)
	Russia	47.8	(1.6)	48.7	(1.6)	50.4	(1.3)	53.9	(1.4)	6.1	(1.6)
	Saudi Arabia	71.0	(1.4)	69.7	(1.4)	69.9	(1.4)	71.0	(1.5)	0.0	(2.0)
	Serbia	53.0	(1.7) †	52.2	(1.5)	50.2	(1.4)	43.1	(1.9)	-9.9	(2.6) †
	Singapore	80.7	(0.9)	83.9	(1.1)	81.2	(1.0)	80.6	(1.3)	-0.1	(1.5)
	Chinese Taipei	59.6	(1.4)	64.5	(1.4)	67.7	(1.1)	76.6	(1.0)	17.0	(1.8)
	Thailand	78.4	(1.3)	79.2	(1.1)	80.7	(1.3)	81.8	(1.1)	3.4	(1.7)
	Ukraine	43.9	(1.9)	48.4	(1.7)	52.0	(1.5)	57.7	(1.7)	13.7	(2.6)
	United Arab Emirates	m	m	m	m	m	m	m	m	m	m
	Uruguay	59.7	(1.7) †	61.9	(2.0) †	57.9	(1.8) †	59.0	(1.4) †	-0.6	(2.1) †
	Viet Nam	65.7	(1.5)	69.0	(1.9)	68.5	(1.9)	68.1	(1.9)	2.4	(2.3)

The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

**Notes**: Values that are statistically significant are indicated in bold (see Annex A3).

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

Table VI.B1.8.2 [5/22] **Access to learning activities, by students' socio-economic status** Based on students' reports

Access to learning activities, by quarter of students' socio-economic status I learn how to solve conflicts with other people in our classrooms Bottom quarter Second quarter Third quarter Top - Bottom quarter Top quarter Australia
Austria 7.4 62.3 (1.1)65.6 (1.0)65.5 (1.0)69.7 (1.0)(1.5)69.5 65.1 65.9 60.9 -8.7 (1.6)(1.6)(1.4)(1.5)(1.8)Canada 65.0 65.6 (0.9)63.3 67.9 (0.9)2.9 (1.4) (1.1)(1.1)Chile 75.7 78.3 75.7 75.1 -0.6 (1.5)(1.4)(1.4)(1.3)(1.8) † Colombia 85.3 88.0 89.4  $(1.5)^{-1}$ 88.1 (1.4)(1.0)(0.9)4.1 (1.7) † Estonia 57.3 (1.7)55.0 (1.5)57.6 (1.5)60.5 (1.6)3.2 (2.5)France 50.1 (1.6)48.5 (1.7)45.6 (1.7)41.6 (1.8)-8.5 (2.4)70.8 (2.1)68 1 (1.9)615 (1.9)60.0 (1.9)-10.8 (2.8) †Germany 64.9 0.2 Greece (1.5)67.4 (1.3)66.9 (1.4)65.1 (1.3)(2.1)Hungary 48.6 (2.1)46.4 (1.5)46.7 (1.9)46.1 (1.7)-2.5 (2.6)Iceland 54.4 (2.0)56.4 (2.0)56.2 (2.1)56.0 1.6 (2.5) †(1.7)**Ireland** 62.7 (1.5)61.3 (1.5)59.5 59.9 -2.9 (1.7)(1.3)(2.0)49.6 45.2 41.7 47.1 -25 Israel (1.9)(1.3)(1.2)(1.8)(2.7) † Italy 65.1 (1.5)67.7 (1.5)62.8 (1.5)63.4 (1.2)-17 (2.0)Korea 72.6 (1.0)73.2 (1.4)73.3 (1.0)78.1 (1.0)5.5 (1.3)Latvia 66.7 (1.6)69.1 (1.3)65.8 (1.4)65.7 (1.5)-1.0 (2.0)Lithuania 2.9 63.7 (1.7)66.5 (1.3)64 4 (1.4)66.6 (1.4)(2.4)86.3 (1.3)83.7 (1.3) 84.4 86.3 0.0 Mexico (1.1)(1.1)(1.6) ‡ **New Zealand** 60.2 (1.3)61.3 (1.4)59.8 (1.6)62.2 (1.4)1.9 (1.9)**Poland** 68.1 (1.4)70.2 (1.2)63.3 60.8 -7.3 (2.1)(1.4)(1.5)Portugal (1.5) 69.4 (1.5) 69.3 (1.3) 65.7 (1.5) -6.3 (2.1)72.1 Scotland (United Kingdom) 46 N 57 9 50.7 57.4 11.4 (2.0) : (1.9) ‡ (1.8) ‡ (2.3) ‡ (3.1)‡ **Slovak Republic** 68.6 66.4 72.1 (2.0)65.6 (1.3)(1.4)(1.7)(1.4)6.6 Slovenia 53.6 (1.5)55.4 (1.4)54.1 (1.9)54.2 (1.7)0.6 (2.3)Spain 74.6 (0.9)73.8 (0.7)72.5 (0.7)71.8 (0.7)-2.8 (1.1) †Switzerland 62.0 (2.2)60.0 (1.8)57.8 (1.8)49 4 (2.0)-12.6 (2.8) †Turkey 78.9 (1.0)80.8 (1.0)79.4 (1.1)76.9 (1.5)-2.0 (1.8)

The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

(0.3)

65.5

Notes: Values that are statistically significant are indicated in bold (see Annex A3).

64.9

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

(0.3)

63.6

(0.3)

64.1

(0.3)

8.0-

(0.4)

StatLink https://doi.org/10.1787/888934171267

Table VI.B1.8.2 [5/22] Access to learning activities, by students' socio-economic status Based on students' reports

I learn how to solve conflicts with other people in our classrooms

	Bottom	quarter	Second q	uarter	Third qu	ıarter	Top qua	rter	Top - Bottom	quarter
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
<b>≅</b> Albania	83.2	(1.0)	85.1	(1.0)	86.5	(0.9)	83.4	(1.0)	0.2	(1.4)
를 Argentina	72.1	(1.7) †	74.9	(1.4) †	73.2	(1.3) †	73.2	(1.3)	1.1	(1.9) †
Baku (Azerbaijan)	72.7	(1.5) †	75.9	(1.5) †	78.5	(1.3) †	76.3	(1.4) †	3.6	(2.1) †
Belarus	63.7	(1.7)	68.1	(1.5)	70.2	(1.2)	71.1	(1.4)	7.4	(2.0)
Bosnia and Herzegovina	66.2	(1.7)	66.7	(1.4)	68.9	(1.1)	63.7	(1.5)	-2.5	(2.4)
Brazil	65.1	(1.5) †	67.3	(1.1) †	67.4	(1.2) †	66.1	(1.7)	0.9	(2.2) †
Brunei Darussalam	72.2	(1.3) †	73.2	(1.3)	71.7	(1.2)	69.9	(1.1)	-2.2	(1.6) †
Bulgaria	66.8	(1.8) †	65.8	(1.7)	64.9	(1.8)	67.8	(1.6)	1.0	(2.3) †
Costa Rica	78.1	(1.0)	76.6	(1.1)	77.2	(1.2)	76.0	(1.4)	-2.1	(1.5)
Croatia	69.0	(1.3)	69.2	(1.3)	67.2	(1.4)	61.9	(1.5)	-7.1	(1.9)
Cyprus	60.6	(2.0) †	61.3	(1.5)	57.9	(1.7)	61.7	(1.6)	1.2	(2.6) †
Dominican Republic	80.8	(2.3) ‡	82.8	(1.9) ‡	82.7	(1.8) ‡	83.6	(1.9) ‡	2.7	(3.1) ‡
Hong Kong (China)	73.3	(1.2)	76.3	(1.1)	76.6	(1.3)	76.1	(1.2)	2.9	(1.6)
Indonesia	86.5	(1.1)	86.4	(0.9)	87.5	(1.0)	86.7	(1.2)	0.2	(1.6)
Jordan	75.3	(1.5)	81.0	(0.9)	80.0	(1.1)	82.6	(1.3)	7.3	(1.9)
Kazakhstan	49.9	(1.1)	56.9	(0.9)	59.0	(0.9)	59.4	(1.0)	9.5	(1.5)
Kosovo	76.5	(1.3)	74.0	(1.7)	75.0	(1.4)	73.9	(1.5)	-2.7	(1.8)
Lebanon	76.1	(1.7)	74.7	(1.5)	71.7	(1.6)	74.4	(1.6)	-1.7	(2.2)
Macao (China)	68.1	(1.5)	73.1	(1.4)	78.3	(1.2)	78.1	(1.5)	10.0	(1.9)
Malaysia	76.7	(1.3)	78.3	(1.1)	76.5	(1.3)	78.5	(1.3)	1.8	(1.7)
Malta	67.9	(2.0)	71.4	(1.6)	66.1	(1.8)	65.8	(1.8)	-2.1	(2.9)
Moldova	69.3	(1.3)	73.8	(1.2)	72.7	(1.3)	70.6	(1.8)	1.3	(2.1)
Montenegro	67.7	(1.3)	69.9	(1.2)	67.5	(1.3)	63.0	(1.2)	-4.8	(1.9)
Morocco	61.2	(2.2) ‡	61.6	(1.7) ‡	61.7	(1.7) †	60.6	(1.7) †	-0.6	(2.7) ‡
North Macedonia	75.5	(1.3)	74.8	(1.3)	76.8	(1.1)	71.2	(1.3)	-4.4	(1.9)
Panama	77.6	(2.6) ‡	74.7	(2.2) ‡	76.1	(1.8) ‡	75.9	(2.2) ‡	-1.7	(3.5) ‡
Peru	85.0	(2.2) ‡	87.5	(1.6) ‡	85.3	(1.3) †	83.2	(1.4) †	-1.8	(2.6) ‡
Philippines	85.1	(1.0)	89.0	(0.8)	90.6	(0.7)	91.4	(0.7)	6.3	(1.2)
Romania	66.7	(1.6)	67.8	(1.5)	65.7	(1.3)	64.0	(1.5)	-2.8	(2.3)
Russia	63.9	(1.5)	59.4	(1.5)	62.0	(1.7)	62.2	(1.4)	-1.7	(1.5)
Saudi Arabia	72.4	(1.3)	71.5	(1.4)	70.9	(1.0)	73.3	(1.1)	0.9	(1.6)
Serbia	57.1	(1.3) †	57.8	(1.3)	58.4	(1.4)	56.1	(1.5)	-1.0	(1.9) †
Singapore	80.1	(0.9)	79.9	(1.0)	78.6	(1.0)	79.3	(0.9)	-0.8	(1.4)
Chinese Taipei	75.4	(1.0)	80.0	(1.2)	81.0	(1.1)	84.5	(0.9)	9.1	(1.4)
Thailand	85.3	(1.0)	86.1	(1.1)	87.9	(0.9)	90.8	(8.0)	5.4	(1.4)
Ukraine	63.0	(1.8)	64.2	(1.4)	65.5	(1.6)	66.2	(1.4)	3.3	(2.1)
United Arab Emirates	m	m	m	m	m	m	m	m	m	m
Uruguay	73.4	(2.0) †	73.5	(1.6) †	68.9	(1.8) †	70.9	(1.6) †	-2.5	(2.6) †
Viet Nam	80.8	(1.5)	83.4	(1.2)	84.8	(1.1)	83.2	(1.2)	2.3	(1.7)

The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

**Notes**: Values that are statistically significant are indicated in bold (see Annex A3).

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

Table VI.B1.8.2 [7/22] Access to learning activities, by students' socio-economic status Based on students' reports

Access to learning activities, by quarter of students' socio-economic status I learn about different cultures Bottom quarter Second quarter Third quarter Top - Bottom quarter Top quarter Australia
Austria 74.4 (1.0)79.6 (8.0)81.5 (8.0)84.1 (0.7)9.7 (1.3)67.2 68.2 74.0 78.0 10.8 (1.3)(1.5)(1.4)(1.5)(1.8)Canada 77.2 (1.0)79.8 (0.9)80.6 (1.0)81.4 (0.9)4.2 (1.2) Chile 79 4 81.4 80.5 78 5 -0.8 (1.5)(1.2)(1.1)(1.2)(2.0) † Colombia 87.6 90.2 88.9 1.3  $(1.2)^{-1}$ 89.1 (1.4)(0.9)(1.0)(1.5) † (1.7)Estonia 67.3 (1.7)66.3 68.9 (1.4)70.2 (1.4)2.9 (2.4)France 69.1 (1.4)73.6 (1.3)78.2 (1.1)81.6 (1.2)12.5 (1.9)77.6 (1.6)81 4 (1.4)77 6 (1.7)86.6 (1.2)8.9 (2.1) †Germany 78.4 80.3 78.4 78.9 0.5 Greece (1.4)(1.2)(1.3)(1.1)(1.7)Hungary 51.5 (1.8)55.9 (1.6)59.2 (1.6)66.5 (1.5)15.1 (2.3)Iceland 80.2 (1.4)81.5 (1.4)85.0 87.9 7.7 (1.7) †(1.5)(1.3)**Ireland** 76.8 (1.2)79.4 (1.1)79.5 (1.4)78.5 1.7 (2.0)(1.6)65.4 63.4 61.5 64.2 Israel (1.7)(1.2)(1.3)(2.2) 1 -1.1 (2.7) † Italy 75.8 (1.4)76.4 (1.4)77.8 (1.2)77.9 (1.2)2.0 (1.6)Korea 73.6 (1.2)77.1 (1.4)77.9 (1.2)82.4 (1.3)8.8 (1.8)Latvia 70.2 (1.4)72.0 (1.2)70.2 (1.4)72.8 (1.5)2.5 (1.9)Lithuania 76.9 78.7 78.5 84.7 (1.2)(1.2)(1.2)(0.9)7.8 (1.5)Mexico 80.2 78.9 80.3 (1.3)82.5 23 (1.4)(1.4)(1.4)(1.8) ‡ **New Zealand** 73.4 (1.2)74.9 (1.2)75.0 (1.1)77.2 (1.2)3.8 (1.5)**Poland** 78.8 (1.4)80.7 (1.5)80.0 (1.2)83.2 (1.2)4.4 (1.8)Portugal 86.3 (1.1) 82.8 (1.3) 80.1 (1.4) 76.9 (1.6) -9.5 (1.9)Scotland (United Kingdom) 66.3 (2.2) ‡ 68 5 (2.0) ‡ 69 1 76.6 10 4 (2.6) ‡ (1.8) ‡ (1.7) ‡ **Slovak Republic** 69.8 74.3 75.4 81.5 (2.2)(1.7)(1.3)(1.3)(1.5)11.7 Slovenia 57.7 (1.5)64.7 (1.6)61.7 (1.5)70.6 (1.8)13.0 (2.4)Spain 73.3 (8.0)71.4 (0.8)69.7 (1.0)71.3 (8.0)-2.1 (1.1) † (2.3) † Switzerland 68 5 (19)68.2 (1.8)697 (1.9)75.5 (17)7.0 Turkey 78.1 (1.1)80.4 (1.0)78.0 (1.0)75.2 (1.4)-2.9 (1.6)

The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

(0.3)

75.1

Notes: Values that are statistically significant are indicated in bold (see Annex A3).

73.4

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

(0.3)

75.5

(0.3)

78.3

(0.3)

4.9

(0.4)

StatLink https://doi.org/10.1787/888934171267

Table VI.B1.8.2 [8/22] Access to learning activities, by students' socio-economic status Based on students' reports

#### I learn about different cultures

	Bottom qu	arter	Second qu	arter	Third qua	rter	Top quai	rter	Top - Bottom	quarter
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
S Albania	90.9	(0.8)	91.6	(0.7)	91.6	(0.7)	91.1	(0.8)	0.2	(1.1)
Argentina	76.1	(1.2) †	80.0	(1.1) †	79.4	(1.2) †	78.7	(1.3)	2.6	(1.6) †
Baku (Azerbaijan)	75.5	(1.8) †	79.4	(1.3) †	80.5	(1.1) †	82.2	(1.2) †	6.7	(2.3) †
Belarus	59.1	(1.5)	64.4	(1.3)	64.1	(1.4)	71.4	(1.4)	12.3	(2.1)
Bosnia and Herzegovina	76.2	(1.3)	79.2	(1.4)	79.4	(1.0)	80.3	(1.4)	4.1	(1.9)
Brazil	82.8	(1.2) †	84.5	(0.9) †	84.4	(1.0) †	89.7	(0.9)	6.9	(1.6) †
Brunei Darussalam	78.2	(1.0) †	81.8	(1.1)	80.7	(1.1)	81.5	(1.0)	3.3	(1.4) †
Bulgaria	69.7	(1.6) †	74.0	(1.8)	75.6	(1.3)	78.8	(1.1)	9.0	(2.0) †
Costa Rica	90.3	(0.8)	91.1	(0.7)	88.5	(0.8)	91.5	(0.7)	1.2	(1.0)
Croatia	79.3	(1.1)	79.6	(1.1)	83.5	(1.0)	84.1	(1.1)	4.8	(1.3)
Cyprus	69.6	(1.7) †	72.8	(1.4)	71.3	(1.4)	75.3	(1.4)	5.7	(2.3) †
Dominican Republic	88.3	(1.8) ‡	88.6	(1.8) ‡	90.9	(1.7) ‡	90.6	(1.4) ‡	2.3	(2.2) ‡
Hong Kong (China)	76.5	(1.2)	79.0	(1.2)	81.7	(1.2)	82.4	(1.5)	6.0	(2.0)
Indonesia	84.4	(1.2)	85.4	(1.1)	87.1	(1.1)	89.6	(1.1)	5.2	(1.7)
Jordan	80.8	(1.4)	84.5	(1.0)	83.7	(0.9)	86.6	(1.2)	5.9	(2.0)
Kazakhstan	72.4	(0.9)	75.0	(0.9)	74.7	(0.8)	78.3	(0.9)	5.9	(1.1)
Kosovo	86.2	(1.0)	84.6	(1.0)	86.8	(1.1)	86.9	(1.0)	0.8	(1.3)
Lebanon	78.7	(1.7)	80.0	(1.4)	80.9	(1.2)	84.0	(1.3)	5.3	(2.3)
Macao (China)	74.4	(1.4)	75.7	(1.4)	81.6	(1.1)	82.0	(1.2)	7.7	(1.9)
Malaysia	75.6	(1.5)	76.8	(1.2)	79.0	(1.3)	84.0	(1.1)	8.3	(1.8)
Malta	80.4	(1.5)	80.1	(1.2)	77.6	(1.4)	74.6	(1.4)	-5.8	(2.2)
Moldova	78.3	(1.4)	80.6	(1.1)	82.8	(1.2)	79.6	(1.3)	1.2	(1.9)
Montenegro	82.4	(1.2)	83.1	(1.0)	82.7	(1.0)	79.6	(1.0)	-2.8	(1.6)
Morocco	69.3	(1.9) ‡	75.6	(1.8) ‡	73.3	(1.6) †	74.0	(1.5) †	4.7	(2.1) ‡
North Macedonia	81.5	(1.1)	80.8	(1.2)	84.7	(1.0)	84.2	(1.1)	2.7	(1.6)
Panama	87.0	(1.9) ‡	86.2	(1.6) ‡	87.0	(1.5) ‡	84.9	(1.4) ‡	-2.1	(2.2) ‡
Peru	90.9	(1.6) ‡	91.7	(1.3) ‡	92.3	(1.0) †	91.3	(1.1) †	0.4	(2.0) ‡
Philippines	83.5	(1.0)	89.9	(0.8)	88.8	(0.8)	91.4	(0.7)	7.9	(1.3)
Romania	73.2	(1.4)	73.7	(1.5)	73.8	(1.3)	72.8	(1.7)	-0.3	(2.2)
Russia	63.6	(1.7)	62.1	(1.7)	63.2	(1.2)	66.6	(1.3)	3.1	(2.1)
Saudi Arabia	75.3	(1.9)	77.3	(1.3)	78.3	(1.2)	77.3	(1.3)	2.1	(2.4)
Serbia	69.3	(1.3) †	71.8	(1.4)	71.4	(1.3)	70.0	(1.3)	0.8	(1.8) †
Singapore	92.7	(0.6)	94.2	(0.6)	92.6	(0.7)	90.9	(0.8)	-1.7	(1.0)
Chinese Taipei	81.7	(1.0)	85.8	(0.8)	87.2	(0.7)	90.7	(0.8)	9.0	(1.3)
Thailand	88.6	(0.9)	89.4	(1.0)	90.5	(0.9)	93.7	(0.7)	5.1	(1.2)
Ukraine	65.5	(1.9)	74.6	(1.2)	76.6	(1.2)	79.8	(1.2)	14.3	(2.4)
United Arab Emirates	m	m	m	m	m	m	m	m	m	m
Uruguay	80.6	(1.7) †	80.6	(1.7) †	78.1	(1.6) †	83.5	(1.3) †	2.9	(2.0) †
Viet Nam	82.1	(1.0)	84.3	(1.2)	85.2	(1.4)	87.3	(1.7)	5.2	(1.8)

The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

**Notes**: Values that are statistically significant are indicated in bold (see Annex A3).

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

Table VI.B1.8.2 [9/22] Access to learning activities, by students' socio-economic status Based on students' reports

Access to learning activities, by quarter of students' socio-economic status We read newspapers, look for news on the Internet or watch the news together during classes Bottom quarter Second quarter Third quarter Top quarter Top - Bottom quarter Australia
Austria 41.5 (1.1)44.9 (1.0)48.1 (1.1)51.5 (1.3)10.0 (1.5)44.5 43.2 41.3 48.2 3.7 (1.7)(2.3)(1.7)(1.9)(2.3)(1.0)Canada 50.3 53.6 54.7 (1.0)61.9 11.6 (1.4) (1.1)(1.1)Chile 45.4 38.9 39.4 36.0 -9.4 (1.7)(1.6)(1.8)(1.5)(2.3) † Colombia 58.1 (1.8)61.2  $(1.7)^{-1}$ 59.0 (1.7)59.3 (1.8)1.2 (2.5) † Estonia 37.0 (1.7)35.2 (1.5)38.1 (1.5)41.1 (1.4)4.1 (2.1)France 32.1 (1.6)34.3 (1.5)30.6 (1.6)34.7 (1.5)2.6 (2.0)(2.0)Germany 40.2 37.0 (1.9)41 0 (1.9)37.0 (2.0)-32 (2.7) †30.3 30.5 -3.6 Greece (1.7)(1.4)26.3 (1.3)26.7 (1.5)(2.1)Hungary 29.4 (2.0)23.8 (1.3)22.4 (1.3)20.6 (1.4)-8.8 (2.5)Iceland 46.6 48.1 51.8 (2.1)56.9 10.3 (2.5) † (1.9)(2.0)(1.8)Ireland 32.1 34.5 (1.5)34.2 34.5 2.4 (2.3)(1.5)(1.5)(1.7)47.6 43.9 49.1 1.6 Israel (1.6)47.9 (1.9)(1.5)(1.6)(2.2) † Italy 48.5 (1.6)45.9 (1.7)49.6 (1.5)49.7 (1.8)1.3 (2.2)Korea 48.1 (1.2)49.3 (1.9)52.0 (1.5)55.9 (1.6)7.8 (1.9)Latvia 30.5 (1.5)31.9 (1.4)30.9 (1.5)30.6 (1.6)0.1 (2.2)Lithuania 37 2 (1.6)35 9 (1.4)32.6 (1.5)37.0 (1.2)-0.2 (1.8)57.2 60.9 (1.8)55.4 (1.5) 56.6 (1.7)-0.5 Mexico (2.4)(3.2) ‡ **New Zealand** 40.8 (1.7)41.9 (1.5)42.9 (1.4)47.8 (1.7)7.0 (2.2)**Poland** 32.9 35.5 (1.5)31.9 28.6 -4.3 (2.1)(1.5)(1.7)(1.6)Portugal 39.2 (1.4)32.9 (1.1) 32.7 (1.6) 28.2 (1.7) -11.0 (2.2)Scotland (United Kingdom) 38.9 46.4 (2.0) ‡ 43.5 529 (2.1) ‡ (2.1) ‡ (2.5) ‡ 13.9 (3.1)‡ **Slovak Republic** 41.5 38.6 38.5 -1.3 39.8 (1.7)(1.3)(1.3)(1.8)(2.4)Slovenia 24.7 (1.2)26.0 (1.4)25.0 (1.1)25.4 (1.4)0.7 (1.8)Spain 40.9 (1.0)42.4 (0.9)40.8 (1.0)41.9 (1.2)0.9 (1.4) † Switzerland 43 1 (2.1)44 1 (17) 38.4 (2.0)40 4 (1.9)-2.7 (2.8) †Turkey 32.7 (1.8)36.7 (1.3)35.9 (1.4)31.0 (1.9)-1.7 (2.5)

The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

(0.3)

Notes: Values that are statistically significant are indicated in bold (see Annex A3).

40.4

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

(0.3)

40.0

(0.3)

41.6

(0.3)

1.2

(0.4)

40.9

StatLink https://doi.org/10.1787/888934171267

Table VI.B1.8.2 [10/22] **Access to learning activities, by students' socio-economic status** Based on students' reports

We read newspapers, look for news on the Internet or watch the news together during classes

	Bottom g	uarter	Second gu	uarter	Third gu	ıarter	Top qua	rter	Top - Bottom	quarter
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
<b>≅</b> Albania	45.3	(1.4)	41.7	(1.4)	48.6	(1.6)	49.4	(1.5)	4.1	(2.1)
Argentina  Baku (Azerbaijan)	52.5	(1.5) †	53.8	(1.5) †	50.7	(1.4) †	52.9	(1.6)	0.4	(2.2) †
Baku (Azerbaijan)	60.5	(1.8) †	63.5	(1.5) †	64.4	(1.6) †	62.0	(1.8) †	1.4	(2.5) †
Belarus	43.4	(1.8)	40.7	(1.7)	38.4	(1.4)	36.8	(1.6)	-6.6	(2.2)
Bosnia and Herzegovina	42.2	(1.3)	42.7	(1.2)	44.4	(1.5)	42.4	(1.5)	0.2	(2.0)
Brazil	50.2	(1.7) †	46.9	(1.4) †	50.5	(1.3) †	48.2	(1.6)	-2.0	(2.2) †
Brunei Darussalam	43.5	(1.5) †	45.4	(1.4)	44.9	(1.3)	47.1	(1.1)	3.6	(1.8) †
Bulgaria	49.1	(2.0) †	42.3	(1.9)	39.9	(1.8) †	39.8	(1.6)	-9.3	(2.5) †
Costa Rica	44.9	(1.7)	43.0	(1.2)	45.5	(1.4)	44.1	(1.6)	-0.8	(2.4)
Croatia	30.1	(1.3)	34.2	(1.2)	32.4	(1.4)	29.6	(1.3)	-0.5	(1.9)
Cyprus	40.9	(2.2) †	41.7	(1.3)	37.6	(1.5)	44.2	(1.5)	3.3	(2.5) †
Dominican Republic	75.8	(2.5) ‡	74.1	(2.5) ‡	70.3	(2.5) ‡	68.2	(2.1) ‡	-7.6	(3.3) ‡
Hong Kong (China)	66.3	(1.4)	70.6	(1.3)	74.2	(1.4)	75.4	(1.5)	9.1	(2.0)
Indonesia	70.7	(1.8)	73.8	(1.4)	74.2	(1.6)	75.2	(1.5)	4.5	(2.3)
Jordan	57.4	(1.4)	60.6	(1.3)	59.8	(1.6)	58.7	(1.8)	1.2	(2.3)
Kazakhstan	57.9	(1.0)	57.5	(1.0)	60.0	(1.0)	62.3	(1.0)	4.4	(1.4)
Kosovo	50.8	(1.7)	52.9	(1.5)	54.1	(1.6)	51.8	(1.9)	1.1	(2.5)
Lebanon	49.9	(2.4)	47.8	(1.6)	46.4	(1.6)	42.4	(2.1)	-7.5	(2.9)
Macao (China)	47.3	(1.5)	50.4	(1.5)	55.3	(1.7)	59.0	(1.6)	11.7	(2.3)
Malaysia	60.2	(1.5)	60.5	(1.4)	61.1	(1.6)	58.9	(1.9)	-1.3	(2.4)
Malta	33.3	(1.8)	32.7	(2.1)	31.0	(1.7)	30.8	(1.8)	-2.5	(2.4)
Moldova	37.9	(1.7)	33.0	(1.5)	33.7	(1.5)	28.9	(1.6)	-8.9	(2.4)
Montenegro	38.5	(1.3)	45.9	(1.2)	43.6	(1.2)	42.7	(1.2)	4.2	(1.7)
Morocco	45.3	(2.1) ‡	44.4	(2.0) ‡	47.0	(1.7) †	41.8	(1.9) †	-3.6	(2.9) ‡
North Macedonia	33.6	(1.3)	34.0	(1.7)	33.4	(1.3)	37.1	(1.4)	3.5	(2.1)
Panama	54.5	(2.8) ‡	53.9	(2.9) ‡	50.8	(2.3) ‡	45.5	(3.4) ‡	-9.0	(4.5) ‡
Peru	58.6	(3.0) ‡	57.2	(2.3) ‡	53.3	(1.8) †	49.7	(2.0) †	-8.9	(3.8) ‡
Philippines	70.8	(1.6)	76.5	(1.2)	75.0	(1.2)	73.7	(1.4)	2.9	(2.0)
Romania	40.8	(1.7)	44.6	(1.6)	46.3	(1.7)	43.0	(1.6)	2.2	(2.2)
Russia	29.7	(1.4)	28.6	(1.2)	26.8	(1.5)	31.0	(1.3)	1.2	(1.6)
Saudi Arabia	53.6	(1.7)	48.9	(1.5)	46.0	(1.5)	44.7	(1.8)	-8.9	(2.2)
Serbia	35.4	(1.7) †	34.9	(1.4)	35.1	(1.4)	31.8	(1.6)	-3.6	(2.2) †
Singapore	74.5	(1.0)	75.3	(1.1)	76.7	(1.0)	76.4	(1.7)	1.9	(1.9)
Chinese Taipei	50.2	(1.5)	51.5	(1.4)	57.4	(1.3)	60.3	(1.3)	10.1	(1.9)
Thailand	77.4	(1.3)	77.2	(1.1)	80.8	(1.1)	77.9	(1.4)	0.6	(1.9)
Ukraine	32.3	(1.6)	30.4	(1.2)	30.1	(1.4)	29.9	(1.7)	-2.3	(2.2)
United Arab Emirates	m	m	m	m	m	m	m	m	m	m
Uruguay	52.6	(1.8) †	52.2	(1.9) †	48.6	(2.0) †	49.8	(2.0) †	-2.8	(2.7) †
Viet Nam	51.5	(1.8)	56.7	(1.4)	59.8	(1.9)	58.9	(2.1)	7.3	(2.9)

The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

**Notes**: Values that are statistically significant are indicated in bold (see Annex A3).

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

Table VI.B1.8.2 [11/22] Access to learning activities, by students' socio-economic status Based on students' reports

Access to learning activities, by quarter of students' socio-economic status I am often invited by my teachers to give my personal opinion about international news **Bottom** quarter Second quarter Third quarter Top quarter Top - Bottom quarter Australia
Austria 38.2 (1.2)39.6 (1.0)44.2 (1.0)51.8 (1.0)13.6 (1.6)46.5 48.6 52.4 54.7 (2.2)(1.7)(1.3)(1.5)(1.7)8.2 Canada 46.4 50.3 (1.0)51.7 60.2 13.8 (1.4) (1.1)(1.1)(1.1)Chile 54 1 50.5 51.3 53.3 -0.8 (1.9)(1.7)(1.4) $(1.6)^{-1}$ (2.4) †Colombia 56.7 55.2 55.1 -1.5 (1.7) 1 52.5  $(1.6)^{-1}$ (1.7)(1.2)(2.1) † Estonia 36.1 (1.9)36.8 (1.8)41.0 (1.6)42.8 (1.7)6.6 (2.2)France 35.1 (1.5)36.7 (1.5)36.5 (1.4)41.0 (1.5)5.9 (2.0)(2.0)44 6 (2.1)43 9 47.0 (2.1)54 4 (2.0)9.9 (2.7) †Germany 50.1 52.3 56.0 Greece (1.7)52.6 (1.3)(1.5)(1.6)5.9 (2.4)Hungary 31.2 (1.4)30.1 (1.6)30.5 (1.6)27.8 (1.6)-3.4 (2.3)Iceland 40.4 (2.1)40.6 (2.0)48.0 50.1 9.7 (2.8) †(1.8)(1.8)**Ireland** 39.9 41.2 (1.7)43.2 46.7 6.8 (1.6)(1.7)(1.6)(2.1)51.1 45.9 47.1 -4.0 Israel (1.5)(1.7)42.4 (1.5)(1.8)(2.2) †Italy 56.1 (1.8)57.3 (1.5)59.5 (1.4)59.4 (1.5)3.3 (2.3)Korea 47.8 (1.3)50.9 (1.5)50.1 (1.5)56.8 (1.6)8.9 (1.8)Latvia 40.1 (1.5)41.1 (1.3)41.6 (1.7)38.7 (1.5)-1.4 (2.2)Lithuania 47.8 (1.4)45 9 (1.6)45 3 (1.5)493 (1.5)1.5 (2.1)58.8 (1.9)56.9 55 1 (1.7)59.9 1.1 (2.7) ‡ Mexico (2.0)(1.6)**New Zealand** 30.6 (1.6)36.5 (1.6)36.9 (1.6)43.7 (1.7)13.1 (2.3)51.2 (1.8)53.0 50.4 50.6 (1.9)-0.6 (2.4)**Poland** (1.6)(1.7)Portugal 53.8 (1.5) 48.9 (1.5) 53.3 (1.7) 47.6 (2.2)-6.2 (2.6)Scotland (United Kingdom) 37 2 39 9 40.6 47 1 (2.8) ‡ (1.9) ‡ (2.1) ‡ (2.0) = (2.4) ‡ 9.9 **Slovak Republic** 44.5 45.9 46.4 1.9 (2.2)(1.5)47.6 (1.3)(1.3)(1.5)Slovenia 26.5 (1.3)31.6 (1.5)31.5 (1.2)31.0 (1.7)4.4 (2.2)Spain 51.1 (1.1)50.1 (0.9)50.8 (0.9)51.0 (1.0)-0.1 (1.4) † Switzerland 42 0 (2.2)44 6 (2.1)45.6 (2.0)41.8 (2.0)-0.2 (2.9) †Turkey 33.4 (1.6)37.1 (1.4)36.1 (1.4)32.1 (2.0)-1.3 (2.4)

The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

(0.3)

44.8

Notes: Values that are statistically significant are indicated in bold (see Annex A3).

44.1

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

(0.3)

45.9

(0.3)

48.0

(0.3)

3.9

(0.4)

StatLink https://doi.org/10.1787/888934171267

Table VI.B1.8.2 [12/22] **Access to learning activities, by students' socio-economic status** Based on students' reports

Access to learning activities, by quarter of students' socio-economic status

I am often invited by my teachers to give my personal opinion about international news

		Bottom qu	arter	Second qu	arter	Third qua	rter	Top quar	ter	Top - Bottom	guarter
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
sıs	Albania	47.4	(1.4)	47.3	(1.5)	52.2	(1.8)	57.7	(1.6)	10.3	(2.1)
Partners	Argentina	48.9	(1.5) †	50.9	(1.7) †	48.7	(1.5) †	51.5	(1.3)	2.6	(1.9) †
Ра	Baku (Azerbaijan)	63.5	(1.6) †	69.4	(1.6) †	70.8	(1.4) †	73.7	(1.7) †	10.2	(2.4) †
	Belarus	52.9	(1.5)	54.6	(1.7)	52.3	(1.3)	53.9	(1.5)	0.9	(2.1)
	Bosnia and Herzegovina	43.4	(1.5)	45.4	(1.5)	45.2	(1.4)	43.8	(1.6)	0.4	(2.1)
	Brazil	45.5	(1.7) †	46.8	(1.6) †	46.9	(1.2) †	47.2	(1.4)	1.7	(2.2) †
	Brunei Darussalam	32.8	(1.5) †	32.8	(1.3) †	30.6	(1.2)	27.5	(1.2)	-5.3	(1.8) †
	Bulgaria	57.4	(1.7) †	56.6	(2.2) †	53.4	(1.7) †	53.2	(1.6)	-4.2	(2.4) †
	Costa Rica	46.8	(1.4)	48.3	(1.4)	45.8	(1.4)	47.4	(2.1)	0.6	(2.7)
	Croatia	43.1	(1.5)	45.6	(1.4)	45.4	(1.3)	45.1	(1.4)	2.0	(2.0)
	Cyprus	50.0	(2.1) †	52.5	(1.4)	50.6	(1.5)	55.2	(1.5)	5.2	(2.7) †
	Dominican Republic	78.3	(2.5) ‡	79.8	(2.1) ‡	73.2	(1.9) ‡	74.8	(1.9) ‡	-3.5	(3.2) ‡
	Hong Kong (China)	45.9	(1.4)	49.3	(1.5)	53.6	(1.5)	54.9	(1.9)	9.0	(2.4)
	Indonesia	65.6	(1.7)	65.3	(1.4)	63.2	(1.7)	61.9	(1.6)	-3.7	(2.4)
	Jordan	55.6	(1.7)	56.2	(1.3)	54.0	(1.7)	55.2	(2.0)	-0.4	(2.5)
	Kazakhstan	53.3	(1.2)	56.5	(0.9)	57.3	(1.0)	59.1	(1.3)	5.7	(1.7)
	Kosovo	44.8	(1.8)	48.0	(1.7)	47.6	(2.0)	52.2	(1.8)	7.4	(2.2)
	Lebanon	63.2	(1.9)	60.2	(1.6)	57.8	(1.5)	57.7	(1.9)	-5.5	(2.7)
	Macao (China)	37.8	(1.5)	39.9	(1.6)	44.7	(1.4)	48.3	(1.6)	10.5	(2.3)
	Malaysia	39.2	(1.5)	36.3	(1.4)	36.0	(1.3)	30.4	(1.8)	-8.8	(2.1)
	Malta	42.1	(2.2)	43.5	(1.9)	40.2	(1.7)	44.6	(1.8)	2.5	(3.0)
	Moldova	35.3	(1.7)	36.2	(1.7)	35.8	(1.6)	31.1	(1.9)	-4.1	(2.3)
	Montenegro	47.1	(1.3)	54.0	(1.3)	54.4	(1.3)	52.4	(1.3)	5.3	(1.9)
	Morocco	47.0	(2.1) ‡	54.1	(2.1) ‡	53.3	(1.7) ‡	52.9	(1.8) †	5.9	(2.7) ‡
	North Macedonia	28.5	(1.4)	27.0	(1.3)	27.7	(1.5)	26.1	(1.2)	-2.3	(1.9)
	Panama	62.3	(2.6) ‡	59.6	(2.3) ‡	56.4	(2.3) ‡	57.0	(2.7) ‡	-5.3	(3.6) ‡
	Peru	71.0	(2.2) ‡	71.8	(1.7) ‡	68.5	(1.9) †	64.8	(2.0) †	-6.2	(3.2) ‡
	Philippines	67.3	(1.6)	72.0	(1.2)	67.4	(1.4)	63.7	(1.8)	-3.6	(2.6)
	Romania	37.6	(2.0)	35.5	(1.8)	34.0	(1.7)	29.4	(1.5)	-8.1	(2.3)
	Russia	41.0	(1.5)	40.7	(1.7)	37.5	(1.5)	41.8	(1.6)	0.8	(2.1)
	Saudi Arabia	48.7	(1.8)	46.2	(1.6)	44.2	(1.5)	39.1	(1.6)	-9.6	(2.5)
	Serbia	51.8	(1.5) †	53.6	(1.5)	50.9	(1.6)	48.8	(1.5)	-3.0	(2.1) †
	Singapore	57.0	(1.5)	61.4	(1.2)	60.6	(1.0)	61.7	(1.7)	4.7	(2.2)
	Chinese Taipei	38.0	(1.7)	38.4	(1.4)	40.3	(1.5)	43.3	(1.5)	5.3	(2.3)
	Thailand	56.4	(1.6)	55.6	(1.6)	57.0	(1.7)	48.2	(1.9)	-8.2	(2.2)
	Ukraine	45.2	(1.7)	44.9	(1.4)	43.8	(1.5)	42.2	(1.6)	-3.0	(2.5)
	United Arab Emirates	m	m	m	m	m	m	m	m	m	m
	Uruguay	48.6	(1.7) †	46.5	(2.1) †	48.3	(2.0) †	48.0	(2.1) †	-0.6	(2.6) †
	Viet Nam	42.5	(2.0)	40.9	(1.8)	44.6	(1.7)	46.3	(1.9)	3.8	(2.9)

The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

**Notes**: Values that are statistically significant are indicated in bold (see Annex A3).

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

Table VI.B1.8.2 [13/22] **Access to learning activities, by students' socio-economic status** Based on students' reports

Access to learning activities, by quarter of students' socio-economic status I participate in events celebrating cultural diversity throughout the school year **Bottom** quarter Second quarter Third quarter Top quarter Top - Bottom quarter Australia
Austria 44.0 (1.3)48.1 (1.0)51.7 (1.1)56.4 (1.3)12.4 (1.7)29.9 30.7 28.7 1.2 (1.7)(1.5)(1.2)31.1 (1.5)(2.4)Canada 41.8 (0.9)43.0 47.3 (0.9)51.5 9.7 (1.3) (1.1) (1.1)Chile 45 1 46.6 45.3 42.7 -24 (1.8)(1.7)(1.9) $(1.6)^{-1}$ (2.4) †Colombia 69.3 68.2  $(1.7)^{-1}$ 66.6 (1.4)68.5 (1.4)(1.2)1.1 (2.1) † Estonia 31.3 33.1 (1.5)36.6 (1.5)38.7 (1.4)7.4 (2.0)(1.8)France 25.7 (1.2)26.2 (1.4)24.3 (1.5)25.9 (1.4)0.2 (1.9) †Germany 247 (1.5)26.2 (1.5)22.0 (1.7)246 (1.6)-0 1 (2.0) †42.0 44.1 41.7 43.7 1.7 Greece (1.6)(1.5)(1.4)(1.5)(2.2)Hungary 40.8 (2.1)39.2 (1.5)39.4 (1.7)40.4 (1.8)-0.5 (2.9)Iceland 41.5 41.5 (2.0)47.2 (2.0)45.3 3.8 (2.5) † (1.9)(1.8)Ireland 36.4 37.6 (1.5)37.8 42.4 6.0 (1.7)(1.6)(1.9)(2.7)49.1 48.2 47.1 52.8 3.7 Israel (1.5)(1.7)(1.8)(2.1)(2.5) † 27.9 Italy 33.9 (1.6)(1.5)27.3 (1.6)27.4 (1.6)-6.4 (2.3)Korea 42.4 (1.3)43.0 (1.4)40.9 (1.5)43.7 (1.7)1.3 (2.1)Latvia 31.4 (1.6)35.1 (1.4)33.3 (1.2)32.4 (1.4)0.9 (2.3)Lithuania 58.8 52 9 (1.6)55 3 (1.6)54 4 (1.4)(1.5)5.8 (2.1)56.2 (1.9)52.3 55.0 54.5 -17 (2.7) ‡ Mexico (1.8)(1.6)(1.4)**New Zealand** 42.4 (1.3)44.8 (1.5)43.8 (1.7)50.1 (1.9)7.7 (2.2)**Poland** 40.7 (1.8)43.9 41.5 44.8 4.1 (2.2)(1.6)(1.4)(1.6)Portugal 41.0 (1.8) 37.4 (1.6) 36.7 (1.5) 33.5 (1.3) -7.5 (2.0)Scotland (United Kingdom) 33.0 383 38.6 41.8 8.8  $(2.7) \ddagger$ (2.0)(2.1) ‡ (1.9) ‡ (2.1) ‡ **Slovak Republic** 36.1 31.1 30.5 -2.1 (1.9)32.6 (1.5)(1.7)(1.5)(1.4)Slovenia 28.7 (1.3)31.2 (1.7)32.9 (1.5)31.6 (1.6)2.9 (2.0)Spain 37.2 (1.2)37.0 (0.9)36.6 (8.0)36.7 (1.0)-0.5 (1.4) † Switzerland 335 (2.2)31.8 (2.1)26.5 (1.4)25.0 (1.6)-8.5 (2.7) †Turkey 47.4 (1.6)49.0 (1.4)50.0 (1.5)47.7 (2.1)0.2 (2.7)

The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

(0.3)

40.5

Notes: Values that are statistically significant are indicated in bold (see Annex A3).

39.8

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

(0.3)

40.2

(0.3)

41.6

(0.3)

1.8

(0.4)

StatLink https://doi.org/10.1787/888934171267

Table VI.B1.8.2 [ $^{14/22}$ ] Access to learning activities, by students' socio-economic status Based on students' reports

I participate in events celebrating cultural diversity throughout the school year

	Bottom qu	arter	Second qu	arter	Third qua	rter	Top quai	rter	Top - Bottom	quarter
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Albania Albania	72.7	(1.4)	75.9	(1.1)	79.4	(1.1)	77.3	(1.0)	4.6	(1.7)
Argentina Baku (Azerbaijan)	42.4	(1.4) †	45.1	(1.6) †	44.8	(1.5) †	45.7	(1.8)	3.3	(2.5) †
Baku (Azerbaijan)	66.3	(1.5) †	70.8	(1.4) †	73.6	(1.4) †	72.8	(1.6) †	6.6	(2.2) †
Belarus	52.7	(1.7)	56.5	(1.6)	52.8	(1.7)	53.3	(1.9)	0.6	(2.5)
Bosnia and Herzegovina	50.3	(1.6)	49.4	(1.6)	52.9	(1.3)	52.9	(1.5)	2.7	(2.3)
Brazil	49.9	(1.9) †	49.4	(1.5) †	51.9	(1.3) †	47.4	(1.7)	-2.5	(2.5) †
Brunei Darussalam	39.4	(1.3) †	37.7	(1.4) †	36.3	(1.3)	40.9	(1.1)	1.4	(1.8) †
Bulgaria	58.2	(1.9) †	58.0	(1.5) †	54.7	(1.5) †	57.9	(1.8)	-0.3	(2.4) †
Costa Rica	52.6	(1.7)	51.4	(1.5)	53.2	(1.6)	56.9	(2.1)	4.3	(2.7)
Croatia	36.3	(1.3)	38.5	(1.5)	38.0	(1.2)	35.5	(1.5)	-0.8	(1.9)
Cyprus	44.5	(1.8) †	46.1	(1.4)	45.8	(1.7)	50.8	(1.6)	6.3	(2.4) †
Dominican Republic	75.7	(2.7) ‡	77.4	(1.9) ‡	73.4	(2.5) ‡	76.1	(1.7) ‡	0.5	(3.1) ‡
Hong Kong (China)	41.6	(1.6)	45.0	(1.6)	48.3	(1.8)	49.3	(2.5)	7.6	(3.0)
Indonesia	69.5	(1.5)	66.9	(1.5)	67.7	(1.6)	66.3	(1.8)	-3.2	(2.4)
Jordan	61.5	(1.4)	66.1	(1.4)	67.3	(1.4)	64.8	(1.3)	3.3	(2.1)
Kazakhstan	61.9	(1.1)	62.6	(1.0)	61.6	(1.0)	66.7	(1.0)	4.9	(1.4)
Kosovo	60.2	(1.7)	62.1	(1.6)	66.5	(1.5)	64.5	(1.7)	4.3	(2.5)
Lebanon	56.7	(2.1)	56.3	(1.8)	58.0	(1.5)	60.3	(1.3)	3.6	(2.4)
Macao (China)	34.9	(1.6)	36.7	(1.5)	43.3	(1.8)	45.8	(1.5)	10.9	(2.1)
Malaysia	42.8	(1.6)	42.4	(1.2)	44.4	(1.6)	45.0	(1.9)	2.2	(2.3)
Malta	41.6	(1.9)	44.3	(2.0)	42.9	(2.0)	43.0	(1.7)	1.4	(2.6)
Moldova	53.3	(1.8)	52.8	(1.5)	52.1	(1.6)	47.8	(2.2)	-5.5	(3.1)
Montenegro	54.9	(1.5)	61.2	(1.4)	61.4	(1.2)	57.1	(1.3)	2.3	(1.9)
Morocco	50.6	(2.0) ‡	54.8	(1.9) ‡	55.4	(1.7) ‡	55.8	(1.8) †	5.1	(2.7) ‡
North Macedonia	36.3	(1.4)	38.3	(1.6)	38.1	(1.4)	42.4	(1.4)	6.1	(1.8)
Panama	63.0	(2.8) ‡	63.5	(3.1) ‡	59.9	(2.6) ‡	56.9	(2.5) ‡	-6.1	(3.7) ‡
Peru	65.3	(2.6) ‡	63.2	(2.1) ‡	60.1	(1.8) †	59.3	(1.8) †	-6.0	(3.2) ‡
Philippines	74.0	(1.3)	73.3	(1.2)	73.2	(1.2)	70.5	(1.4)	-3.4	(1.9)
Romania	49.9	(1.4)	46.6	(1.6)	47.8	(1.7)	44.3	(1.8)	-5.7	(2.3)
Russia	43.2	(1.3)	42.0	(2.0)	40.3	(1.6)	44.5	(1.3)	1.3	(1.8)
Saudi Arabia	53.4	(1.7)	51.5	(1.6)	50.8	(1.5)	50.4	(1.5)	-3.1	(2.1)
Serbia	41.3	(1.8) †	43.2	(1.6)	43.7	(1.3)	39.7	(1.5)	-1.6	(2.1) †
Singapore	73.8	(1.2)	77.5	(1.1)	79.3	(1.0)	81.5	(1.2)	7.7	(1.5)
Chinese Taipei	44.7	(1.5)	44.1	(1.4)	46.2	(1.4)	49.2	(1.5)	4.5	(2.1)
Thailand	70.2	(1.3)	68.8	(1.3)	70.1	(1.3)	68.9	(1.5)	-1.3	(1.9)
Ukraine	42.4	(1.6)	42.5	(1.4)	44.0	(1.6)	42.9	(1.6)	0.5	(2.2)
United Arab Emirates	m	m	m	m	m	m	m	m	m	m
Uruguay	45.9	(2.2) †	40.8	(1.8) †	39.2	(2.3) †	39.0	(2.1) †	-7.0	(3.2) †
Viet Nam	43.8	(1.8)	42.5	(1.7)	43.4	(2.0)	44.7	(1.5)	0.9	(2.2)

The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

**Notes**: Values that are statistically significant are indicated in bold (see Annex A3).

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

Table VI.B1.8.2 [15/22] Access to learning activities, by students' socio-economic status Based on students' reports

Access to learning activities, by quarter of students' socio-economic status I participate in classroom discussions about world events as part of the regular instruction **Bottom** quarter Second quarter Third quarter Top - Bottom quarter Top quarter Australia
Austria 53.2 (1.1)58.9 (1.2)62.8 (1.0)66.7 (1.0)13.5 (1.5)46.3 51.2 52.7 16.8 (1.4)(1.5)(1.5)63.1 (1.5)(2.1)Canada 55.3 (1.0)61.0 (1.0)64.1 69.4 (0.9)(1.3) (1.1)14.1 Chile 45.5 46.5 47.8 44 4 (2.0)(1.5)(1.5)(1.8)34 (2.6) † Colombia 60.4 59.7 (1.8)(1.4)65.9 (1.5)67.2 (1.3)7.6 (2.3) † Estonia 52.4 54.8 59.3 (1.4)67.0 (1.5)14.5 (1.9)(1.6)(1.6)France 53.9  $(1.7)^{-1}$ 57.8 (1.6)60.1 (1.3)59.6 (1.5)5.7 (2.2) †(1.9) Germany 50.8 (2.1)56.5 55.8 (2.1)66.9 (2.1)16.1 (2.8) †59.6 Greece (1.4)63.8 (1.5)64.5 (1.4)68.2 (1.3)8.7 (1.9)Hungary 33.7 (1.3)36.4 (1.6)39.2 (1.3)42.5 (1.7)8.9 (2.1)Iceland 64.0 63.3 68.0 69.9 5.9 (2.8) †(2.1)(1.9)(1.9)(1.7)Ireland 54.3 59.6 64.9 67.5 13.2 (1.7)(1.5)(1.4)(1.5)(2.5)61.3 59.5 60.5 68.7 7.5 Israel (1.5)(1.6)(1.5)(1.4) 1(2.1) † Italy 59.1 (1.8)59.3 (1.6)59.5 (1.4)57.4 (1.5)-1.7 (2.2)Korea 37.2 (1.3)40.8 (1.5)42.3 (1.6)46.3 (1.7)9.1 (2.1)Latvia 41.5 (1.3)49.0 (1.5)48.7 (1.6)51.7 (1.5)10.2 (1.7)Lithuania 60.3 70.5 10.2 (1.4)64.6 (1.3)64.8 (1.2)(1.1) (1.7)(1.8) 59.6 56.3 57.7 62.4 2.8 Mexico (2.1)(2.0)(1.8)(2.6) ‡ **New Zealand** 47.4 (1.5)55.4 (1.6)57.8 (1.6)63.6 (1.5)16.2 (2.0)**Poland** 47.2 (1.5)53.8 50.1 51.2 4.0 (2.0)(1.5)(1.6)(1.6)Portugal 60.0 (1.7) 62.4 (1.7) 68.1 (1.5) 68.2 (1.7) 8.1 (2.2)Scotland (United Kingdom) 50.5 54.6 57.0 62.6 (2.8) ‡ (1.9) ‡ (1.6) ‡ (2.3) ‡ (2.2) ‡ 12.1 **Slovak Republic** 40.2 44.5 42.3 44.6 (2.2)(1.6)(1.3)(1.5)(1.3)4.5 Slovenia 31.9 (1.3)34.5 (1.3)36.7 (1.5)41.3 (1.7)9.4 (2.0)Spain 56.1 (1.0)57.1 (0.9)56.0 (8.0)56.6 (1.0)0.5 (1.2) †Switzerland 50.9 (2.2)55.2 (2.0)57.2 (1.6)60.5 (2.0)9.7 (2.9) †Turkey 56.5 (1.4)60.4 (1.2)60.1 (1.3)58.9 (1.6)2.4 (2.0)

The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

(0.3)

54.7

Notes: Values that are statistically significant are indicated in bold (see Annex A3).

51.4

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

(0.3)

56.4

(0.3)

60.0

(0.3)

8.6

(0.4)

StatLink https://doi.org/10.1787/888934171267

Table VI.B1.8.2 [16/22] **Access to learning activities, by students' socio-economic status** Based on students' reports

I participate in classroom discussions about world events as part of the regular instruction

	Bottom qu	arter	Second qu	arter	Third qua	rter	Top quai	ter	Top - Bottom	quarter
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Albania Albania	71.8	(1.3)	71.8	(1.3)	78.2	(1.1)	80.5	(0.9)	8.8	(1.6)
Argentina Baku (Azerbaijan)	59.2	(1.6) †	59.2	(1.6) †	60.3	(1.3) †	66.0	(1.5)	6.8	(2.2) †
Baku (Azerbaijan)	63.3	(1.7) †	70.5	(1.5) †	73.6	(1.3) †	74.0	(1.3) †	10.7	(2.3) †
Belarus	49.7	(1.6)	51.7	(1.7)	52.6	(1.3)	53.6	(1.6)	3.9	(2.0)
Bosnia and Herzegovina	54.0	(1.4)	54.7	(1.4)	55.3	(1.4)	54.9	(1.5)	1.0	(2.1)
Brazil	51.3	(1.6) †	54.9	(1.3) †	57.8	(1.1) †	59.7	(1.6)	8.4	(2.2) †
Brunei Darussalam	48.4	(1.5) †	50.6	(1.4) †	49.5	(1.4)	50.2	(1.4)	1.8	(1.9) †
Bulgaria	57.1	(1.8) †	60.8	(1.8) †	56.3	(1.6) †	56.4	(1.6)	-0.7	(2.2) †
Costa Rica	47.8	(1.3)	51.4	(1.1)	53.3	(1.5)	57.9	(1.8)	10.1	(2.2)
Croatia	52.7	(1.4)	54.5	(1.4)	56.4	(1.3)	57.3	(1.2)	4.6	(1.9)
Cyprus	49.4	(2.2) †	53.8	(1.3)	52.4	(1.8)	59.9	(1.8)	10.6	(2.7) †
Dominican Republic	79.2	(2.2) ‡	80.3	(1.9) ‡	77.1	(2.1) ‡	79.9	(1.8) ‡	0.6	(2.8) ‡
Hong Kong (China)	61.9	(1.4)	67.9	(1.5)	70.1	(1.2)	71.7	(1.9)	9.8	(2.3)
Indonesia	74.0	(1.4)	73.1	(1.4)	75.6	(1.6)	73.1	(1.5)	-0.9	(2.0)
Jordan	67.5	(1.8)	71.5	(1.1)	70.3	(1.5)	72.2	(1.5)	4.7	(2.3)
Kazakhstan	60.3	(1.3)	64.0	(1.0)	64.5	(1.0)	69.2	(1.0)	8.9	(1.7)
Kosovo	62.9	(1.4)	68.4	(1.5)	67.4	(1.5)	69.5	(1.5)	6.6	(2.1)
Lebanon	65.4	(1.6)	68.0	(1.6)	67.9	(1.5)	72.2	(1.5)	6.8	(1.9)
Macao (China)	34.8	(1.4)	43.0	(1.7)	50.1	(1.5)	59.7	(1.6)	24.9	(2.0)
Malaysia	55.4	(1.6)	57.4	(1.4)	59.6	(1.5)	58.1	(1.9)	2.7	(2.4)
Malta	59.0	(1.9)	61.2	(1.5)	58.5	(1.8)	60.2	(1.6)	1.2	(2.3)
Moldova	60.5	(1.5)	64.9	(1.5)	66.8	(1.3)	64.8	(1.2)	4.3	(1.8)
Montenegro	63.4	(1.6)	69.0	(1.2)	70.4	(1.2)	66.6	(1.4)	3.2	(2.2)
Morocco	49.4	(2.5) ‡	53.4	(2.1) ‡	53.1	(1.8) ‡	55.6	(1.7) †	6.2	(3.4) ‡
North Macedonia	65.2	(1.5)	67.4	(1.5)	70.8	(1.3)	71.6	(1.4)	6.4	(2.1)
Panama	60.8	(3.5) ‡	60.9	(2.5) ‡	60.2	(2.1) ‡	62.7	(2.2) ‡	1.9	(4.1) ‡
Peru	68.6	(3.3) ‡	68.7	(2.3) ‡	62.7	(1.6) †	61.4	(1.7) †	-7.2	(3.8) ‡
Philippines	82.7	(1.0)	82.7	(0.9)	83.4	(0.9)	80.6	(1.2)	-2.0	(1.5)
Romania	48.4	(1.8)	48.4	(1.7)	48.7	(1.4)	47.2	(1.3)	-1.2	(2.2)
Russia	50.8	(1.6)	52.0	(1.6)	52.8	(1.3)	58.9	(1.2)	8.2	(1.9)
Saudi Arabia	57.5	(1.5)	56.5	(1.7)	55.8	(1.3)	58.4	(1.4)	0.9	(2.0)
Serbia	50.5	(1.4) †	53.2	(1.6)	54.0	(1.3)	52.2	(1.6)	1.6	(2.1) †
Singapore	63.9	(1.3)	68.4	(1.3)	67.6	(1.1)	70.8	(1.4)	6.9	(1.8)
Chinese Taipei	45.0	(1.5)	48.5	(1.3)	51.2	(1.5)	57.1	(1.3)	12.1	(1.9)
Thailand	68.5	(1.3)	68.3	(1.3)	68.3	(1.6)	66.1	(1.7)	-2.4	(2.0)
Ukraine	43.6	(1.5)	47.6	(1.7)	50.0	(1.5)	55.9	(1.5)	12.3	(2.3)
United Arab Emirates	m	m	m	m	m	m	m	m	m	m
Uruguay	53.0	(2.0) †	54.3	(1.9) †	56.5	(1.5) †	63.1	(2.1) †	10.1	(3.0) †
Viet Nam	54.8	(1.4)	57.7	(1.6)	57.1	(1.9)	51.5	(1.6)	-3.3	(2.1)

The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

**Notes**: Values that are statistically significant are indicated in bold (see Annex A3).

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

Table VI.B1.8.2 [17/22] **Access to learning activities, by students' socio-economic status** Based on students' reports

Access to learning activities, by guarter of students' socio-economic status I analyse global issues together with my classmates in small groups during class **Bottom** quarter Second quarter Third quarter Top quarter Top - Bottom quarter Australia
Austria 47.1 (1.0)51.4 (1.1)54.3 (1.1)59.1 (1.0)12.1 (1.5)45.0 48.0 49.4 56.0 11.0 (1.6)(1.6)(1.2)(1.5)(2.0)Canada 49.0 53.1 53.4 61.1 (1.0)12.1 (1.5) (1.2)(1.1)(1.1)Chile 49 1 50.7 51 7 53 1 40 (1.8)(1.5)(1.7)(1.3)(2.1) † Colombia 74.1 5.3 68.8 (1.9)67.0 (1.4)69.7 (1.4)(1.2)(2.4) † Estonia 39.0 (2.0)44.3 47.5 (1.6)51.3 (1.8)12.3 (2.4)(1.6)France 42.0 (1.6)45.4 (1.7)44.5 (1.5)42.8 (1.5)0.7 (2.0) †(1.9) (1.9) Germany 46.4 46.4 48 7 (2.1)55 5 (1.9)9.0 (2.5) †50.5 49.5 49.4 51.3 0.8 Greece (1.6)(1.6)(1.3)(1.5)(2.2)Hungary 28.5 (1.6)27.0 (1.6)28.6 (1.4)29.8 (1.5)1.3 (2.2)Iceland 48.5 52.0 (2.2)(2.1)55.7 7.3 (2.4) † (1.7)56.1 (1.8)Ireland 38.2 41.1 (1.5)41.4 44.5 6.2 (1.5)(1.5)(1.7)(2.5)44.9 40.1 35.1 43.3 -1.6 Israel (1.5)(1.6)(1.3)(1.6)(2.1) † Italy 47.2 (1.7)47.3 (1.4)44.9 (1.7)45.7 (1.3)-1.5 (2.2)Korea 46.0 (1.5)50.3 (1.6)51.5 (1.6)56.6 (1.6)10.5 (1.9)Latvia 40.3 (1.6)46.7 (1.5)45.4 (1.6)45.1 (1.6)4.8 (2.4)Lithuania 50.5 54.3 53.9 48 5 (1.7)(1.6)(1.5)(1.5)5.4 (2.2)63.0 62.1 62.6 (1.3) 66.7 37 (2.7) ‡ Mexico (2.1)(1.4)(1.8)**New Zealand** 41.4 (1.7)46.1 (1.4)47.9 (1.5)53.0 (1.4)11.6 (2.1)**Poland** 45.9 (1.5)46.6 42.6 43.1 -2.8 (2.3)(1.5)(1.6)(1.7)Portugal 61.9 (1.4)57.4 (1.7) 62.7 (1.6) 61.7 (1.7) -0.2 (2.3)Scotland (United Kingdom) 39.2 43.1 42.1 49 N 9.8 (2.9) ‡ (2.1)(1.9) ‡ (2.1) ‡ (2.2) ‡ **Slovak Republic** 39.4 38.9 40.2 3.2 37.0 (1.8)(1.6)(1.4)(1.5)(2.4)Slovenia 29.7 (1.3)33.4 (1.5)32.0 (1.5)35.0 (1.8)5.3 (2.0)Spain 53.0 (1.1)54.8 (0.9)53.6 (0.9)50.9 (0.9)-2.1 (1.3) † Switzerland 48 4 (2.3)44 8 (19) 48 7 (17) 47 4 (2.0)-1 0 (3.0) † Turkey 43.8 (1.6)47.4 (1.5)48.0 (1.5)46.5 (2.3)2.7 (2.7)

The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

(0.3)

47.6

Notes: Values that are statistically significant are indicated in bold (see Annex A3).

46.0

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

(0.3)

48.3

(0.3)

50.8

(0.3)

4.8

(0.4)

StatLink https://doi.org/10.1787/888934171267

Table VI.B1.8.2 [18/22] **Access to learning activities, by students' socio-economic status** Based on students' reports

I analyse global issues together with my classmates in small groups during class

		Bottom qu	arter	Second qu	arter	Third qua	rter	Top quar	ter	Top - Bottom	quarter
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
<b>≅</b> Albania		72.6	(1.4)	74.8	(1.5)	76.2	(1.4)	78.5	(1.3)	5.8	(1.7)
Argentina		53.1	(1.7) †	56.4	(1.5) †	55.4	(1.5) †	55.7	(1.4)	2.6	(2.2) †
Baku (Azerbaijai	1)	66.7	(1.9) †	70.2	(1.6) †	72.3	(1.6) †	77.5	(1.5) †	10.9	(2.4) †
Belarus		46.3	(1.7)	44.9	(1.6)	43.8	(1.5)	43.5	(1.4)	-2.8	(2.0)
<b>Bosnia and Herz</b>	egovina	47.5	(1.5)	49.1	(1.3)	52.6	(1.4)	51.8	(1.6)	4.3	(2.1)
Brazil		54.0	(1.7) †	56.2	(1.4) †	59.0	(1.5) †	60.3	(1.6)	6.3	(2.1) †
Brunei Darussala	am	49.0	(1.7) †	50.7	(1.3) †	51.2	(1.4)	53.5	(1.1)	4.5	(1.8) †
Bulgaria		55.2	(1.8) †	56.9	(1.9)	53.3	(1.7) †	53.4	(1.3)	-1.8	(2.3) †
Costa Rica		58.8	(1.5)	54.0	(1.4)	55.3	(1.6)	58.0	(2.2)	-0.8	(2.6)
Croatia		42.8	(1.4)	46.1	(1.4)	49.4	(1.5)	47.7	(1.3)	4.9	(1.9)
Cyprus		46.3	(1.5) †	46.6	(1.6)	46.8	(1.7)	55.4	(1.7)	9.2	(2.3) †
Dominican Repu	blic	78.1	(3.0) ‡	72.3	(2.6) ‡	75.0	(2.4) ‡	72.1	(2.1) ‡	-5.9	(3.8) ‡
Hong Kong (Chir	na)	58.9	(1.5)	67.0	(1.5)	69.9	(1.3)	71.6	(1.7)	12.7	(2.4)
Indonesia		71.1	(1.2)	69.3	(1.4)	69.5	(1.5)	71.0	(1.6)	-0.1	(1.9)
Jordan		63.9	(1.3)	67.3	(1.2)	66.1	(1.1)	66.4	(1.4)	2.5	(1.9)
Kazakhstan		58.9	(1.4)	61.6	(0.9)	63.7	(0.9)	67.7	(1.0)	8.8	(1.6)
Kosovo		56.7	(1.6)	64.1	(1.7)	64.3	(1.8)	65.8	(1.7)	9.2	(2.1)
Lebanon		61.9	(1.8)	60.7	(1.5)	60.3	(1.5)	57.4	(1.5)	-4.6	(2.4)
Macao (China)		34.7	(1.4)	40.4	(1.7)	50.3	(1.6)	55.0	(1.8)	20.3	(2.0)
Malaysia		52.6	(1.6)	51.7	(1.4)	50.9	(1.4)	52.8	(1.6)	0.2	(2.3)
Malta		54.2	(1.6)	52.0	(1.8)	51.1	(1.9)	50.0	(2.1)	-4.3	(2.4)
Moldova		49.9	(1.5)	50.7	(1.6)	55.6	(1.4)	50.6	(1.5)	0.8	(2.0)
Montenegro		51.9	(1.5)	60.6	(1.4)	59.8	(1.2)	57.4	(1.3)	5.5	(2.0)
Morocco		53.3	(2.6) ‡	51.6	(1.9) ‡	55.9	(1.9) ‡	57.2	(1.2) †	3.9	(2.8) ‡
North Macedoni	a	59.0	(1.7)	60.6	(1.4)	64.2	(1.5)	64.4	(1.4)	5.4	(2.2)
Panama		64.2	(3.4) ‡	66.2	(2.2) ‡	62.6	(2.5) ‡	61.5	(2.0) ‡	-2.6	(3.9) ‡
Peru		68.7	(2.6) ‡	70.6	(2.2) ‡	64.7	(1.8) †	64.9	(2.1) †	-3.8	(3.2) ‡
Philippines		74.7	(1.2)	77.8	(1.1)	78.8	(1.3)	76.7	(1.2)	2.0	(1.6)
Romania		43.3	(1.8)	38.7	(1.7)	39.3	(1.9)	35.3	(1.5)	-8.1	(2.3)
Russia		52.3	(1.5)	47.6	(1.6)	49.7	(1.6)	54.5	(1.4)	2.1	(2.1)
Saudi Arabia		55.0	(1.6)	56.6	(1.5)	51.9	(1.5)	56.4	(1.2)	1.4	(1.7)
Serbia		47.2	(1.6) †	48.7	(1.5)	49.2	(1.4)	46.4	(1.5)	-0.7	(2.0) †
Singapore		61.6	(1.3)	64.6	(1.3)	67.4	(1.0)	70.8	(1.3)	9.2	(1.7)
Chinese Taipei		41.2	(1.5)	44.6	(1.3)	46.9	(1.4)	50.9	(1.7)	9.6	(2.3)
Thailand		71.1	(1.7)	70.0	(1.2)	72.2	(1.4)	70.4	(1.1)	-0.7	(2.0)
Ukraine		42.8	(1.6)	44.2	(1.5)	47.9	(1.7)	50.1	(1.6)	7.3	(2.3)
<b>United Arab Emi</b>	rates	m	m	m	m	m	m	m	m	m	m
Uruguay		55.6	(2.1) †	55.1	(2.1) †	52.2	(2.2) †	57.5	(1.7) †	1.9	(2.5) †
Viet Nam		52.3	(1.7)	53.2	(1.7)	52.1	(1.9)	53.2	(2.0)	0.9	(2.6)

The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

**Notes**: Values that are statistically significant are indicated in bold (see Annex A3).

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

Table VI.B1.8.2 [19/22] **Access to learning activities, by students' socio-economic status** Based on students' reports

Access to learning activities, by quarter of students' socio-economic status I learn how people from different cultures can have different perspectives on some issues **Bottom** quarter Second quarter Third quarter Top - Bottom quarter Top quarter Australia
Austria 63.4 (1.2)67.9 (1.0)71.8 (1.0)75.5 (1.0)12.0 (1.5)74.6 62.4 65.7 69.0 12.2 (1.3)(1.3)(1.7)(1.5)(1.7)Canada 64.6 68.9 (8.0)70.9 (1.0)74.3 (0.8)9.7 (1.4) (1.1)67.8 Chile 67.2 68.1 66.0 (1.5)(1.7)(1.5)(1.2)-18 (1.7) †Colombia 66.6 (2.4)71.4 (2.5)77.3 (1.4)81.2 (1.3)14.6 (2.3)Estonia 52.9 52.5 (1.7)56.7 (1.4)59.8 (1.5)6.9 (1.9)(1.4)France 50.2 (1.3)53.8 (1.7)54.9 (1.4)54.8 (1.5)4.7 (1.9)(2.0)51.8 (2.3)56.6 544 (2.1)617 (1.8)9.9 (2.9) †Germany 69.0 71.3 69.6 71.5 Greece (1.3)(1.5)(1.2)(1.4)2.6 (1.9)Hungary 35.1 (1.5)36.0 (1.7)37.2 (1.5)38.5 (1.7)3.3 (2.4)Iceland 63.5 69.8 74.8 11.3 (2.4) †(1.9)64.6 (1.9)(1.6)(1.6)**Ireland** 58.3 61.7 61.8 (1.7)64.9 6.6 (1.6)(1.4)(1.4)(2.1)55.5 56.1 55.9 61.9 Israel (1.8)(1.6)(1.3)(1.6)6.4 (2.2) † Italy 60.0 (1.5)61.1 (1.5)63.2 (1.4)58.9 (1.5)-1.1 (2.1)Korea 54.6 (1.3)58.4 (1.5)60.7 (1.6)67.5 (1.4)12.9 (2.0)Latvia 49.3 (1.8)53.4 (1.3)53.3 (1.8)54.4 (1.7)5.2 (2.2)Lithuania 61.7 (1.5)63.6 (1.5)63.2 (1.4)66.6 (1.5)5.0 (2.1)71.1 (1.9)72.9 (1.3)71.9 76.7 5.6 (2.3) ‡ Mexico (1.4)(1.4)**New Zealand** 61.3 (1.1)65.3 (1.4)65.8 (1.5)70.1 (1.2)8.7 (1.7)**Poland** 61.3 (1.5)65.5 (1.4)61.1 63.1 1.8 (2.1)(1.5)(1.6)Portugal 70.0 (1.4)67.8 (1.6) 72.8 (1.4) 2.1 (2.2)72.1 (1.6)Scotland (United Kingdom) 493 57.3 57.7 62.5 (2.6) ‡ (1.9)(2.1) ‡ (2.0) ‡ (1.9) ‡ 13.3 **Slovak Republic** 52.8 57.9 60.3 (2.2)(1.6)(1.5)(1.5)64.7 (1.6)12.0 Slovenia 41.9 (1.3)44.5 (1.5)43.9 (1.6)46.3 (1.7)4.4 (2.0)Spain 64.8 (0.9)63.5 (1.0)62.7 (8.0)62.8 (0.9)-2.0 (1.3) †(2.4) † Switzerland 62.2 (2 2) 609 (1.8)613 (1.9)68.7 (1.4)6.5 Turkey 65.6 (1.1)65.1 (1.2)65.0 (1.3)64.5 (1.8)-1.2 (2.0)

The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

(0.3)

61.2

Notes: Values that are statistically significant are indicated in bold (see Annex A3).

58.8

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

(0.3)

62.2

(0.3)

65.1

(0.3)

6.4

(0.4)

StatLink https://doi.org/10.1787/888934171267

Table VI.B1.8.2 [20/22] Access to learning activities, by students' socio-economic status Based on students' reports

I learn how people from different cultures can have different perspectives on some issues

	Bottom qu	arter	Second qu	arter	Third qua	rter	Top quai	rter	Top - Bottom	quarter
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Albania Albania	80.8	(1.3)	79.0	(1.0)	83.7	(1.0)	84.5	(1.0)	3.6	(1.5)
Argentina Baku (Azerbaijan)	69.6	(1.3) †	71.9	(1.6) †	73.1	(1.0) †	76.1	(1.1)	6.5	(1.5) †
Baku (Azerbaijan)	65.8	(1.7) †	69.2	(1.4) †	72.6	(1.6) †	77.0	(1.5) †	11.2	(2.2) †
Belarus	61.4	(1.7)	63.0	(1.5)	66.1	(1.3)	72.4	(1.4)	11.0	(2.0)
Bosnia and Herzegovina	61.7	(1.4)	63.0	(1.3)	66.1	(1.2)	63.6	(1.7)	1.9	(2.3)
Brazil	66.6	(1.7) †	69.1	(1.3) †	72.6	(1.2) †	75.3	(1.1)	8.7	(2.2) †
Brunei Darussalam	64.6	(1.5) †	69.3	(1.2) †	70.5	(1.3)	74.0	(1.1)	9.4	(1.7) †
Bulgaria	65.5	(2.0) †	70.1	(1.8) †	66.1	(1.6) †	71.7	(1.4)	6.2	(2.4) †
Costa Rica	73.1	(1.1)	72.0	(1.1)	70.7	(1.5)	74.2	(1.4)	1.1	(1.8)
Croatia	58.5	(1.3)	60.4	(1.5)	61.9	(1.2)	60.8	(1.2)	2.3	(1.7)
Cyprus	55.8	(1.7)	60.7	(1.4)	60.1	(1.6)	63.8	(1.5)	8.0	(2.3)
Dominican Republic	64.9	(3.0) ‡	67.8	(2.8) ‡	71.6	(2.2) ‡	76.4	(1.9) ‡	11.5	(3.8) ‡
Hong Kong (China)	67.4	(1.2)	71.6	(1.2)	73.6	(1.4)	75.8	(1.5)	8.4	(2.0)
Indonesia	74.6	(1.5)	76.0	(1.2)	77.6	(1.4)	79.0	(1.2)	4.3	(1.8)
Jordan	73.5	(1.3)	76.9	(1.0)	76.6	(1.1)	79.4	(1.2)	5.9	(1.7)
Kazakhstan	63.1	(1.3)	65.9	(1.0)	67.9	(1.1)	70.2	(1.0)	7.2	(1.4)
Kosovo	73.7	(1.4)	75.1	(1.2)	77.9	(1.3)	78.9	(1.4)	5.2	(1.9)
Lebanon	68.0	(1.9)	66.6	(1.6)	63.6	(1.6)	67.4	(1.3)	-0.6	(2.1)
Macao (China)	51.2	(1.4)	57.6	(1.6)	65.6	(1.3)	71.9	(1.5)	20.8	(2.1)
Malaysia	68.0	(1.4)	71.2	(1.3)	72.8	(1.4)	78.9	(1.1)	10.9	(1.7)
Malta	67.2	(1.8)	69.8	(1.6)	71.3	(1.5)	67.5	(1.5)	0.3	(2.6)
Moldova	62.3	(1.6)	63.0	(1.5)	64.1	(1.4)	62.1	(1.4)	-0.2	(2.1)
Montenegro	67.6	(1.4)	69.2	(1.3)	69.0	(1.3)	67.7	(1.3)	0.1	(2.1)
Morocco	58.2	(2.5) ‡	60.7	(1.8) ‡	60.8	(1.6) ‡	65.4	(1.6) †	7.1	(3.1) ‡
North Macedonia	65.3	(1.6)	66.9	(1.4)	72.2	(1.4)	68.1	(1.4)	2.8	(2.1)
Panama	76.5	(2.2) ‡	75.0	(2.1) ‡	78.0	(1.9) ‡	74.1	(1.8) ‡	-2.4	(2.8) ‡
Peru	80.9	(2.9) ‡	81.5	(2.0) ‡	77.8	(1.4) †	79.8	(1.5) †	-1.2	(3.2) ‡
Philippines	77.1	(1.0)	83.4	(1.0)	83.0	(1.0)	86.0	(0.8)	8.9	(1.2)
Romania	57.5	(1.8)	60.8	(1.5)	58.1	(1.6)	55.7	(1.4)	-1.8	(2.1)
Russia	54.6	(1.3)	53.1	(1.5)	55.3	(1.6)	57.5	(1.2)	2.9	(1.5)
Saudi Arabia	68.8	(1.4)	71.8	(1.4)	72.0	(1.1)	72.7	(1.3)	3.9	(1.8)
Serbia	60.7	(1.4) †	62.3	(1.3)	60.4	(1.4)	58.4	(1.4)	-2.4	(2.1) †
Singapore	87.0	(0.9)	88.8	(0.8)	90.4	(0.6)	90.6	(0.7)	3.5	(1.2)
Chinese Taipei	69.2	(1.4)	76.8	(1.0)	78.1	(1.2)	85.6	(0.9)	16.3	(1.6)
Thailand	76.3	(1.4)	76.4	(1.2)	79.3	(1.1)	79.9	(0.9)	3.7	(1.5)
Ukraine	47.8	(1.7)	49.0	(1.6)	51.4	(1.7)	54.1	(1.5)	6.3	(2.1)
United Arab Emirates	m	m	m	m	m	m	m	m	m	m
Uruguay	66.8	(2.0) †	68.3	(1.7) †	67.4	(1.6) †	69.0	(1.6) †	2.1	(2.6) †
Viet Nam	58.3	(2.0)	61.5	(1.7)	65.3	(2.1)	67.2	(1.9)	8.9	(2.7)

The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

**Notes**: Values that are statistically significant are indicated in bold (see Annex A3).

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

Table VI.B1.8.2 [21/22] **Access to learning activities, by students' socio-economic status** Based on students' reports

Access to learning activities, by quarter of students' socio-economic status I learn how to communicate with people from different backgrounds **Bottom** quarter Second quarter Third quarter Top - Bottom quarter Top quarter Australia
Austria 55.5 7.3 (1.1)60.4 (1.1)59.7 (1.2)62.8 (1.0)(1.6)59.2 53.1 52.7 -3.9 (1.8)(1.5)(1.6)55.2 (1.5)(2.0)Canada 58.6 61.5 (8.0)58.9 63.2 (0.9)4.6 (1.6) (1.1)(1.1)Chile 53.2 55.4 55.2 51.6 -1.6 (1.8)(1.7)(1.8)(1.4)(2.1) † Colombia 70.0 2.7 (1.5)71.4 (1.4)70.3 (1.2)72.7 (1.4)(2.1) † Estonia 51.3 54.0 (1.6)56.9 (1.4)52.7 (1.5)1.3 (2.2)(1.6)France 56.1 (1.5)54.4 (1.5)58.3 (1.4)56.7 (1.4)0.6 (1.9) †56.8 (2.3)526 (1.6)46.8 (2.1)513 (1.6)-5.5 (2.6) † Germany 59.8 -3.5 Greece 63.3 (1.5)63.2 (1.4)62.5 (1.2)(1.2)(1.8)Hungary 36.1 (1.9)36.0 (1.9)37.6 (1.6)37.8 (1.5)1.6 (2.6)Iceland 60.7 61.2 60.2 (2.1)60.7 0.0 (2.7) † (1.9)(1.8)(1.8)**Ireland** 57.6 57.3 56.3 54.6 -3.0 (1.9)(1.7)(1.5)(1.7)(2.5)52.8 50.9 49.4 50.9 -1.8 Israel (1.8)(1.6)(1.6)(1.7)(2.4) †Italy 64.9 (1.7)64.1 (1.3)63.2 (1.7)60.2 (1.5)-4.7 (2.3)Korea 53.4 (1.2)56.5 (1.5)55.7 (1.5)61.1 (1.3)7.7 (1.9)Latvia 58.6 (1.7)63.2 (1.6)60.0 (1.4)62.1 (1.5)3.5 (2.3)Lithuania 60.6 5.3 553 (1.4)57 4 (1.3)56.0 (1.5)(1.6)(2.3)(1.8) 62.2 647 66.1 71.6 9.5 Mexico (2.1)(1.5)(1.3)(2.6) ‡ **New Zealand** 58.1 (1.3)61.6 (1.4)63.5 (1.4)59.4 (1.5)1.3 (1.9)**Poland** 64.8 (1.5)62.8 61.4 -3.4 (1.9)66.2 (1.3)(1.4)(1.3)Portugal 69.8 (1.5) 66.2 (1.4) 68.1 (1.6) 63.9 (1.5) -5.9 (2.2)Scotland (United Kingdom) 46.2 (2.0) : 54.8 543 55 9 (3.0) ‡ (2.7) ‡ (2.0) ‡ (2.5) ‡ 97 **Slovak Republic** 55.9 58.5 59.2 8.3 (2.2)(1.6)(1.4)(1.7)64.2 (1.4)Slovenia 46.3 (1.5)49.4 (1.6)45.9 (1.6)48.1 (1.7)1.8 (2.3)Spain 62.6 (1.1)61.6 (8.0)60.6 (0.9)59.9 (0.9)-2.7 (1.4) † (2.0) (2.3) † Switzerland 60.1 543 (2.0)50.6 (1.8)52.0 (17)-8.1 Turkey 68.8 (1.3)72.4 (1.1)72.4 (1.3)69.9 (1.3)1.0 (1.8)**OECD** average 57.7 (0.3)58.6 (0.3)57.9 (0.3)58.5 (0.3)8.0 (0.4)

The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

Notes: Values that are statistically significant are indicated in bold (see Annex A3).

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

Table VI.B1.8.2 [22/22] **Access to learning activities, by students' socio-economic status** Based on students' reports

### I learn how to communicate with people from different backgrounds

		Bottom qu	arter	Second qu	arter	Third qua	rter	Top quar	ter	Top - Bottom	quarter
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
SLS	Albania	81.4	(1.1)	81.3	(1.2)	83.4	(0.9)	83.5	(1.2)	2.1	(1.4)
Partners	Argentina	65.6	(1.4) †	70.1	(1.2) †	70.7	(1.3) †	69.1	(1.2)	3.5	(1.7) †
Pa	Baku (Azerbaijan)	56.5	(1.8) †	61.5	(1.5) †	65.2	(1.7) †	69.4	(1.9) †	12.9	(2.6) †
-	Belarus	51.5	(1.3)	55.6	(1.3)	52.4	(1.1)	55.2	(1.6)	3.7	(2.0)
I	Bosnia and Herzegovina	67.6	(1.4)	67.7	(1.3)	70.6	(1.2)	66.9	(1.4)	-0.8	(2.0)
I	Brazil	49.7	(1.7) †	51.5	(1.2) †	56.6	(1.3)	59.3	(1.4)	9.6	(2.0) †
I	Brunei Darussalam	71.7	(1.4) †	76.2	(1.2)	75.3	(1.2)	75.5	(1.0)	3.8	(1.8) †
I	Bulgaria	63.0	(1.9) †	65.2	(1.8) †	62.4	(1.8) †	62.6	(1.6)	-0.5	(2.2) †
(	Costa Rica	69.0	(1.1)	69.8	(1.4)	71.4	(1.4)	71.0	(1.5)	2.1	(1.7)
(	Croatia	62.4	(1.3)	62.5	(1.4)	62.9	(1.3)	57.9	(1.2)	-4.5	(1.8)
(	Cyprus	56.9	(1.7) †	58.5	(1.6)	58.7	(1.4)	65.7	(1.3)	8.8	(2.3) †
I	Dominican Republic	41.6	(3.4) ‡	45.6	(2.8) ‡	50.1	(2.7) †	59.8	(2.5) †	18.3	(3.8) ‡
ŀ	long Kong (China)	64.0	(1.3)	67.5	(1.1)	71.3	(1.7)	72.3	(1.4)	8.4	(1.9)
1	ndonesia	77.2	(1.3)	79.8	(1.2)	80.1	(1.4)	80.2	(1.4)	3.0	(2.0)
J	ordan	71.8	(1.2)	77.3	(1.3)	78.0	(1.0)	79.1	(1.2)	7.2	(1.8)
I	Kazakhstan	60.1	(1.0)	64.8	(1.0)	65.4	(0.9)	67.7	(0.9)	7.5	(1.2)
ŀ	(osovo	74.8	(1.4)	75.0	(1.3)	77.9	(1.4)	77.5	(1.4)	2.7	(2.0)
I	ebanon	69.8	(1.9)	69.6	(1.7)	67.6	(1.4)	67.3	(1.3)	-2.5	(2.3)
ľ	Macao (China)	60.1	(1.6)	66.8	(1.8)	71.4	(1.5)	71.2	(1.7)	11.1	(2.1)
1	Malaysia	70.0	(1.3)	72.7	(1.4)	77.0	(1.2)	81.4	(1.0)	11.3	(1.6)
ľ	Malta	67.8	(1.7)	71.4	(1.8)	71.7	(1.4)	65.4	(1.6)	-2.5	(2.3)
1	Moldova	77.6	(1.3)	78.6	(1.1)	77.9	(1.1)	77.6	(1.5)	0.0	(1.8)
ľ	Montenegro	69.6	(1.3)	70.8	(1.2)	69.7	(1.2)	68.3	(1.3)	-1.3	(1.9)
1	Morocco	59.3	(2.1) ‡	66.0	(1.5) ‡	63.9	(1.8) ‡	68.0	(1.8) †	8.8	(3.0) ‡
1	North Macedonia	77.9	(1.3)	73.6	(1.4)	76.1	(1.3)	73.6	(1.3)	-4.3	(1.8)
F	Panama	49.5	(2.9) ‡	53.4	(2.5) ‡	56.8	(2.3) ‡	55.3	(2.2) †	5.8	(3.6) ‡
F	Peru	72.3	(2.6) ‡	70.6	(2.0) ‡	66.8	(1.4) †	65.3	(1.8) †	-7.0	(3.3) ‡
F	Philippines	80.2	(1.1)	86.2	(1.0)	86.8	(0.8)	88.5	(0.9)	8.3	(1.5)
F	Romania	68.5	(1.6)	65.3	(1.6)	66.3	(1.5)	62.4	(1.6)	-6.2	(2.2)
F	Russia	54.8	(1.1)	53.1	(1.7)	53.1	(1.7)	56.0	(1.4)	1.2	(1.4)
9	Saudi Arabia	71.0	(1.3)	74.3	(1.2)	74.5	(1.2)	76.9	(1.0)	5.8	(1.7)
9	Serbia	58.0	(1.6) †	59.0	(1.3)	58.3	(1.5)	54.6	(1.6)	-3.4	(2.2) †
9	Singapore	85.6	(0.9)	87.2	(0.9)	87.3	(8.0)	84.2	(0.9)	-1.4	(1.3)
(	Chinese Taipei	69.4	(1.3)	77.3	(1.1)	77.7	(1.0)	82.7	(0.9)	13.3	(1.6)
1	<b>Thailand</b>	76.6	(1.4)	74.9	(1.3)	79.9	(1.0)	78.7	(1.2)	2.1	(1.9)
Į	Jkraine	54.9	(1.6)	63.1	(1.5)	59.6	(1.5)	62.9	(1.6)	8.0	(2.2)
ı	Jnited Arab Emirates	m	m	m	m	m	m	m	m	m	m
ı	Jruguay	49.0	(2.1) †	50.4	(1.5) †	48.3	(1.8) †	52.5	(2.0)	3.5	(2.7) †
١	/iet Nam	75.6	(1.3)	77.6	(1.6)	78.8	(1.7)	79.7	(1.4)	4.1	(1.9)

The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

**Notes**: Values that are statistically significant are indicated in bold (see Annex A3).

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

#### Annex B1 List of tables available on line

https://doi.org/10.1787/888934171153

Chapter 2 Examining local, global and intercultural issues
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#### Chapter 3 Understanding and appreciating the perspectives and worldviews of others

### https://doi.org/10.1787/888934171172

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Table VI.B1.3.8 Variation in respect for people from other cultures

Table VI.B1.3.9 Respect for people from other cultures, by student and school characteristics

VEB Table VI.B1.3.11 Variation in cognitive adaptability

WEB Table VI.B1.3.12 Cognitive adaptability, by student and school characteristics

NEB Table VI.B1.3.14 Variation in students' attitudes towards immigrants

Table VI.B1.3.15 Students' attitudes towards immigrants, by student and school characteristics

Table VI.B1.3.16 Students' and parents' interest in learning about other cultures

Table VI.B1.3.17 Proportion of correct answers: Understanding the perspectives of others

WEB Table VI.B1.3.18 Association between indices related to understanding the perspective of others

Table VI.B1.3.19 Students' ability to understand different perspectives and cognitive adaptability

Table VI.B1.3.20 Students' resilience and cognitive adaptability

 Table VI.B1.3.21
 Students' respect for people from other cultures and their interest in learning about other cultures

Table VI.B1.3.22 Students' attitudes towards immigrants and the proportion of immigrants in school

Table VI.B1.3.23 Students' and parents' attitudes towards immigrants

WEB Table VI.B1.3.24 Teachers' attitudes towards immigrants

## Chapter 4 Ability to engage in open, appropriate and effective communication across cultures

#### https://doi.org/10.1787/888934171191

VEB	Table VI.B1.4.2	Variation in awareness	of intercultural	communication
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Table VI.B1.4.3 Awareness of intercultural communication, by student and school characteristics

Table VI.B1.4.4 Association between indices covering intercultural communication

**Table VI.B1.4.5** Contact with people from other countries

Table VI.B1.4.6 Contact with people from other countries and students' socio-demographic profile

WEB Table VI.B1.4.7 Intercultural skills and attitudes, by contact with people from other countries in the family

WEB Table VI.B1.4.8 Intercultural skills and attitudes, by contact with people from other countries at school

Table VI.B1.4.9 Intercultural skills and attitudes, by contact with people from other countries in the neighbourhood

Table VI.B1.4.10 Intercultural skills and attitudes, by contact with people from other countries in the circle of friends

WEB Table VI.B1.4.11 Languages spoken at home and learned at school

WEB Table VI.B1.4.12 Average indices, by number of languages spoken by student

Table VI.B1.4.13 Average indices, by number of foreign languages learned by student at school

WEB Table VI.B1.4.14 Attitudes and dispositions of monolingual students who learn one of more foreign languages at school1

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# Chapter 5 Taking action for collective well-being and sustainable development

# https://doi.org/10.1787/888934171210

WEB Table VI.B1.5.2	Variation in agency regarding global issues
WEB Table VI.B1.5.3	Agency regarding global issues, by student and school characteristics
WEB Table VI.B1.5.4	Students' agency regarding global issues, by quarter of indices of students' attitudes
WEB Table VI.B1.5.5	Association between indices of taking action for collective well-being and sustainable development
WEB Table VI.B1.5.6	Proportion of correct answers: Taking action for collective well-being and sustainable development
WEB Table VI.B1.5.7	Parents' capacity to take action
WEB Table VI.B1.5.8	Students who take action for collective wellbeing and sustainable development
WEB Table VI.B1.5.9	Students who reduce the energy they use at home to protect the environment, by quarter of key indices
WEB Table VI.B1.5.10	Students who choose certain products for ethical or environmental reasons, by quarter of key indices
WEB Table VI.B1.5.11	Students who sign environmental or social petitions on line, by quarter of key indices
WEB Table VI.B1.5.12	Students who keep themselves informed about world events via <twitter> or <facebook>, by quarter of key indices</facebook></twitter>
WEB Table VI.B1.5.13	Students who boycott products or companies for political, ethical or environmental reasons, by quarter of key indices
WEB Table VI.B1.5.14	Students who participate in activities promoting equality between men and women, by quarter of key indices
WEB Table VI.B1.5.15	Students who participate in activities in favour of environmental protection, by quarter of key indices
WEB Table VI.B1.5.16	Students who regularly read websites on international social issues, by quarter of key indices
WEB Table VI.B1.5.17	Number of actions for collective well-being and sustainable development taken by students, by quarter of key indices
WEB Table VI.B1.5.18	Number of actions taken by students, by key indices, and student and school characteristics
WEB Table VI.B1.5.19	Number of actions taken by students, by students' socio-demographic profile

# Chapter 6 The links between the knowledge, skills and attitudes needed to thrive in an interconnected world

## https://doi.org/10.1787/888934171229

WEB Table VI.B1.6.2	Performance on the global competence test, comparison between countries
WEB Table VI.B1.6.3	Correlation between the four domains
WEB Table VI.B1.6.4	Performance on the global competence test, by students' characteristics
WEB Table VI.B1.6.5	Performance on the global competence test and students' attitudes and dispositions
WEB Table VI.B1.6.6	Students' attitudes and dispositions and system level characteristics

# Chapter 7 Education for living in an interconnected world

# https://doi.org/10.1787/888934171248

WEB Table VI.B1.7.2	Student's self-efficacy regarding global issues, by learning activity
WEB Table VI.B1.7.3	Student's awareness of global issues, by learning activity
WEB Table VI.B1.7.4	Student's perspective taking, by learning activity
WEB Table VI.B1.7.5	Interest in learning about other cultures, by learning activity
WEB Table VI.B1.7.6	Respect for people from other cultures, by learning activity
WEB Table VI.B1.7.7	Attitudes towards immigrants, by learning activity
WEB Table VI.B1.7.8	Awareness of intercultural communication, by learning activity
WEB Table VI.B1.7.9	Cognitive adaptability, by learning activity
WEB Table VI.B1.7.10	Agency regarding global issues, by learning activity
WEB Table VI.B1.7.11	Association between indices of global competence and learning activities
WEB Table VI.B1.7.12	Multicultural learning at school
WEB Table VI.B1.7.13	Curriculum at school focusing on global issues
WEB Table VI.B1.7.14	Curriculum at school focusing on intercultural understanding
WEB Table VI.B1.7.15	Teacher professional development in global competence
WEB Table VI.B1.7.16	Opportunities to promote intercultural skills in lessons
WEB Table VI.B1.7.17	Teachers' self-efficacy in multicultural environments
WEB Table VI.B1.7.18	Students' attitudes and dispositions and enjoyment of reading
WEB Table VI.B1.7.19	Students' attitudes and dispositions and performance in reading

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# Chapter 8 Equity in providing learning opportunities for living together https://doi.org/10.1787/888934171267 web Table VI.B1.8.3 Access to learning activities, by grade repetition web Table VI.B1.8.4 Access to learning activities, by programme orientation web Table VI.B1.8.5 Access to learning activities, by school type web Table VI.B1.8.6 Access to learning activities, by schools' socio-economic profile web Table VI.B1.8.7 Students' attitudes and grade repetition web Table VI.B1.8.8 Students' attitudes and enrolment in vocational or general programmes web Table VI.B1.8.9 Students' attitudes and enrolment in public and private schools web Table VI.B1.8.10 Students' attitudes and schools' socio-economic profile web Table VI.B1.8.11 Principals' view on teachers' multicultural beliefs meb Table VI.B1.8.12 Principals' view on teachers' multicultural beliefs and student outcomes meb Table VI.B1.8.13 Discriminatory school climate as perceived by students

Table VI.B1.8.16 Discriminatory school climate as perceived by students, and school principals' views on teachers' multicultural beliefs

WEB Table VI.B1.8.14 Discriminatory school climate as perceived by students, and student outcomes

WEB Table VI.B1.8.15 Teachers' multicultural and egalitarian beliefs

#### **ANNEX B2**

# **Results for regions within countries**

Table VI.B2.2.1 [1/6] Students' awareness of global issues

Based on students' reports

					Students	' awarene	ss of global	issues				
							,	/ariation in	the index <sup>1</sup>			
	Mean i		Standard o		Tot variat	tion <sup>2</sup>	Variation scho		Variation scho		Proporti variation t between s	that lies schools <sup>4</sup>
	Mean index	S.E.	S.D.	S.E.	Variance	S.E.	Variance	S.E.	Variance	S.E.	%	S.E.
Canada Alberta												
	0.31	(0.03)	1.06	(0.02)	1.12	(0.05)	0.03	(0.02)	1.09	(0.05)	2.6	(1.4)
British Columbia	0.06	(0.03)	0.99	(0.02)	0.98	(0.04)	0.02	(0.01)	0.97	(0.04)	1.7	(1.0)
Manitoba	0.18	(0.03)	1.12	(0.02)	1.24	(0.04)	0.03	(0.02)	1.24	(0.06)	2.5	(1.3)
New Brunswick	-0.18	(0.03)	1.06	(0.03)	1.13	(0.06)	0.02	(0.01)	1.11	(0.07)	2.2	(1.0)
Newfoundland and Labrador	0.14	(0.04)	1.01	(0.04)	1.03	(0.07)	0.01	(0.01)	1.01	(80.0)	0.8	(1.5)
Nova Scotia	0.03	(0.03)	1.01	(0.03)	1.02	(0.05)	0.02	(0.01)	1.00	(0.05)	2.3	(1.2)
Ontario	0.20	(0.03)	1.04	(0.02)	1.08	(0.04)	0.03	(0.01)	1.06	(0.04)	2.6	(0.7)
Prince Edward Island	0.01	(0.05)	1.08	(0.04)	1.15	(0.10)	0.01	(0.02)	1.10	(0.10)	0.8	(1.8)
Quebec	0.02	(0.02)	1.02	(0.02)	1.03	(0.04)	0.03	(0.01)	1.01	(0.04)	2.5	(0.7)
Saskatchewan	0.03	(0.04)	1.08	(0.03)	1.17	(0.06)	0.04	(0.01)	1.12	(0.05)	3.0	(1.1)
Colombia												
Bogotá	-0.16	(0.03)	0.88	(0.02)	0.77	(0.03)	0.04	(0.01)	0.73	(0.03)	5.3	(1.6)
Italy												
Bolzano	-0.10	(0.02)	0.88	(0.02)	0.77	(0.04)	0.00	(0.01)	0.75	(0.04)	0.6	(1.0)
Sardegna	-0.08	(0.03)	0.95	(0.03)	0.91	(0.05)	0.04	(0.02)	0.83	(0.04)	5.0	(1.8)
Toscana	-0.10	(0.03)	0.89	(0.03)	0.79	(0.05)	0.02	(0.01)	0.74	(0.04)	3.1	(1.4)
Trento	-0.09	(0.03)	0.88	(0.03)	0.77	(0.06)	0.05	(0.02)	0.69	(0.06)	7.3	(2.5)
Spain												
Andalusia	-0.03	(0.04)	0.94	(0.04)	0.89	(0.07)	0.05	(0.02)	0.81	(0.05)	6.0	(2.3)
Aragon	-0.01	(0.02)	0.86	(0.03)	0.73	(0.04) †	0.00	(0.00)	0.73	(0.04)	0.2	(0.6)
Asturias	0.10	(0.02)	0.82	(0.02)	0.67	(0.03) †	0.01	(0.00)	0.67	(0.03)	0.9	(0.7)
Balearic Islands	0.02	(0.02)	0.89	(0.02)	0.79	(0.04)	0.01	(0.01)	0.79	(0.05)	0.8	(0.8)
Basque Country	-0.03	(0.02)	0.85	(0.02)	0.73	(0.03) †	0.02	(0.01)	0.70	(0.03)	3.0	(0.9)
Canary Islands	0.08	(0.02)	0.86	(0.03)	0.74	(0.05) †	0.01	(0.00)	0.73	(0.05)	0.8	(0.7)
Cantabria	0.04	(0.02)	0.83	(0.02)	0.69	(0.04) †	0.01	(0.01)	0.67	(0.04)	1.2	(0.7)
Castile and Leon	0.03	(0.03)	0.78	(0.01)	0.62	(0.02) †	0.01	(0.01)	0.61	(0.03)	1.1	(0.9)
Castile-La Mancha	0.03	(0.03)	0.84	(0.03)	0.71	(0.05) †	0.01	(0.01)	0.69	(0.04)	1.0	(0.9)
Catalonia	0.05	(0.02)	0.89	(0.03)	0.80	(0.05)	0.01	(0.01)	0.78	(0.05)	1.4	(1.0)
Ceuta	-0.04	(0.11) ‡	1.28	(0.10) ‡	1.65	(0.24)	0.00	(0.01) C ‡	1.63	(0.28) ‡	0.0	(1.0) C =
Comunidad Valenciana	0.01	(0.03) †	0.89	(0.03) †	0.78	(0.05)	0.01	(0.01) †	0.77	(0.05) †	0.9	(0.8)
Extremadura	-0.01	(0.03)	0.85	(0.03)	0.73	(0.05) †	0.01	(0.01)	0.77	(0.04)	1.8	(0.9)
Galicia	0.11	(0.03)	0.83	(0.03)	0.73	(0.03) 1	0.01	(0.01)	0.72	(0.04)	1.5	(0.6)
		` ′						` ′		` ′		
La Rioja Madrid	0.02	(0.02)	0.82	(0.02)	0.67	(0.03) †		(0.01)	0.67	(0.05)	0.5	(0.9)
Madrid	0.07	(0.02)	0.86	(0.01)	0.74	(0.02) †	0.02	(0.01)	0.71	(0.03)	2.3	(0.8)
Melilla	0.20	(0.06)	0.92	(0.05)	0.86	(0.09)	0.07	(0.03)	0.79	(0.10)	8.0	(3.9)
Murcia	0.05	(0.02)	0.81	(0.02)	0.66	(0.03) †	0.00	(0.01)	0.66	(0.04)	0.5	(0.8)
Navarre	-0.06	(0.03)	0.84	(0.03)	0.71	(0.05) †	0.03	(0.01)	0.68	(0.05)	3.6	(1.3)
United Kingdom												
England	m	m	m	m	m	m	m	m	m	m	m	m
Northern Ireland	m	m	m	m	m	m	m	m	m	m	m	m
Scotland*	0.09	(0.02)	0.97	(0.01)	0.93	(0.03)	0.03	(0.01)	0.90	(0.03)	3.0	(0.8)
Wales	m	m	m	m	m	m	m	m	m	m	m	m

<sup>\*</sup> PISA adjudicated region.

**Notes**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

See Table VI.B1.2.3 for national data.

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of students' awareness of global issues is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B2.2.1 [2/6] Students' awareness of global issues

					Students	' aware <u>ne</u>	ss of global	issues				
							,	Variation in	the index <sup>1</sup>			
	Mean i		Standard		Tot variat	ion <sup>2</sup>	Variation scho	ols <sup>3</sup>	Variatior scho	ols	Proporti variation t between s	that lies chools <sup>4</sup>
	Mean index	S.E.	S.D.	S.E.	Variance	S.E.	Variance	S.E.	Variance	S.E.	%	S.E.
Argentina												
로 Argentina CABA* Cordoba*	-0.24	(0.03)	0.94	(0.02)	0.89	(0.03)	0.04	(0.01)	0.86	(0.04)	5.0	(1.4)
	-0.37	(0.03)	1.02	(0.02)	1.04	(0.05)	0.05	(0.01)	0.96	(0.05)	5.2	(1.3)
PBA*	-0.36	(0.03)	1.01	(0.03)	1.01	(0.05)	0.03	(0.02)	0.94	(0.05)	3.3	(1.7)
Tucuman*	-0.35	(0.04)	1.10	(0.03)	1.20	(0.06)	0.09	(0.02)	1.10	(0.06)	7.3	(1.4)
Brazil												
Middle-West	-0.17	(80.0)	1.12	(0.05)	1.16	(0.12)	0.10	(0.04)	1.05	(0.10)	8.3	(3.3)
North	-0.28	(0.07) †	1.13	(0.04) †	1.28	(0.09)	0.13	(0.05) †	1.13	(0.07) †	10.5	(4.1) †
Northeast	-0.30	(0.04) †	1.14	(0.03) †	1.29	(0.07)	0.18	(0.04) †	1.09	(0.06) †	14.3	(2.9) †
South	-0.25	(0.04)	1.03	(0.04)	1.00	(80.0)	0.05	(0.02)	0.95	(0.06)	5.1	(2.0)
Southeast	-0.20	(0.03)	1.06	(0.02)	1.09	(0.04)	0.10	(0.02)	0.99	(0.04)	9.0	(1.5)
Indonesia												
DI Yogyakarta	-0.43	(0.04)	0.93	(0.03)	0.87	(0.05)	0.06	(0.02)	0.77	(0.05)	7.5	(1.8)
DKI Jakarta	-0.31	(0.03)	0.99	(0.03)	0.99	(0.06)	0.05	(0.01)	0.92	(0.06)	5.4	(1.4)
Kazakhstan												
Akmola region	0.05	(0.05)	1.24	(0.04)	1.54	(0.11)	0.03	(0.02)	1.50	(0.08)	1.9	(1.3)
Aktobe region	-0.11	(0.05)	1.25	(0.03)	1.45	(0.06)	0.09	(0.05)	1.36	(0.07)	6.4	(3.1)
Almaty	0.11	(0.06)	1.21	(0.05)	1.29	(0.09)	0.07	(0.03)	1.20	(0.10)	5.9	(2.5)
Almaty region	0.18	(0.06)	1.34	(0.04)	1.82	(0.11)	0.06	(0.03)	1.68	(0.10)	3.6	(1.5)
Astana	0.12	(0.04)	1.13	(0.04)	1.23	(0.09)	0.05	(0.03)	1.15	(0.10)	4.5	(2.1)
Atyrau region	-0.30	(0.07)	1.28	(0.04)	1.51	(0.12)	0.05	(0.04)	1.50	(0.11)	3.4	(2.4)
East-Kazakhstan region	0.12	(0.06)	1.18	(0.03)	1.29	(0.08)	0.09	(0.04)	1.21	(0.07)	7.1	(2.7)
Karagandy region	0.09	(0.04)	1.18	(0.03)	1.40	(0.08)	0.07	(0.03)	1.30	(0.08)	5.2	(2.1)
Kostanay region	0.24	(0.03)	1.17	(0.02)	1.35	(0.06)	0.05	(0.02)	1.26	(0.06)	3.7	(1.8)
Kyzyl-Orda region	0.11	(0.07)	1.43	(0.03)	1.78	(0.10)	0.15	(0.05)	1.66	(0.13)	8.4	(2.9)
Mangistau region	-0.27	(0.06)	1.37	(0.03)	1.79	(0.10)	0.15	(0.08)	1.58	(0.13)	8.7	(4.1)
North-Kazakhstan region	0.07	(0.05)	1.14	(0.04)	1.31	(0.09)	0.11	(0.05)	1.15	(0.07)	8.6	(3.7)
Pavlodar region	0.12	(0.06)	1.29	(0.04)	1.63	(0.11)	0.09	(0.05)	1.41	(0.10)	5.9	(3.3)
South-Kazakhstan region	0.10	(0.04)	1.25	(0.03)	1.58	(0.08)	0.04	(0.02)	1.55	(0.09)	2.3	(1.0)
West-Kazakhstan region	0.12	(0.08)	1.27	(0.04)	1.48	(0.12)	0.13	(0.05)	1.28	(0.10)	9.1	(3.3)
Zhambyl region	0.30	(0.05)	1.24	(0.04)	1.49	(0.11)	0.04	(0.02)	1.41	(0.09)	2.6	(1.6)
Russia		(/		, , , ,		, ,		( )				
Moscow city	0.38	(0.02)	1.07	(0.01)	1.14	(0.03)	0.01	(0.01)	1.13	(0.03)	1.2	(0.5)
Moscow region*	0.21	(0.04)	1.16	(0.03)	1.35	(0.08)	0.04	(0.01)	1.31	(0.07)	3.2	(1.0)
Republic of Tatarstan*	0.04	(0.02)	1.14	(0.02)	1.30	(0.04)	0.03	(0.01)	1.29	(0.04)	2.1	(0.6)

<sup>\*</sup> PISA adjudicated region.

**Notes**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

See Table VI.B1.2.3 for national data.

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of students' awareness of global issues is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B2.2.1 [3/6] **Students' awareness of global issues** Based on students' reports

based off students Teports				Percenta	age of stu	dents wh	no respon	ded how	informe	d they a <u>re</u>	about th	e followi	ng topics	:		
	(	Climate ch global v	nange and varming	i		Global (e.g. epi			(n	Migra novement	ation of people	2)	I	nternatio	onal confli	cts
	Never h top or doesn much a	oic n't know	Knows the topic familiar	or very	Never h topic or know abou	doesn't much	Knows the topic familiar	or very	Never h topic or kno much a	doesn't ow	Knows the topic familiar	or very	Never h topic or know abo	doesn't much	topic or v	about the ery familiar th it
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Canada Alberta																
5 Alberta	8.9	(8.0)	91.1	(0.8)	24.1	(0.8)	75.9	(0.8)	15.2	(0.9)	84.8	(0.9)	24.1	(1.1)	75.9	(1.1)
British Columbia	15.2	(1.0)	84.8	(1.0)	31.2	(1.0)	68.8	(1.0)	28.4	(1.1)	71.6	(1.1)	29.7	(1.2)	70.3	(1.2)
Manitoba	13.2	(0.9)	86.8	(0.9)	31.9	(1.2)	68.1	(1.2)	21.8	(1.2)	78.2	(1.2)	34.8	(1.2)	65.2	(1.2)
New Brunswick	22.6	(1.2)	77.4	(1.2)	40.5	(1.5)	59.5	(1.5)	32.1	(1.3)	67.9	(1.3)	44.8	(1.5)	55.2	(1.5)
Newfoundland and Labrador	12.1	(1.2)	87.9	(1.2)	35.2	(1.6)	64.8	(1.6)	19.1	(1.6)	80.9	(1.6)	30.3	(1.8)	69.7	(1.8)
Nova Scotia	13.5	(0.9)	86.5	(0.9)	37.3	(1.6)	62.7	(1.6)	27.6	(1.4)	72.4	(1.4)	37.9	(1.7)	62.1	(1.7)
Ontario	10.0	(0.7)	90.0	(0.7)	29.3	(1.0)	70.7	(1.0)	21.0	(0.9)	79.0	(0.9)	29.8	(1.0)	70.2	(1.0)
Prince Edward Island	16.8	(1.9)	83.2	(1.9)	34.4	(2.5)	65.6	(2.5)	27.3	(3.0)	72.7	(3.0)	38.7	(3.3)	61.3	(3.3)
Quebec	16.5	(0.8)	83.5	(0.8)	26.7	(0.8)	73.3	(0.8)	26.4	(0.9)	73.6	(0.9)	41.0	(1.0)	59.0	(1.0)
Saskatchewan	16.9	(1.2)	83.1	(1.2)	32.6	(1.5)	67.4	(1.5)	25.8	(1.2)	74.2	(1.2)	32.9	(1.6)	67.1	(1.6)
Colombia																
Bogotá	25.5	(1.2)	74.5	(1.2)	37.3	(1.4)	62.7	(1.4)	29.1	(1.4)	70.9	(1.4)	31.1	(1.4)	68.9	(1.4)
Italy		( )		()		( )		( ,		( ,		( ,		()		()
Bolzano	16.1	(1.1)	83.9	(1.1)	42.0	(1.4)	58.0	(1.4)	14.3	(1.1)	85.7	(1.1)	39.5	(1.4)	60.5	(1.4)
Sardegna	27.8	(1.5)	72.2	(1.5)	35.6	(1.3)	64.4	(1.3)	16.9	(1.3)	83.1	(1.3)	36.6	(1.4)	63.4	(1.4)
Toscana	22.2	(1.4)	77.8	(1.4)	37.1	(1.3)	62.9	(1.3)	14.5	(1.4)	85.5	(1.4)	35.7	(1.3)	64.3	(1.3)
Trento	19.5	(1.4)	80.5	(1.4)	38.3	(1.6)	61.7	(1.6)	13.9	(1.4)	86.1	(1.4)	35.4	(1.5)	64.6	(1.5)
	19.5	(1.5)	00.5	(1.5)	30.3	(1.0)	01.7	(1.0)	13.5	(1.2)	00.1	(1.2)	33.4	(1.5)	04.0	(1.5)
Spain Andalusia	22.3	(1.9)	77.7	(1.9)	31.3	(1.7)	68.7	(1.7)	25.6	(1.5)	74.4	(1.5)	34.3	(1.8)	65.7	(1.8)
	17.5		82.5		29.8		70.2		22.3		77.7		33.3		66.7	
Aragon		(1.2)		(1.2)		(1.1)		(1.1)		(1.0)		(1.0)		(1.2)		(1.2)
Asturias	15.1	(0.8)	84.9	(0.8)	26.1	(1.3)	73.9	(1.3)	20.2	(1.1)	79.8	(1.1)	29.1	(1.3)	70.9	(1.3)
Balearic Islands	19.3	(1.0)	80.7	(1.0)	30.6	(1.1)	69.4	(1.1)	23.6	(1.1)	76.4	(1.1)	37.1	(1.5)	62.9	(1.5)
Basque Country	17.5	(0.8)	82.5	(0.8)	34.2	(1.0)	65.8	(1.0)	23.4	(1.1)	76.6	(1.1)	37.5	(1.0)	62.5	(1.0)
Canary Islands	20.3	(1.1)	79.7	(1.1)	28.0	(1.2)	72.0	(1.2)	21.0	(1.3)	79.0	(1.3)	34.0	(1.6)	66.0	(1.6)
Cantabria	16.7	(1.0)	83.3	(1.0)	27.9	(1.2)	72.1	(1.2)	21.5	(1.1)	78.5	(1.1)	33.9	(1.4)	66.1	(1.4)
Castile and Leon	13.7	(1.1)	86.3	(1.1)	28.9	(1.8)	71.1	(1.8)	20.2	(1.1)	79.8	(1.1)	31.5	(1.2)	68.5	(1.2)
Castile-La Mancha	17.1	(1.2)	82.9	(1.2)	27.2	(1.0)	72.8	(1.0)	21.2	(1.3)	78.8	(1.3)	33.9	(1.3)	66.1	(1.3)
Catalonia	22.3	(1.6)	77.7	(1.6)	28.5	(1.3)	71.5	(1.3)	23.0	(1.1)	77.0	(1.1)	29.9	(1.2)	70.1	(1.2)
Ceuta	27.6	(3.5) ‡	72.4	(3.5) ‡	28.8	(4.2) ‡	71.2	(4.2) ‡	30.9	(4.3) ‡	69.1	(4.3) ‡	34.6	(4.2) ‡		(4.2) ‡
Comunidad Valenciana	19.3	(1.1) †	80.7	(1.1) †	29.6	(1.6) †	70.4	(1.6) †	26.7	(1.3) †	73.3	(1.3) †	34.2	(1.2) †		(1.2) †
Extremadura	19.4	(1.2)	80.6	(1.2)	27.9	(1.2)	72.1	(1.2)	22.8	(1.5)	77.2	(1.5)	36.7	(1.5)	63.3	(1.5)
Galicia	15.0	(0.9)	85.0	(0.9)	27.4	(1.0)	72.6	(1.0)	19.4	(1.0)	80.6	(1.0)	29.5	(1.3)	70.5	(1.3)
La Rioja	15.3	(1.1)	84.7	(1.1)	26.1	(1.2)	73.9	(1.2)	21.9	(1.2)	78.1	(1.2)	33.7	(1.4)	66.3	(1.4)
Madrid	16.2	(8.0)	83.8	(0.8)	26.8	(0.8)	73.2	(8.0)	21.3	(0.9)	78.7	(0.9)	31.8	(1.0)	68.2	(1.0)
Melilla	21.6	(3.1)	78.4	(3.1)	22.4	(2.7)	77.6	(2.7)	19.9	(3.0)	80.1	(3.0)	34.3	(3.4)	65.7	(3.4)
Murcia	16.6	(1.0)	83.4	(1.0)	26.8	(1.2)	73.2	(1.2)	21.1	(8.0)	78.9	(0.8)	34.0	(1.7)	66.0	(1.7)
Navarre	18.8	(1.4)	81.2	(1.4)	31.7	(1.2)	68.3	(1.2)	23.0	(1.3)	77.0	(1.3)	38.6	(1.4)	61.4	(1.4)
United Kingdom																
England	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Northern Ireland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Scotland*	21.6	(0.9)	78.4	(0.9)	40.6	(1.2)	59.4	(1.2)	20.9	(1.0)	79.1	(1.0)	34.5	(1.1)	65.5	(1.1)
Wales	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

<sup>\*</sup> PISA adjudicated region.

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of students' awareness of global issues is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

4. This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B2.2.1 [4/6] Students' awareness of global issues

					Percenta	ge of stud	lents wh	respond	led how i	informed	they are	about the	e followir	g topics:			
		(	Climate ch global v	nange and varming	I		Global (e.g. epi			(m	Migra novement	ation of people	e)	In	ternatior	nal conflic	ts
		Never h topi doesn' much a	ic or t know	Knows the topic familiar	or very	Never h topic or know i abou	doesn't much	Knows the topic familiar	or very	Never h topic or kno much a	doesn't ow	Knows the topic familiar	or very	Never h topic or know abou	doesn't much	Knows the topic familiar	or very
∠ Argentina																	
Argentina  CABA*  Cordoba*		38.0	(1.8)	62.0	(1.8)	46.4	(1.1)	53.6	(1.1)	29.6	(1.2)	70.4	(1.2)	42.6	(1.2)	57.4	(1.2)
E Cordoba*		46.8	(1.6)	53.2	(1.6)	50.3	(1.3)	49.7	(1.3)	38.0	(1.5)	62.0	(1.5)	45.9	(1.1)	54.1	(1.1)
PBA*		49.7	(1.4)	50.3	(1.4)	46.4	(1.5)	53.6	(1.5)	41.2	(1.5)	58.8	(1.5)	47.1	(1.3)	52.9	(1.3)
Tucuman*		52.0	(2.1)	48.0	(2.1)	49.6	(1.5) †	50.4	(1.5) †	39.6	(1.5) †	60.4	(1.5) †	48.8	(1.4) †	51.2	(1.4) †
Brazil			( , ,				( /		,		, , ,		( /				
Middle-West		36.8	(4.1)	63.2	(4.1)	34.7	(3.3)	65.3	(3.3)	28.1	(2.7) †	71.9	(2.7) †	34.3	(2.4) †	65.7	(2.4) †
North		42.6	(3.4) †	57.4	(3.4) †	42.0	(3.0) †	58.0	(3.0) †	34.0	(2.5) †	66.0	(2.5) †	38.9	(3.0) †	61.1	(3.0) †
Northeast		42.6	(1.6) †	57.4	(1.6) †	40.9	(1.5) †	59.1	(1.5) †	34.8	(1.5) †	65.2	(1.5) †	41.2	(1.4) †	58.8	(1.4) †
South		36.7	(2.3)	63.3	(2.3)	39.7	(1.7)	60.3	(1.7)	28.9	(2.0)	71.1	(2.0)	35.8	(2.0)	64.2	(2.0)
Southeast		37.1	(1.1)	62.9	(1.1)	38.1	(1.0) †	61.9	(1.0) †	28.5	(1.1) †	71.5	(1.1) †	37.4	(1.1) †	62.6	(1.1) †
Indonesia																	
DI Yogyakarta	•	32.7	(2.1)	67.3	(2.1)	49.9	(1.6)	50.1	(1.6)	28.9	(1.8)	71.1	(1.8)	47.0	(1.4)	53.0	(1.4)
DKI Jakarta		33.8	(1.6)	66.2	(1.6)	46.2	(1.5)	53.8	(1.5)	28.1	(1.1)	71.9	(1.1)	46.1	(1.5)	53.9	(1.5)
Kazakhstan																	
Akmola regior	1	23.7	(1.9)	76.3	(1.9)	27.5	(1.8)	72.5	(1.8)	19.8	(1.9)	80.2	(1.9)	23.7	(1.4)	76.3	(1.4)
Aktobe region		33.8	(2.0)	66.2	(2.0)	30.0	(1.4)	70.0	(1.4)	26.0	(1.7)	74.0	(1.7)	29.6	(1.4)	70.4	(1.4)
Almaty		24.0	(1.6)	76.0	(1.6)	26.9	(1.7)	73.1	(1.7)	19.6	(1.8)	80.4	(1.8)	23.1	(1.6)	76.9	(1.6)
Almaty region		23.7	(2.0)	76.3	(2.0)	22.1	(1.7)	77.9	(1.7)	21.7	(1.5)	78.3	(1.5)	23.7	(1.8)	76.3	(1.8)
Astana		22.2	(1.6)	77.8	(1.6)	27.4	(1.5)	72.6	(1.5)	19.9	(1.4)	80.1	(1.4)	25.5	(1.3)	74.5	(1.3)
Atyrau region		38.3	(2.4)	61.7	(2.4)	35.9	(2.6)	64.1	(2.6)	30.5	(2.2)	69.5	(2.2)	35.3	(2.1)	64.7	(2.1)
East-Kazakhst	an region	23.0	(1.9)	77.0	(1.9)	23.0	(1.9)	77.0	(1.9)	19.7	(1.7)	80.3	(1.7)	21.1	(1.7)	78.9	(1.7)
Karagandy reg	gion	22.8	(1.8)	77.2	(1.8)	25.5	(1.0)	74.5	(1.0)	20.7	(1.3)	79.3	(1.3)	22.9	(1.1)	77.1	(1.1)
Kostanay regi	on	18.9	(1.5)	81.1	(1.5)	24.4	(1.4)	75.6	(1.4)	18.3	(0.8)	81.7	(8.0)	21.2	(1.1)	78.8	(1.1)
Kyzyl-Orda reg	ion	27.3	(2.2)	72.7	(2.2)	24.2	(2.0)	75.8	(2.0)	22.9	(2.1)	77.1	(2.1)	25.8	(2.3)	74.2	(2.3)
Mangistau reg	ion	38.1	(2.2)	61.9	(2.2)	35.4	(1.8)	64.6	(1.8)	30.8	(1.5)	69.2	(1.5)	32.1	(1.3)	67.9	(1.3)
North-Kazakh	stan region	22.2	(1.3)	77.8	(1.3)	27.9	(1.4)	72.1	(1.4)	19.1	(1.3)	80.9	(1.3)	24.7	(1.6)	75.3	(1.6)
Pavlodar regio	on	23.9	(1.8)	76.1	(1.8)	28.0	(2.0)	72.0	(2.0)	20.9	(1.6)	79.1	(1.6)	23.4	(1.7)	76.6	(1.7)
South-Kazakh	stan region	27.2	(1.2)	72.8	(1.2)	24.2	(1.3)	75.8	(1.3)	22.6	(1.5)	77.4	(1.5)	25.9	(1.2)	74.1	(1.2)
West-Kazakhs	tan region	24.8	(2.5)	75.2	(2.5)	22.4	(2.1)	77.6	(2.1)	19.4	(2.1)	80.6	(2.1)	22.9	(1.6)	77.1	(1.6)
Zhambyl regio	n	19.5	(1.2)	80.5	(1.2)	19.3	(1.2)	80.7	(1.2)	16.6	(0.9)	83.4	(0.9)	21.0	(1.2)	79.0	(1.2)
Russia																	
Moscow city		13.4	(0.5)	86.6	(0.5)	13.1	(0.6)	86.9	(0.6)	13.1	(0.5)	86.9	(0.5)	15.1	(0.6)	84.9	(0.6)
Moscow regio	n*	19.4	(1.4)	80.6	(1.4)	18.6	(1.2)	81.4	(1.2)	17.2	(1.2)	82.8	(1.2)	19.4	(1.1)	80.6	(1.1)
Republic of Ta	tarstan*	24.3	(0.8)	75.7	(0.8)	24.9	(0.8)	75.1	(8.0)	22.3	(0.7)	77.7	(0.7)	23.5	(0.7)	76.5	(0.7)

<sup>\*</sup> PISA adjudicated region.

**Notes**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

See Table VI.B1.2.3 for national data.

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of students' awareness of global issues is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B2.2.1 [5/6] **Students' awareness of global issues** Based on students' reports

			Percentage	of student	s who respor	nded how i	informed the	y are abou	it the followir	ng topics:		
			alnutrition in s of the world			Causes o	f poverty				nen and wom s of the world	
	Never heard or doesn't kr abou	ow much	Knows abou		Never heard or doesn't kr abou	now much	Knows about		Never heard or doesn't kr abou	now much	Knows about	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Canada  Alberta												
	17.2	(0.9)	82.8	(0.9)	17.9	(0.9)	82.1	(0.9)	10.9	(0.5)	89.1	(0.5)
British Columbia	23.9	(1.0)	76.1	(1.0)	22.1	(1.1)	77.9	(1.1)	12.4	(8.0)	87.6	(8.0)
Manitoba	20.0	(1.2)	80.0	(1.2)	20.9	(1.1)	79.1	(1.1)	14.8	(1.0)	85.2	(1.0)
New Brunswick	29.6	(1.3)	70.4	(1.3)	29.1	(1.3)	70.9	(1.3)	19.7	(1.3)	80.3	(1.3)
Newfoundland and Labrador	20.8	(1.6)	79.2	(1.6)	19.9	(1.5)	80.1	(1.5)	13.2	(1.1)	86.8	(1.1)
Nova Scotia	24.9	(1.2)	75.1	(1.2)	22.3	(1.3)	77.7	(1.3)	14.3	(0.9)	85.7	(0.9)
Ontario	21.8	(1.0)	78.2	(1.0)	19.1	(0.9)	80.9	(0.9)	11.2	(0.7)	88.8	(0.7)
Prince Edward Island	26.8	(2.4)	73.2	(2.4)	28.7	(2.5)	71.3	(2.5)	16.1	(2.0)	83.9	(2.0)
Quebec	23.9	(8.0)	76.1	(0.8)	24.1	(0.8)	75.9	(0.8)	14.1	(0.7)	85.9	(0.7)
Saskatchewan	24.0	(1.6)	76.0	(1.6)	23.6	(1.4)	76.4	(1.4)	16.8	(1.1)	83.2	(1.1)
Colombia												
Bogotá	25.0	(1.3)	75.0	(1.3)	20.8	(1.2)	79.2	(1.2)	20.4	(1.2)	79.6	(1.2)
Italy												
Bolzano	22.5	(1.2)	77.5	(1.2)	22.3	(1.2)	77.7	(1.2)	34.1	(1.4)	65.9	(1.4)
Sardegna	22.5	(1.1)	77.5	(1.1)	25.0	(1.7)	75.0	(1.7)	16.7	(1.1)	83.3	(1.1)
Toscana	24.7	(1.1)	75.3	(1.1)	26.3	(1.1)	73.7	(1.1)	18.0	(1.1)	82.0	(1.1)
Trento	24.8	(1.4)	75.2	(1.4)	27.6	(1.7)	72.4	(1.7)	16.8	(1.2)	83.2	(1.2)
Spain												
Andalusia	18.9	(1.9)	81.1	(1.9)	22.9	(1.8)	77.1	(1.8)	10.4	(1.6)	89.6	(1.6)
Aragon	19.0	(1.1)	81.0	(1.1)	20.0	(1.1)	80.0	(1.1)	8.1	(8.0)	91.9	(8.0)
Asturias	15.0	(0.9)	85.0	(0.9)	17.4	(1.1)	82.6	(1.1)	7.7	(0.8)	92.3	(0.8)
Balearic Islands	17.7	(0.9)	82.3	(0.9)	20.0	(0.8)	80.0	(0.8)	8.0	(0.9)	92.0	(0.9)
Basque Country	18.3	(0.9)	81.7	(0.9)	21.9	(1.0)	78.1	(1.0)	8.5	(0.6)	91.5	(0.6)
Canary Islands	15.2	(8.0)	84.8	(0.8)	18.0	(0.8)	82.0	(0.8)	7.4	(0.8)	92.6	(8.0)
Cantabria	17.0	(1.2)	83.0	(1.2)	20.3	(1.2)	79.7	(1.2)	7.6	(0.7)	92.4	(0.7)
Castile and Leon	16.2	(1.0)	83.8	(1.0)	21.3	(1.2)	78.7	(1.2)	6.5	(0.5)	93.5	(0.5)
Castile-La Mancha	17.6	(1.0)	82.4	(1.0)	20.7	(1.0)	79.3	(1.0)	7.1	(8.0)	92.9	(8.0)
Catalonia	22.6	(1.3)	77.4	(1.3)	22.0	(1.2)	78.0	(1.2)	7.8	(1.0)	92.2	(1.0)
Ceuta	23.9	(3.5) ‡		(3.5) ‡	30.4	(4.4) ‡		(4.4) ‡		(3.1) ‡	83.5	(3.1) ‡
Comunidad Valenciana	18.4	(1.2) †	81.6	(1.2) †	21.5	(1.5) †		(1.5) †	9.4	(0.9) †	90.6	(0.9) †
Extremadura	18.0	(1.0)	82.0	(1.0)	23.0	(1.3)	77.0	(1.3)	8.4	(0.9)	91.6	(0.9)
Galicia	16.2	(1.0)	83.8	(1.0)	20.0	(1.0)	80.0	(1.0)	6.4	(0.6)	93.6	(0.6)
La Rioja	17.4	(1.1)	82.6	(1.1)	21.0	(1.1)	79.0	(1.1)	7.0	(0.7)	93.0	(0.7)
Madrid	15.8	(8.0)	84.2	(8.0)	18.8	(0.7)	81.2	(0.7)	8.0	(0.5)	92.0	(0.5)
Melilla	17.5	(2.7)	82.5	(2.7)	15.3	(2.9)	84.7	(2.9)	7.1	(1.9)	92.9	(1.9)
Murcia	15.4	(0.9)	84.6	(0.9)	21.0	(1.0)	79.0	(1.0)	7.4	(0.6)	92.6	(0.6)
Navarre	20.0	(1.3)	80.0	(1.3)	22.8	(1.2)	77.2	(1.2)	9.0	(0.9)	91.0	(0.9)
United Kingdom												
England	m	m	m	m	m	m	m	m	m	m	m	m
Northern Ireland	m	m	m	m	m	m	m	m	m	m	m	m
Scotland*	24.5	(0.9)	75.5	(0.9)	13.0	(0.7)	87.0	(0.7)	15.0	(0.7)	85.0	(0.7)
Wales	m	m	m	m	m	m	m	m	m	m	m	m

<sup>\*</sup> PISA adjudicated region.

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of students' awareness of global issues is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B2.2.1 [6/6] **Students' awareness of global issues** Based on students' reports

-	•		Percentage of students who responded how informed they are about the following topics:											
				Inutrition in of the world			Causes o	f poverty				nen and work		
		Never heard or doesn't kno about	ow much it	Knows abou	iar with it	Never heard or doesn't ki abou	now much t it	Knows abou	liar with it	Never heard or doesn't kr abou	now much t it	Knows about	liar with it	
50	lumontino	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	
Partners	Argentina CABA*	22.2	(1.2)	667	(1.2)	25.0	(1.2)	74.2	(1.2)	17.0	(1.2)	02.7	(1.2)	
art		33.3	(1.3)	66.7	(1.3)	25.8	(1.3)	74.2	(1.3)	17.3	(1.2)	82.7	(1.2)	
-	Cordoba*	34.9	(1.1)	65.1	(1.1)	28.9	(1.3)	71.1	(1.3)	24.8	(1.2)	75.2	(1.2)	
	PBA*	33.0	(1.2)	67.0	(1.2)	28.4	(1.2)	71.6	(1.2)	25.9	(1.5)	74.1	(1.5)	
	Tucuman*	32.0	(1.3) †	68.0	(1.3) †	26.4	(1.1) †	73.6	(1.1) †	27.6	(1.3)	72.4	(1.3)	
	Brazil	240	(2.0) ±	75.4	(2.0) +	244	(2.2) ±	75.0	(2.2) ±	25.0	(2.6)	74.0	(2.6)	
	Middle-West	24.9	(3.0) †	75.1	(3.0) †	24.1	(2.2) †	75.9	(2.2) †	25.8	(2.6)	74.2	(2.6)	
	North	28.9	(2.3) †	71.1	(2.3) †	30.2	(2.5) †	69.8	(2.5) †	30.3	(2.8) †	69.7	(2.8) †	
	Northeast	31.5	(1.5) †	68.5	(1.5) †	28.8	(1.3) †	71.2	(1.3) †	29.1	(1.3) †	70.9	(1.3) †	
	South	27.3	(1.9)	72.7	(1.9)	25.1	(1.7)	74.9	(1.7)	22.9	(1.7)	77.1	(1.7)	
	Southeast	27.1	(1.0) †	72.9	(1.0) †	24.7	(1.0) †	75.3	(1.0) †	23.7	(1.1)	76.3	(1.1)	
1	ndonesia						44.60							
	DI Yogyakarta	31.1	(1.5)	68.9	(1.5)	24.6	(1.6)	75.4	(1.6)	40.2	(1.7)	59.8	(1.7)	
	DKI Jakarta	30.9	(1.2)	69.1	(1.2)	24.5	(1.1)	75.5	(1.1)	41.5	(1.7)	58.5	(1.7)	
-	Kazakhstan .	24.2	(4.7)	70.7	(4.7)	20.0	(4.6)	70.0	(4.6)	22.0	(4.7)	77.4	(4.7)	
	Akmola region	21.3	(1.7)	78.7	(1.7)	20.8	(1.6)	79.2	(1.6)	22.9	(1.7)	77.1	(1.7)	
	Aktobe region	27.0	(1.3)	73.0	(1.3)	25.5	(1.3)	74.5	(1.3)	28.0	(1.2)	72.0	(1.2)	
	Almaty	20.8	(1.7)	79.2	(1.7)	19.2	(2.2)	80.8	(2.2)	23.0	(2.2)	77.0	(2.2)	
	Almaty region	20.8	(1.2)	79.2	(1.2)	21.3	(1.3)	78.7	(1.3)	20.6	(1.6)	79.4	(1.6)	
	Astana	19.9	(1.7)	80.1	(1.7)	18.5	(1.6)	81.5	(1.6)	22.3	(1.3)	77.7	(1.3)	
	Atyrau region	30.8	(2.6)	69.2	(2.6)	31.3	(2.4)	68.7	(2.4)	35.1	(1.7)	64.9	(1.7)	
	East-Kazakhstan region	19.9	(1.9)	80.1	(1.9)	19.4	(1.7)	80.6	(1.7)	20.2	(1.6)	79.8	(1.6)	
	Karagandy region	21.1	(1.4)	78.9	(1.4)	20.1	(1.1)	79.9	(1.1)	23.6	(1.2)	76.4	(1.2)	
	Kostanay region	18.4	(1.0)	81.6	(1.0)	18.5	(0.9)	81.5	(0.9)	20.5	(1.5)	79.5	(1.5)	
	Kyzyl-Orda region	24.9	(2.5)	75.1	(2.5)	24.8	(2.2)	75.2	(2.2)	24.2	(1.9)	75.8	(1.9)	
	Mangistau region	30.5	(1.1)	69.5	(1.1)	30.8	(1.8)	69.2	(1.8)	31.3	(1.7)	68.7	(1.7)	
	North-Kazakhstan region	22.1	(1.5)	77.9	(1.5)	21.0	(1.5)	79.0	(1.5)	24.0	(1.5)	76.0	(1.5)	
	Pavlodar region	23.0	(1.6)	77.0	(1.6)	21.3	(1.6)	78.7	(1.6)	23.9	(1.6)	76.1	(1.6)	
	South-Kazakhstan region	22.8	(1.3)	77.2	(1.3)	24.0	(1.8)	76.0	(1.8)	23.4	(1.6)	76.6	(1.6)	
	West-Kazakhstan region	21.7	(1.7)	78.3	(1.7)	18.1	(2.0)	81.9	(2.0)	21.5	(2.1)	78.5	(2.1)	
	Zhambyl region	17.6	(1.4)	82.4	(1.4)	16.6	(1.3)	83.4	(1.3)	19.2	(1.3)	80.8	(1.3)	
- 1	Russia													
	Moscow city	15.8	(0.5)	84.2	(0.5)	14.2	(0.5)	85.8	(0.5)	17.2	(0.6)	82.8	(0.6)	
	Moscow region*	19.1	(1.1)	80.9	(1.1)	17.6	(1.0)	82.4	(1.0)	21.9	(1.4)	78.1	(1.4)	
	Republic of Tatarstan*	23.3	(0.7)	76.7	(0.7)	22.2	(0.7)	77.8	(0.7)	25.6	(0.7)	74.4	(0.7)	

<sup>\*</sup> PISA adjudicated region.

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of students' awareness of global issues is calculated from the square of the standard deviation of the index within each country/ economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3)

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B2.3.1 [1/6] Perspective taking

						Perspecti	ve taking					
								Variation i	n the index <sup>1</sup>			
	Mean i		Standard		Total va		Variation scho	ols <sup>3</sup>	Variatio scho	ools	Proport variation between	that lies schools <sup>4</sup>
	Mean	S.E.	S.D.	S.E.	Variance	S.E.	Variance	S.E.	Variance	S.E.	%	S.E.
Canada												
Alberta	0.16	(0.03)	1.00	(0.02)	1.01	(0.03)	0.02	(0.01)	0.99	(0.04)	2.0	(0.9)
British Columbia	0.15	(0.02)	0.96	(0.02)	0.93	(0.03)	0.00	(0.01)	0.93	(0.03)	0.3	(0.7)
Manitoba	0.13	(0.03)	1.02	(0.02)	1.04	(0.04)	0.01	(0.01)	1.03	(0.04)	1.1	(0.7)
New Brunswick	0.11	(0.03)	1.03	(0.02)	1.06	(0.05)	0.00	(0.01)	1.06	(0.05)	0.2	(0.9)
Newfoundland and Labrador	0.17	(0.04)	0.98	(0.03)	0.96	(0.05)	0.00	C	0.97	(0.06)	0.0	C
Nova Scotia	0.15	(0.03)	0.99	(0.03)	0.99	(0.05)	0.00	C	0.98	(0.05)	0.0	C
Ontario	0.18	(0.02)	0.98	(0.01)	0.96	(0.02)	0.02	(0.01)	0.95	(0.02)	1.6	(0.6)
Prince Edward Island	0.17	(0.05)	0.97	(0.04)	0.95	(0.10)	0.03	(0.04)	0.92	(0.06)	3.1	(3.9)
Quebec	0.05	(0.02)	0.99	(0.01)	0.98	(0.03)	0.02	(0.01)	0.96	(0.03)	1.8	(0.7)
Saskatchewan	0.05	(0.02)	1.00	(0.02)	1.01	(0.04)	0.01	(0.01)	1.00	(0.04)	0.9	(0.8)
Colombia												
Bogotá	-0.17	(0.03)	0.89	(0.02)	0.80	(0.03)	0.02	(0.01)	0.77	(0.03)	2.1	(1.4)
Italy												
Bolzano	-0.10	(0.03)	0.93	(0.02)	0.86	(0.04)	0.05	(0.02)	0.79	(0.04)	6.4	(1.9)
Sardegna	-0.36	(0.03)	0.89	(0.02)	0.78	(0.04)	0.01	(0.01)	0.76	(0.04)	1.6	(1.3)
Toscana	-0.34	(0.02)	0.91	(0.02)	0.82	(0.04)	0.01	(0.01)	0.78	(0.04)	1.1	(1.0)
Trento	-0.38	(0.02)	0.87	(0.03)	0.76	(0.05)	0.01	(0.01)	0.74	(0.03)	0.7	(1.3)
Spain												
Andalusia	0.27	(0.02)	1.00	(0.02)	1.00	(0.04)	0.00	С	1.00	(0.04)	0.0	С
Aragon	0.20	(0.03)	1.01	(0.02)	1.02	(0.04)	0.00	(0.01)	1.02	(0.04)	0.1	(0.7)
Asturias	0.22	(0.02)	0.97	(0.01)	0.94	(0.03)	0.01	(0.01)	0.93	(0.03)	0.7	(0.7)
Balearic Islands	0.12	(0.03)	0.95	(0.02)	0.91	(0.04)	0.00	(0.01)	0.91	(0.04)	0.5	(0.9)
Basque Country	0.06	(0.02)	0.93	(0.01)	0.86	(0.02)	0.00	(0.01)	0.86	(0.03)	0.1	(0.6)
Canary Islands	0.28	(0.03)	0.99	(0.02)	0.98	(0.04)	0.00	(0.00)	0.98	(0.04)	0.0	(0.4)
Cantabria	0.20	(0.03)	0.95	(0.02)	0.91	(0.03)	0.01	(0.01)	0.89	(0.04)	1.6	(0.7)
Castile and Leon	0.27	(0.03)	0.91	(0.01)	0.83	(0.02)	0.01	(0.01)	0.82	(0.02)	0.8	(0.7)
Castile-La Mancha	0.26	(0.02)	0.93	(0.02)	0.87	(0.04)	0.00	(0.01)	0.86	(0.03)	0.4	(0.6)
Catalonia	0.23	(0.02)	0.92	(0.02)	0.85	(0.05)	0.00	(0.01)	0.83	(0.04)	0.7	(0.8)
Ceuta	0.09	(0.03)		(0.03)		(0.21)	0.00	(0.01) C ‡	1.52	(0.24) ‡	0.0	(0.0) C
Comunidad Valenciana	0.09	(0.03) †		(0.00) +		(0.21)	0.00	(0.01) †	0.95	(0.24) +	2.4	(1.2)
Extremadura	0.12	(0.03)	0.96	(0.02)	0.92	(0.04)	0.02	(0.01)	0.92	(0.04)	0.1	(0.6)
Galicia	0.20	(0.03)	0.96	(0.02)	0.92	(0.04)	0.00	(0.01)	0.92	(0.04)	1.0	(0.9)
La Rioja	0.18	(0.03)	0.96	(0.02)	0.92	(0.03)	0.00		0.91	(0.04)	0.0	
Madrid	0.19	(0.03)	0.98	(0.02)	0.95	(0.04)		(0 00)	0.95	(0.04)	0.6	(0.5)
maaria Melilla							0.01	(0.00)				
	0.31	(0.07)	1.02	(0.06)	1.04	(0.12)	0.02	(0.02)	1.02	(0.11)	2.1	(2.0)
Murcia	0.28	(0.02)	0.98	(0.02)	0.97	(0.04)	0.00	(0.01)	0.96	(0.04)	0.0	(O, C)
Navarre	0.16	(0.03)	0.96	(0.01)	0.92	(0.03)	0.00	(0.01)	0.91	(0.04)	0.4	(0.6)
United Kingdom												
England	m	m	m	m	m	m	m	m	m	m	m	m
Northern Ireland	m	m	m	m	m	m	m	m	m	m	m	m
Scotland* Wales	-0.07	(0.02)	0.97	(0.01)	0.94	(0.03)	0.01	(0.01)	0.94	(0.03)	0.6	(0.6)

<sup>\*</sup> PISA adjudicated region.

**Notes**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

See Table VI.B1.3.1 for national data.

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of perspective taking is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B2.3.1 [2/6] Perspective taking

						Perspectiv	ve taking					
								Variation in	the index <sup>1</sup>			
	Mean i		Standard		Total va		Variation scho	ols <sup>3</sup>	scho		Proportion of that lies b school	oetween ols <sup>4</sup>
	Mean	S.E.	S.D.	S.E.	Variance	S.E.	Variance	S.E.	Variance	S.E.	%	S.E.
TARGENTINA  CABA*  Cordoba*												
든 CABA*	0.05	(0.03)	1.02	(0.02)	1.05	(0.04)	0.01	(0.01)	1.04	(0.03)	1.4	(1.0)
	0.02	(0.02)	1.03	(0.02)	1.06	(0.04)	0.00	(0.01)	1.04	(0.04)	0.4	(0.7)
PBA*	0.03	(0.03)	1.05	(0.02)	1.10	(0.04)	0.00	(0.01)	1.09	(0.04)	0.2	(0.6)
Tucuman*	0.03	(0.03) †	1.09	(0.02) †	1.16	(0.05)	0.00	(0.01) †	1.16	(0.05) †	0.0	(0.6) †
Brazil												
Middle-West	0.10	(0.04) †	1.12	(0.03) †	1.28	(0.07)	0.03	(0.03) †	1.24	(0.07) †	2.5	(2.0) †
North	0.09	(0.07) †	1.12	(0.04) †	1.26	(0.09)	0.06	(0.03) †	1.21	(0.10) †	5.0	(2.4) †
Northeast	0.09	(0.03) †	1.12	(0.02) †	1.26	(0.05)	0.03	(0.01) †		(0.05) †		(1.1) †
South	0.10	(0.03)	1.09	(0.02)	1.17	(0.04)	0.00	C	1.17	(0.05)	0.0	C
Southeast	0.16	(0.03) †	1.11	(0.02) †	1.20	(0.04)	0.03	(0.01) †	1.15	(0.04) †	2.4	(1.1) †
Indonesia												
DI Yogyakarta	0.07	(0.02)	0.76	(0.02)	0.58	(0.03) †		(0.00)	0.56	(0.03)	0.7	(0.7)
DKI Jakarta	0.10	(0.02)	0.81	(0.03)	0.65	(0.04) †	0.01	(0.01)	0.64	(0.04)	1.5	(1.0)
Kazakhstan												
Akmola region	0.05	(0.03) †		(0.04) †	1.13	(0.09)	0.01	(0.01) †		(0.07) †	0.8	(0.9) †
Aktobe region	0.06	(0.03)	1.09	(0.04)	1.13	(0.07)	0.00	(0.01)	1.13	(0.07)	0.2	(0.5)
Almaty	0.08	(0.03)	1.06	(0.03)	1.01	(0.06)	0.00	(0.00)	0.97	(0.05)	0.2	(0.3)
Almaty region	0.12	(0.04)	1.06	(0.02)	1.10	(0.05)	0.00	C	1.08	(0.04)	0.0	C
Astana	0.08	(0.03)	1.02	(0.02)	1.01	(0.03)	0.01	(0.01)	0.99	(0.05)	1.4	(0.9)
Atyrau region	-0.03	(0.05)	1.14	(0.03)	1.22	(80.0)	0.00	C	1.22	(0.06)	0.0	C
East-Kazakhstan region	0.02	(0.05)	1.10	(0.03)	1.18	(0.07)	0.02	(0.01)	1.12	(80.0)	1.7	(1.1)
Karagandy region	0.09	(0.04)	1.03	(0.02)	1.11	(0.06)	0.04	(0.02)	1.03	(0.07)	3.8	(1.8)
Kostanay region	0.03	(0.04)	1.06	(0.04)	1.12	(0.09)	0.01	(0.01)	1.05	(0.06)	0.8	(1.0)
Kyzyl-Orda region	0.13	(0.04)	1.18	(0.03)	1.34	(0.08)	0.01	(0.03)	1.28	(0.09)	1.0	(2.4)
Mangistau region	-0.01	(0.05)	1.20	(0.02)	1.41	(0.07)	0.01	(0.01)	1.36	(80.0)	0.6	(0.7)
North-Kazakhstan region	0.00	(0.04)	1.03	(0.03)	1.08	(0.07)	0.02	(0.01)	0.99	(0.07)	2.0	(1.3)
Pavlodar region	0.07	(0.04)	1.10	(0.03)	1.16	(0.08)	0.00	(0.01)	1.08	(0.07)	0.4	(8.0)
South-Kazakhstan region	0.11	(0.04)	1.12	(0.02)	1.25	(0.05)	0.00	C	1.22	(0.05)	0.0	C
West-Kazakhstan region	0.09	(0.06)	1.13	(0.03)	1.17	(0.06)	0.04	(0.02)	1.05	(0.06)	3.8	(2.0)
Zhambyl region	0.08	(0.03)	1.14	(0.03)	1.24	(0.06)	0.00	С	1.24	(0.07)	0.0	C
Russia												
Moscow city	0.25	(0.02)	1.09	(0.01)	1.19	(0.03)	0.01	(0.00)	1.18	(0.03)	0.5	(0.4)
Moscow region*	0.16	(0.03)	1.13	(0.02)	1.28	(0.05)	0.00	(0.01)	1.27	(0.05)	0.1	(0.5)
Republic of Tatarstan*	0.15	(0.02)	1.13	(0.01)	1.28	(0.03)	0.02	(0.01)	1.25	(0.03)	1.3	(0.5)

<sup>\*</sup> PISA adjudicated region.

**Notes**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

See Table VI.B1.3.1 for national data.

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of perspective taking is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B2.3.1 [3/6] **Perspective taking** 

			Percentage of	students v	vho reported	how well e	ach of the fol	lowing stat	ements descr	ibes them		
			erybody's sid before I make ion"				ere are two sion n and try to loon n both"		friend	ds better by	to understand / imagining ho their perspect	ow
	Somewhat li not much or like th	not at all	Very much o		Somewhat li not much or like th	not at all	Very much o		Somewhat li not much or like the	not at all	Very much o	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Canada Alberta												
	34.0	(1.1)	66.0	(1.1)	28.3	(1.1)	71.7	(1.1)	29.8	(1.2)	70.2	(1.2)
British Columbia	32.1	(1.2)	67.9	(1.2)	31.3	(1.0)	68.7	(1.0)	29.0	(1.3)	71.0	(1.3)
Manitoba	35.8	(1.4)	64.2	(1.4)	31.2	(1.4)	68.8	(1.4)	32.1	(1.4)	67.9	(1.4)
New Brunswick	34.5	(1.5)	65.5	(1.5)	31.9	(1.5)	68.1	(1.5)	32.1	(1.4)	67.9	(1.4)
Newfoundland and Labrador	30.3	(1.9)	69.7	(1.9)	30.1	(1.9)	69.9	(1.9)	30.1	(1.8)	69.9	(1.8)
Nova Scotia	33.4	(1.4)	66.6	(1.4)	31.8	(1.4)	68.2	(1.4)	29.6	(1.3)	70.4	(1.3)
Ontario	30.4	(0.9)	69.6	(0.9)	30.9	(0.9)	69.1	(0.9)	28.9	(0.9)	71.1	(0.9)
Prince Edward Island	35.1	(2.2)	64.9	(2.2)	30.4	(2.7)	69.6	(2.7)	27.0	(2.5)	73.0	(2.5)
Quebec	38.6	(1.0)	61.4	(1.0)	33.8	(1.0)	66.2	(1.0)	30.9	(0.9)	69.1	(0.9)
Saskatchewan	39.9	(1.4)	60.1	(1.4)	34.9	(1.1)	65.1	(1.1)	34.0	(1.1)	66.0	(1.1)
Colombia												
Bogotá	52.1	(1.5)	47.9	(1.5)	43.2	(1.2)	56.8	(1.2)	37.4	(1.2)	62.6	(1.2)
Italy												
Bolzano	42.2	(1.6)	57.8	(1.6)	40.2	(1.5)	59.8	(1.5)	37.0	(1.6)	63.0	(1.6)
Sardegna	56.6	(1.4)	43.4	(1.4)	55.0	(1.4)	45.0	(1.4)	45.0	(1.5)	55.0	(1.5)
Toscana	56.9	(1.1)	43.1	(1.1)	54.0	(1.2)	46.0	(1.2)	43.6	(1.4)	56.4	(1.4)
Trento	56.5	(1.4)	43.5	(1.4)	55.5	(1.7)	44.5	(1.7)	45.2	(1.7)	54.8	(1.7)
Spain												
Andalusia	33.5	(1.0)	66.5	(1.0)	30.4	(1.2)	69.6	(1.2)	25.3	(1.5)	74.7	(1.5)
Aragon	32.3	(1.2)	67.7	(1.2)	32.5	(1.2)	67.5	(1.2)	24.2	(1.2)	75.8	(1.2)
Asturias	36.1	(1.2)	63.9	(1.2)	31.7	(1.4)	68.3	(1.4)	22.3	(1.3)	77.7	(1.3)
Balearic Islands	33.0	(1.1)	67.0	(1.1)	30.8	(1.2)	69.2	(1.2)	26.9	(1.2)	73.1	(1.2)
Basque Country	37.2	(1.0)	62.8	(1.0)	36.8	(1.1)	63.2	(1.1)	29.5	(1.1)	70.5	(1.1)
Canary Islands	32.6	(1.3)	67.4	(1.3)	31.5	(1.3)	68.5	(1.3)	24.2	(1.4)	75.8	(1.4)
Cantabria	34.1	(1.1)	65.9	(1.1)	33.0	(1.1)	67.0	(1.1)	22.7	(1.2)	77.3	(1.2)
Castile and Leon	32.3	(1.2)	67.7	(1.2)	30.2	(1.3)	69.8	(1.3)	22.5	(1.2)	77.5	(1.2)
Castile-La Mancha	31.1	(1.0)	68.9	(1.0)	31.6	(1.0)	68.4	(1.0)	23.2	(1.1)	76.8	(1.1)
Catalonia	33.4	(1.4)	66.6	(1.4)	32.3	(1.4)	67.7	(1.4)	28.8	(1.6)	71.2	(1.6)
Ceuta	35.1	(4.1) ‡	64.9	(4.1) ‡	38.3	(4.5) ‡	61.7	(4.5) ‡	30.1	(4.0) ‡	69.9	(4.0) ‡
Comunidad Valenciana	36.7	(1.3) †	63.3	(1.3) †	36.1	(1.4) †	63.9	(1.4) †	28.3	(1.6) †	71.7	(1.6)
Extremadura	30.5	(1.3)	69.5	(1.3)	32.2	(1.6)	67.8	(1.6)	23.8	(1.2)	76.2	(1.2)
Galicia	33.2	(1.1)	66.8	(1.1)	31.5	(1.0)	68.5	(1.0)	25.0	(1.0)	75.0	(1.0)
La Rioja	32.5	(1.4)	67.5	(1.4)	32.9	(1.2)	67.1	(1.2)	23.9	(1.3)	76.1	(1.3)
Madrid	33.2	(0.8)	66.8	(0.8)	31.7	(0.8)	68.3	(0.8)	24.5	(0.7)	75.5	(0.7)
Melilla	30.5	(3.3)	69.5	(3.3)	29.7	(2.9)	70.3	(2.9)	19.3	(2.5)	80.7	(2.5)
Murcia	32.8	(1.3)	67.2	(1.3)	32.2	(1.2)	67.8	(1.2)	22.0	(1.1)	78.0	(1.1)
Navarre	31.8	(1.2)	68.2	(1.2)	33.8	(1.1)	66.2	(1.1)	26.1	(1.3)	73.9	(1.3)
United Kingdom	31.0	\/	30.2	( · · -/	33.0	()	30.2	()	20.1	()	, 5.5	(1.5)
England	m	m	m	m	m	m	m	m	m	m	m	m
Northern Ireland	m	m	m	m	m	m	m	m	m	m	m	m
Scotland*	43.0	(0.9)	57.0	(0.9)	41.7	(0.9)	58.3	(0.9)	37.9	(1.0)	62.1	(1.0)
Wales	45.0 m	(0.9) m	37.0 m	(0.9) m	41.7 m	(0.9) m	36.3 m	(0.9) m	37.9 m	(1.0) m	m	(1.0) m

<sup>\*</sup> PISA adjudicated region.

**Notes**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

See Table VI.B1.3.1 for national data.

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of perspective taking is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B2.3.1 [4/6] Perspective taking

		1	Percentage of	students v	vho reported	how well e	ach of the fol	owing stat	ements descr	ibes them:		
			erybody's side before I make sion"				ere are two sion n and try to lo n both"		friend	ds better by	o understand imagining ho heir perspecti	w
	Somewhat li not much or like th	not at all	Very much o like the	,	Somewhat li not much or like the	not at all	Very much o		Somewhat li not much or like the	not at all	Very much o	
<b>≅</b> Argentina	<b>%</b>	5.E.	%	5.E.		5.E.	<b>%</b>	5.E.		5.E.	<b>%</b>	5.E.
도 Cordoba*	36.4	(1.2)	63.6	(1.2)	39.1	(1.2)	60.9	(1.2)	36.1	(1.1)	63.9	(1.1)
E Cordoba*	38.8	(0.8)	61.2	(0.8)	42.7	(1.1)	57.3	(1.2)	36.3	(1.1)	63.7	(1.1)
PBA*	38.9	(1.1)	61.1	(1.1)	43.4	(1.1)	56.6	(1.1)	35.3	(1.0)	64.7	(1.1)
Tucuman*	40.7	(1.1)	59.3	(1.1)	43.4	(1.3) †	56.8	(1.3) †	34.7	(1.0)	65.3	(1.3) †
Brazil	40.7	(1.1)	33.3	(1.1)	43.2	(1.5) 1	50.0	(1.5) 1	34.7	(1.5) 1	05.5	(1.5) 1
Middle-West	37.6	(2.1) †	62.4	(2.1) †	35.4	(2.2) †	64.6	(2.2) †	36.1	(1.9) †	63.9	(1.9) †
North	40.4	(2.6) †	59.6	(2.1) †	34.9	(3.0) †	65.1	(3.0) †	35.1	(3.4) †	64.9	(3.4) †
Northeast	40.4	(1.4) †	59.9	(1.4) †	37.2	(1.5) †	62.8	(1.5) †	37.7	(1.3) †	62.3	(1.3) †
South	39.7	(1.4)	60.3	(1.4)	34.2	(1.7) †	65.8	(1.7) †	36.8	(1.6)	63.2	(1.6)
Southeast	38.0	(1.0) †	62.0	(1.0) †	32.2	(1.0) †	67.8	(1.0) †	34.9	(1.0)	65.1	(1.0) †
Indonesia	30.0	(1.0) 1	02.0	(1.0) 1	32.2	(1.0) 1	07.0	(1.0) 1	54.5	(1.0) 1	05.1	(1.0) 1
DI Yoqyakarta	26.2	(1.3)	73.8	(1.3)	29.0	(1.3)	71.0	(1.3)	26.9	(1.0)	73.1	(1.0)
DKI Jakarta	27.3	(1.2)	72.7	(1.2)	29.4	(1.3)	70.6	(1.3)	25.4	(1.1)	74.6	(1.1)
Kazakhstan	27.5	(1.2)	72.7	(1.2)	23.4	(1.5)	70.0	(1.5)	25.4	(1.1)	74.0	(1.1)
Akmola region	34.8	(1.6) †	65.2	(1.6) †	34.7	(2.1) †	65.3	(2.1) †	33.4	(1.7) †	66.6	(1.7) †
Aktobe region	38.5	(2.0)	61.5	(2.0)	37.2	(1.3)	62.8	(1.3)	39.6	(1.8)	60.4	(1.8)
Almaty	35.0	(1.7)	65.0	(1.7)	33.7	(1.6)	66.3	(1.6)	35.0	(1.9)	65.0	(1.9)
Almaty region	36.8	(1.7)	63.2	(1.7)	33.0	(1.5)	67.0	(1.5)	35.8	(1.6)	64.2	(1.6)
Astana	35.2	(1.3)	64.8	(1.3)	32.9	(1.1)	67.1	(1.1)	34.5	(1.6)	65.5	(1.6)
Atyrau region	40.1	(2.2)	59.9	(2.2)	39.1	(2.1)	60.9	(2.1)	43.1	(1.6)	56.9	(1.6)
East-Kazakhstan region	38.7	(1.7)	61.3	(1.7)	35.7	(1.8)	64.3	(1.8)	38.5	(1.9)	61.5	(1.9)
Karagandy region	32.8	(2.0)	67.2	(2.0)	33.1	(1.5)	66.9	(1.5)	33.2	(1.4)	66.8	(1.4)
Kostanay region	34.1	(1.8)	65.9	(1.8)	33.7	(1.6)	66.3	(1.6)	33.8	(1.8)	66.2	(1.8)
Kyzyl-Orda region	38.0	(1.5)	62.0	(1.5)	34.8	(1.3)	65.2	(1.3)	39.3	(1.3)	60.7	(1.3)
Mangistau region	41.7	(1.6)	58.3	(1.6)	41.5	(1.8)	58.5	(1.8)	43.8	(1.3)	56.2	(1.3)
North-Kazakhstan region	35.7	(1.9)	64.3	(1.9)	32.6	(1.8)	67.4	(1.8)	37.2	(2.0)	62.8	(2.0)
Pavlodar region	33.3	(1.4)	66.7	(1.4)	33.1	(1.5)	66.9	(1.5)	35.1	(1.5)	64.9	(1.5)
South-Kazakhstan region	38.1	(1.5)	61.9	(1.5)	35.1	(1.3)	64.9	(1.3)	39.9	(1.8)	60.1	(1.8)
West-Kazakhstan region	34.4	(2.0)	65.6	(2.0)	32.8	(2.2)	67.2	(2.2)	34.7	(2.3)	65.3	(2.3)
Zhambyl region	39.0	(1.3)	61.0	(1.3)	36.6	(1.5)	63.4	(1.5)	37.7	(1.6)	62.3	(1.6)
Russia												
Moscow city	26.5	(0.7)	73.5	(0.7)	26.5	(0.7)	73.5	(0.7)	30.5	(0.7)	69.5	(0.7)
Moscow region*	28.6	(1.3)	71.4	(1.3)	30.6	(1.4)	69.4	(1.4)	33.8	(1.4)	66.2	(1.4)
Republic of Tatarstan*	30.3	(0.8)	69.7	(0.8)	31.6	(0.8)	68.4	(0.8)	34.3	(0.8)	65.7	(0.8)

<sup>\*</sup> PISA adjudicated region.

**Notes**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

See Table VI.B1.3.1 for national data.

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of perspective taking is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B2.3.1 [5/6] Perspective taking

		Percentag <u>e</u> c	of students who report	ted how well ea	ach of the following st	atements de <u>sc</u>	ribes them:	
		'Before criticisi to imagine ho were in th	w I would feel if I			When I'm upse to take the pe person for	rspective of that	
	Somewhat like them or not at all like	them	Very much or mostly		Somewhat like them or not at all like	them	Very much or mostly	
	%	S.E.	%	S.E.	%	S.E.	%	S.E. s
Canada Alberta				44.43				
	40.1	(1.1)	59.9	(1.1)	56.3	(1.4)	43.7	(1.4)
British Columbia	40.6	(1.3)	59.4	(1.3)	54.8	(1.2)	45.2	(1.2)
Manitoba	40.6	(1.3)	59.4	(1.3)	52.2	(1.3)	47.8	(1.3)
New Brunswick	39.5	(1.1)	60.5	(1.1)	54.1	(1.5)	45.9	(1.5)
Newfoundland and Labrador	35.2	(2.0)	64.8	(2.0)	51.7	(1.9)	48.3	(1.9)
Nova Scotia	39.3	(1.5)	60.7	(1.5)	59.9	(1.7)	40.1	(1.7)
Ontario	40.3	(1.1)	59.7	(1.1)	54.6	(1.1)	45.4	(1.1)
Prince Edward Island	36.9	(2.6)	63.1	(2.6)	52.8	(3.4)	47.2	(3.4)
Quebec	40.8	(1.0)	59.2	(1.0)	62.2	(0.9)	37.8	(0.9)
Saskatchewan	42.2	(1.1)	57.8	(1.1)	54.3	(1.2)	45.7	(1.2)
Colombia	47.0	(1.4)	F2.0	(1.4)	62.6	(1.2)	27.4	(1.2)
Bogotá	47.0	(1.4)	53.0	(1.4)	62.6	(1.2)	37.4	(1.2)
Italy Bolzano	50.4	(1.5)	49.6	(1.5)	69.4	(1.6)	30.6	(1.6)
	51.2	(1.5)	48.8	(1.5)	72.9	(1.6)	27.1	(1.6)
Sardegna				(1.5)		(1.2)		(1.2)
Toscana Trento	52.2 55.1	(1.2) (1.5)	47.8 44.9	(1.2) (1.5)	70.8 72.3	(1.0)	29.2 27.7	(1.0) (1.5)
	55.1	(1.5)	44.9	(1.5)	72.5	(1.3)	21.1	(1.3)
Spain Andalusia	39.1	(1.3)	60.9	(1.3)	48.6	(1.5) †	51.4	(1.5) †
	40.0	(1.4)	60.0	(1.4)	49.1	(1.2)	50.9	(1.2)
Aragon Asturias	38.3	(1.4)	61.7	(1.4)	50.0	(1.2)	50.0	(1.2)
Balearic Islands	41.7	(1.2)	58.3	(1.2)	55.0	(1.4)	45.0	(1.4)
Basque Country	44.9	(0.9)	55.1	(0.9)	54.6	(1.4)	45.4	(1.4)
Canary Islands	37.3	(1.4)	62.7	(1.4)	48.6	(1.2)	51.4	(1.2)
Cantabria	38.9	(1.4)	61.1	(1.4)	49.1	(1.2)	50.9	(1.2)
Castile and Leon	37.7	(1.1)	62.3	(1.1)	47.5	(1.2)	52.5	(1.2)
Castile-La Mancha	34.4	(1.4)	65.6	(1.4)	46.4	(0.9)	53.6	(0.9)
Catalonia	49.3	(1.4)	50.7	(1.4)	60.7	(1.9)	39.3	(1.9)
Ceuta	42.0	(4.0) ‡	58.0	(4.0) ‡	51.5	(4.3) ‡	48.5	(4.3) ‡
Comunidad Valenciana	43.9	(1.5) †	56.1	(1.5) †	56.2	(1.7) †	43.8	(1.7) †
Extremadura	36.5	(1.3)	63.5	(1.3)	46.8	(1.7)	53.2	(1.7)
Galicia	37.8	(1.1)	62.2	(1.1)	51.2	(1.2)	48.8	(1.7)
La Rioja	38.5	(1.4)	61.5	(1.4)	50.1	(1.5)	49.9	(1.5)
Madrid	40.0	(0.7)	60.0	(0.7)	51.0	(0.8)	49.0	(0.8)
Melilla	34.3	(3.2)	65.7	(3.2)	43.9	(3.5)	56.1	(3.5)
Murcia	35.4	(1.1)	64.6	(1.1)	47.0	(1.4)	53.0	(1.4)
Navarre	40.2	(1.6)	59.8	(1.6)	52.1	(1.4)	47.9	(1.4)
United Kingdom	40.2	(1.0)	59.0	(1.0)	JZ. I	(1.0)	47.5	(1.0)
England	m	m	m	m	m	m	m	m
Northern Ireland	m	m	m	m	m	m	m	m
Scotland*	47.6	(1.0)	52.4	(1.0)	66.1	(1.0)	33.9	(1.0)
Wales	47.0 m	(1.0) m	32.4 m	m	m	(1.0) m	33.9 m	(1.0) m

<sup>\*</sup> PISA adjudicated region.

**Notes**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

See Table VI.B1.3.1 for national data.

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of perspective taking is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B2.3.1 [6/6] Perspective taking

		Percentage o	of students who report	ted how well e	ach of the following st	atements descr	ibes them:	
			ing somebody, ow I would feel if I eir place"			When I'm upset to take the per person for a	spective of that	
	Somewhat like them or not at all like	them	Very much or mostly		Somewhat like them or not at all like	them	Very much or mostly	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.
로 Cardoba*	42.4	(4.4)	57.0	(4.4)	62.0	(4.4)	20.0	(4.4)
E CABA*	42.1	(1.4)	57.9	(1.4)	62.0	(1.4)	38.0	(1.4)
	39.5	(1.0)	60.5	(1.0)	58.3	(1.2)	41.7	(1.2)
PBA*	38.2	(1.1)	61.8	(1.1)	57.2	(1.1)	42.8	(1.1)
Tucuman*	35.4	(1.3) †	64.6	(1.3) †	51.5	(1.6) †	48.5	(1.6) †
Brazil								
Middle-West	40.6	(2.4) †	59.4	(2.4) †	50.9	(2.2) †	49.1	(2.2) †
North	37.2	(2.9) †	62.8	(2.9) †	52.7	(2.3) †	47.3	(2.3) †
Northeast	40.3	(1.4) †	59.7	(1.4) †	51.2	(1.2) †	48.8	(1.2) †
South	37.9	(1.7) †	62.1	(1.7) †	55.5	(1.6) †	44.5	(1.6) †
Southeast	38.6	(1.1) †	61.4	(1.1) †	54.8	(1.0) †	45.2	(1.0) †
Indonesia								
DI Yogyakarta	28.7	(1.0)	71.3	(1.0)	38.7	(1.2)	61.3	(1.2)
DKI Jakarta	28.7	(1.5)	71.3	(1.5)	37.5	(1.6)	62.5	(1.6)
Kazakhstan								
Akmola region	35.5	(1.9) †	64.5	(1.9) †	46.8	(1.8) †	53.2	(1.8) †
Aktobe region	38.6	(1.7)	61.4	(1.7)	47.3	(2.0)	52.7	(2.0)
Almaty	36.1	(1.4)	63.9	(1.4)	48.5	(2.3)	51.5	(2.3)
Almaty region	35.8	(1.8)	64.2	(1.8)	41.5	(2.0)	58.5	(2.0)
Astana	37.4	(1.3)	62.6	(1.3)	50.1	(1.1)	49.9	(1.1)
Atyrau region	40.5	(2.0)	59.5	(2.0)	47.7	(2.3)	52.3	(2.3)
East-Kazakhstan region	37.9	(2.3)	62.1	(2.3)	48.2	(2.5)	51.8	(2.5)
Karagandy region	38.4	(1.4)	61.6	(1.4)	48.2	(1.4)	51.8	(1.4)
Kostanay region	36.6	(1.8)	63.4	(1.8)	46.5	(1.9)	53.5	(1.9)
Kyzyl-Orda region	35.8	(1.7)	64.2	(1.7)	39.1	(1.3)	60.9	(1.3)
Mangistau region	42.2	(2.3)	57.8	(2.3)	47.9	(1.8)	52.1	(1.8)
North-Kazakhstan region	39.0	(1.8)	61.0	(1.8)	49.6	(1.6)	50.4	(1.6)
Pavlodar region	38.4	(1.3)	61.6	(1.3)	48.1	(1.7)	51.9	(1.7)
South-Kazakhstan region	37.2	(1.6)	62.8	(1.6)	42.5	(1.3)	57.5	(1.3)
West-Kazakhstan region	34.5	(2.2)	65.5	(2.2)	41.8	(2.2)	58.2	(2.2)
Zhambyl region	36.1	(1.7)	63.9	(1.7)	40.4	(1.4)	59.6	(1.4)
Russia								
Moscow city	42.4	(0.8)	57.6	(0.8)	61.2	(0.7)	38.8	(0.7)
Moscow region*	43.1	(1.3)	56.9	(1.3)	56.1	(1.3)	43.9	(1.3)
Republic of Tatarstan*	40.9	(0.8)	59.1	(0.8)	52.9	(0.8)	47.1	(0.8)

<sup>\*</sup> PISA adjudicated region.

**Notes**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

See Table VI.B1.3.1 for national data.

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of perspective taking is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B2.4.1 [1/6] **Awareness of intercultural communication** Based on students' reports

					Awareness	of intercul	tural comm	unication				
								Variation i	the index <sup>1</sup>			
	Mean	index	Standard	deviation	Total va	riation <sup>2</sup>	Variation scho	between ools <sup>3</sup>	Variatio scho		Proport variation between	that lies
	Mean	S.E.	S.D.	S.E.	Variance	S.E.	Variance	S.E.	Variance	S.E.	%	S.E.
G Canada <i>Alberta</i>												
	0.14	(0.03)	1.04	(0.02)	1.07	(0.04)	0.02	(0.01)	1.04	(0.04)	2.3	(0.9)
British Columbia	0.05	(0.03)	0.99	(0.02)	0.99	(0.04)	0.00	(0.01)	1.00	(0.04)	0.3	(8.0)
Manitoba	-0.02	(0.03)	1.05	(0.02)	1.10	(0.05)	0.02	(0.01)	1.10	(0.04)	1.7	(1.2)
New Brunswick	-0.01	(0.04)	1.02	(0.03)	1.04	(0.05)	0.01	(0.01)	1.03	(0.05)	0.7	(0.8)
Newfoundland and Labrador	0.18	(0.04)	1.03	(0.03)	1.07	(0.06)	0.00	(0.01)	1.07	(0.07)	0.3	(1.0)
Nova Scotia	0.11	(0.03)	1.02	(0.02)	1.05	(0.05)	0.01	(0.01)	1.04	(0.06)	0.7	(1.2)
Ontario	0.11	(0.02)	1.02	(0.02)	1.04	(0.03)	0.01	(0.01)	1.03	(0.03)	1.0	(0.6)
Prince Edward Island	0.14	(0.06)	1.03	(0.07)	1.17	(0.12)	0.07	(0.04)	1.10	(0.13)	6.1	(3.8)
Quebec	0.20	(0.02)	1.01	(0.01)	1.03	(0.03)	0.04	(0.01)	0.99	(0.03)	3.6	(8.0)
Saskatchewan	-0.04	(0.03)	0.98	(0.02)	0.97	(0.05)	0.02	(0.01)	0.96	(0.04)	2.2	(0.7)
Colombia												
Bogotá	-0.02	(0.03)	0.92	(0.02)	0.84	(0.03)	0.04	(0.01)	0.79	(0.03)	5.0	(1.4)
Italy												
Bolzano	-0.13	(0.03)	0.97	(0.02)	0.94	(0.05)	0.05	(0.02)	0.91	(0.04)	4.8	(2.0)
Sardegna	0.02	(0.03)	1.00	(0.02)	1.01	(0.04)	0.08	(0.02)	0.92	(0.05)	8.1	(2.0)
Toscana	0.00	(0.03)	0.94	(0.01)	0.88	(0.03)	0.05	(0.02)	0.82	(0.03)	6.1	(1.7)
Trento	-0.02	(0.03)	0.98	(0.03)	0.97	(0.06)	0.09	(0.02)	0.87	(0.03)	9.5	(2.0)
Spain												
Andalusia	0.03	(0.04) †	1.02	(0.02) †	1.04	(0.04)	0.02	(0.01) †	1.01	(0.04) †	1.9	(1.1)
Aragon	0.10	(0.04)	1.01	(0.02)	1.03	(0.04)	0.03	(0.01)	1.01	(0.04)	2.6	(0.8)
Asturias	0.20	(0.03)	1.08	(0.02)	1.16	(0.04)	0.01	(0.01)	1.15	(0.04)	0.8	(0.7)
Balearic Islands	0.02	(0.02)	0.95	(0.01)	0.89	(0.02)	0.01	(0.01)	0.89	(0.03)	0.9	(0.9)
Basque Country	-0.01	(0.02) †		(0.02) †		(0.03)	0.02	(0.01) †	0.89	(0.03) †	2.5	(0.7)
Canary Islands	0.17	(0.03)	1.02	(0.02)	1.04	(0.05)	0.02	(0.01)	1.03	(0.05)	1.5	(1.0)
Cantabria	0.21	(0.02)	0.98	(0.02)	0.96	(0.04)	0.01	(0.01)	0.96	(0.04)	1.0	(0.8)
Castile and Leon	0.23	(0.02)	0.99	(0.02)	0.98	(0.04)	0.03	(0.01)	0.95	(0.03)	2.9	(1.5)
Castile-La Mancha	0.23	(0.03)	0.98	(0.02)	0.96	(0.03)	0.03	(0.02)	0.93	(0.03)	0.6	(0.8)
Catalonia	-0.04	(0.03)	0.98	(0.02)	0.97	(0.05)	0.00	(0.01) C	0.97	(0.05)	0.0	(0.0) C
Ceuta	-0.04	(0.03)		(0.03)		(0.05)	0.05	(0.09) ‡	1.31	(0.24) ‡	4.0	(6.4)
Comunidad Valenciana	0.05	(0.10) 1		(0.07) +		(0.10)	0.00	(0.09) + c †	1.03	(0.24) +	0.0	(U.4)
Extremadura	0.03	(0.02)	0.98	(0.03)	0.95	(0.03)	0.00	(0.01)	0.94	(0.03)	0.0	(0.7)
Galicia	0.07	(0.03)	0.98	(0.02)	0.93	(0.03)	0.01	(0.01)	0.94	(0.03)	1.0	(0.7)
				. ,						, ,		
La Rioja	0.17	(0.03)	0.96	(0.02)	0.92	(0.03)	0.00	C (0.01)	0.93	(0.05)	0.0	C (0.7)
Madrid	0.17	(0.02)	1.00	(0.01)	1.00	(0.02)	0.02	(0.01)	0.98	(0.03)	1.8	(0.7)
Melilla	0.18	(0.07)	0.93	(0.04)	0.86	(0.08)	0.00	C (0.04)	0.86	(0.06)	0.0	C
Murcia	0.20	(0.02)	1.03	(0.02)	1.05	(0.04)	0.02	(0.01)	1.04	(0.04)	1.6	(1.1)
Navarre	0.08	(0.04)	0.96	(0.02)	0.93	(0.03)	0.04	(0.01)	0.88	(0.04)	4.6	(1.2)
United Kingdom												
England	m	m	m	m	m	m	m	m	m	m	m	m
Northern Ireland	m	m	m	m	m	m	m	m	m	m	m	m
Scotland*	0.00	(0.02)	0.95	(0.01)	0.91	(0.03)	0.01	(0.01)	0.90	(0.03)	0.9	(0.7)
Wales	m	m	m	m	m	m	m	m	m	m	m	m

<sup>\*</sup> PISA adjudicated region.

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of awareness of intercultural communication is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B2.4.1 [2/6] **Awareness of intercultural communication** Based on students' reports

					Awareness	of intercul	tural commi	unication				
								Variation in	the index <sup>1</sup>			
	Mean		Standard		Total va	riation <sup>2</sup>	Variation scho		sch	n within ools	Proportion of that lies be school	etween
	Mean	S.E.	S.D.	S.E.	Variance	S.E.	Variance	S.E.	Variance	S.E.	%	S.E.
Argentina												
로 Cardoba*	0.02	(0.03)	1.01	(0.02)	1.02	(0.04)	0.02	(0.01)	1.02	(0.04)	2.1	(1.1)
Cordoba*	-0.10	(0.03)	1.05	(0.02)	1.10	(0.04)	0.05	(0.02)	1.04	(0.04)	5.0	(1.4)
PBA*	-0.03	(0.04)	1.03	(0.02)	1.06	(0.04)	0.07	(0.02)	0.97	(0.04)	6.5	(1.7)
Tucuman*	-0.09	(0.03) †	1.06	(0.02) †	1.12	(0.04)	0.07	(0.02) †	1.05	(0.04) 1	6.5	(1.5) †
Brazil												
Middle-West	-0.02	(0.06) †	1.05	(0.04) †	1.10	(0.09)	0.09	(0.04) †	1.03	(0.07) 1	7.8	(3.4) †
North	-0.15	(0.03) †	0.99	(0.03) †	0.98	(0.06)	0.04	(0.04) †	0.96	(0.07) 1	4.0	(4.3) †
Northeast	-0.13	(0.03) †	1.01	(0.02) †	1.02	(0.05)	0.08	(0.03) †	0.93	(0.05) 1	7.7	(2.8) †
South	-0.02	(0.04) †	0.97	(0.02) †	0.96	(0.04)	0.04	(0.02) †	0.88	(0.05) 1	4.8	(1.9) †
Southeast	-0.07	(0.02) †	1.00	(0.02) †	0.98	(0.04)	0.04	(0.02) †	0.93	(0.03)	4.4	(1.6) †
Indonesia												
DI Yogyakarta	-0.10	(0.02)	0.71	(0.02)	0.51	(0.03) †	0.01	(0.01)	0.49	(0.03)	2.8	(1.5)
DKI Jakarta	0.02	(0.02)	0.76	(0.02)	0.58	(0.03) †	0.02	(0.01)	0.55	(0.03)	3.8	(1.7)
Kazakhstan												
Akmola region	-0.29	(0.04) †	0.97	(0.04) †	0.98	(80.0)	0.05	(0.02) †	0.91	(0.07) 1	5.2	(1.9) †
Aktobe region	-0.32	(0.04)	0.94	(0.04)	0.89	(0.07)	0.02	(0.02)	0.92	(0.07)	2.2	(1.7)
Almaty	-0.24	(0.04)	0.94	(0.02)	0.87	(0.05)	0.02	(0.01)	0.88	(0.06)	2.3	(1.1)
Almaty region	-0.23	(0.03)	0.96	(0.03)	0.91	(0.06)	0.01	(0.01)	0.91	(0.05)	1.4	(1.1)
Astana	-0.24	(0.04)	0.97	(0.02)	0.98	(0.03)	0.02	(0.01)	0.97	(0.04)	2.3	(1.0)
Atyrau region	-0.38	(0.04)	0.96	(0.03)	0.89	(80.0)	0.02	(0.01)	0.83	(0.06)	2.9	(1.7)
East-Kazakhstan region	-0.20	(0.04)	1.01	(0.02)	1.00	(0.05)	0.02	(0.01)	1.02	(0.07)	1.8	(1.1)
Karagandy region	-0.32	(0.05)	0.96	(0.02)	0.97	(0.04)	0.06	(0.03)	0.91	(0.06)	6.3	(2.5)
Kostanay region	-0.29	(0.04)	1.01	(0.03)	1.02	(0.07)	0.02	(0.01)	1.03	(0.06)	1.5	(1.0)
Kyzyl-Orda region	-0.13	(0.03)	1.04	(0.03)	1.07	(0.07)	0.05	(0.02)	1.05	(0.07)	4.7	(1.9)
Mangistau region	-0.35	(0.05)	0.99	(0.03)	0.93	(0.07)	0.05	(0.03)	0.92	(0.06)	5.3	(2.7)
North-Kazakhstan region	-0.36	(0.03)	0.94	(0.03)	0.92	(0.05)	0.01	(0.01)	0.95	(0.05)	1.0	(0.7)
Pavlodar region	-0.34	(0.04)	0.97	(0.03)	0.95	(0.05)	0.04	(0.02)	0.92	(0.06)	4.1	(2.0)
South-Kazakhstan region	-0.28	(0.03)	0.93	(0.03)	0.85	(0.07)	0.03	(0.01)	0.82	(0.05)	3.7	(1.2)
West-Kazakhstan region	-0.28	(0.05)	0.97	(0.04)	0.90	(0.07)	0.06	(0.03)	0.80	(0.06)	7.3	(3.2)
Zhambyl region	-0.18	(0.02)	0.96	(0.03)	0.92	(0.07)	0.00	(0.01)	0.96	(0.07)	0.5	(0.7)
Russia												
Moscow city	-0.15	(0.02)	1.01	(0.01)	1.02	(0.03)	0.01	(0.00)	1.01	(0.03)	0.9	(0.4)
Moscow region*	-0.27	(0.03)	1.08	(0.02)	1.17	(0.05)	0.01	(0.01)	1.16	(0.04)	0.6	(0.6)
Republic of Tatarstan*	-0.32	(0.02)	1.01	(0.02)	1.02	(0.03)	0.01	(0.01)	1.03	(0.03)	1.3	(0.5)

<sup>\*</sup> PISA adjudicated region.

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of awareness of intercultural communication is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

4. This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B2.4.1 [3/6] **Awareness of intercultural communication** Based on students' reports

based on stadents reports				ı	Percentag whose				ed/agreed							
	"I carefu	lly observ	e their re	actions"	"I freq	uently ch	eck that v	ve are			to what th			oose my v	words car	efully"
	Disag strongly	ree or disagree S.E.	Agre strongly		Disagi strongly		Agre strongly		Disagi strongly		Agre strongly		Disag strongly			ee or ly agree S.E.
Canada																
Canada Alberta	13.6	(0.7)	86.4	(0.7)	12.5	(0.8)	87.5	(0.8)	8.5	(0.7)	91.5	(0.7)	13.9	(0.8)	86.1	(0.8)
British Columbia	13.9	(0.9)	86.1	(0.9)	13.4	(0.7)	86.6	(0.7)	9.6	(0.8)	90.4	(0.8)	18.1	(0.9)	81.9	(0.9)
Manitoba	15.4	(1.0)	84.6	(1.0)	15.3	(1.0)	84.7	(1.0)	11.2	(0.9)	88.8	(0.9)	19.4	(1.1)	80.6	(1.1)
New Brunswick	15.7	(1.2)	84.3	(1.2)	15.7	(1.2)	84.3	(1.2)	10.5	(0.9)	89.5	(0.9)	19.9	(1.3)	80.1	(1.3)
Newfoundland and Labrador	10.7	(1.1)	89.3	(1.1)	12.4	(1.1)	87.6	(1.1)	7.6	(0.9)	92.4	(0.9)	14.8	(1.4)	85.2	(1.4)
Nova Scotia	13.8	(0.9)	86.2	(0.9)	12.6	(0.8)	87.4	(0.8)	8.9	(0.7)	91.1	(0.7)	17.2	(1.0)	82.8	(1.0)
Ontario	13.0	(0.6)	87.0	(0.6)	12.6	(0.6)	87.4	(0.6)	9.7	(0.5)	90.3	(0.5)	16.1	(0.8)	83.9	(0.8)
Prince Edward Island	10.6	(1.7)	89.4	(1.7)	13.1	(2.1)	86.9	(2.1)	9.6	(1.8)	90.4	(1.8)	14.7	(2.5)	85.3	(2.5)
Quebec	14.4	(0.7)	85.6	(0.7)	11.8	(0.7)	88.2	(0.7)	9.3	(0.6)	90.7	(0.6)	17.7	(0.7)	82.3	(0.7)
Saskatchewan	15.6	(0.8)	84.4	(0.8)	14.5	(0.8)	85.5	(0.8)	10.7	(0.7)	89.3	(0.7)	19.1	(1.0)	80.9	(1.0)
Colombia		(-1-)		()		(=.=)		()		(=,		(,		()		(::=)
Bogotá	14.7	(1.0)	85.3	(1.0)	13.4	(1.1)	86.6	(1.1)	13.0	(1.1)	87.0	(1.1)	20.8	(1.3)	79.2	(1.3)
Italy		=/		·/		/		,		/				/		,
Bolzano	25.7	(1.4)	74.3	(1.4)	19.7	(1.2)	80.3	(1.2)	15.9	(1.4)	84.1	(1.4)	25.7	(1.4)	74.3	(1.4)
Sardegna	18.0	(1.4)	82.0	(1.4)	15.2	(1.0)	84.8	(1.0)	13.9	(0.9)	86.1	(0.9)	19.6	(1.0)	80.4	(1.0)
Toscana	16.2	(1.1)	83.8	(1.1)	13.9	(1.2)	86.1	(1.2)	12.7	(1.3)	87.3	(1.3)	20.9	(1.3)	79.1	(1.3)
Trento	17.7	(1.1)	82.3	(1.1)	14.3	(1.0)	85.7	(1.0)	13.9	(1.0)	86.1	(1.0)	21.0	(1.3)	79.0	(1.3)
Spain	17.7	(1.1)	02.5	(111)	11.5	(1.0)	03.7	(1.0)	13.3	(1.0)	00.1	(1.0)	21.0	(1.5)	73.0	(1.5)
Andalusia	17.1	(1.4) †	82.9	(1.4) †	13.9	(1.3) †	86.1	(1.3) †	13.4	(1.3) †	86.6	(1.3) †	23.2	(1.5) †	76.8	(1.5) 1
Aragon	16.4	(1.2)	83.6	(1.2)	11.1	(1.0)	88.9	(1.0)	11.9	(0.7)	88.1	(0.7)	20.8	(1.3)	79.2	(1.3)
Asturias .	14.1	(0.8)	85.9	(0.8)	11.6	(0.6)	88.4	(0.6)	9.8	(0.6)	90.2	(0.6)	19.7	(1.0)	80.3	(1.0)
Balearic Islands	19.6	(1.0)	80.4	(1.0)	12.7	(0.8)	87.3	(0.8)	11.1	(0.8)	88.9	(0.8)	22.5	(1.0)	77.5	(1.0)
Basque Country	17.7	(0.9) †	82.3	(0.9) †	13.9	(0.9) †	86.1	(0.9) †	12.0	(0.6) †	88.0	(0.6) †	23.7	(1.0) †	76.3	(1.0)
Canary Islands	12.7	(0.9)	87.3	(0.9)	10.4	(0.9)	89.6	(0.9)	8.9	(0.0)	91.1	(0.0)	20.3	(1.0)	79.7	(1.0)
Cantabria Cantabria	13.4		86.6		8.8		91.2		7.5		92.5		18.1			(1.1)
Cantabria Castile and Leon	12.4	(0.8)	87.6	(0.8) (1.0)	8.1	(0.6) (1.0)	91.2	(0.6) (1.0)	9.1	(0.6) (1.0)	90.9	(0.6) (1.0)	16.8	(1.2)	81.9 83.2	(1.2)
Castile-La Mancha	15.1	(1.0)	84.9	(1.0)	9.8	(1.0)	90.2	(1.0)	10.7	(0.9)	89.3	(0.9)	20.2	(1.1)	65.2 79.8	(1.1)
Catalonia	23.7	(1.2)	76.3	(1.2)	15.2	(1.0)	84.8	(1.0)	10.7	(0.9)	87.5	(0.9)	24.5	(1.1)	79.6 75.5	(1.1)
Ceuta	29.0	(3.7) ‡	70.3	(3.7) ‡	26.9	(4.3) ‡	73.1	(4.3) ‡	16.9	(3.4) ‡	83.1	(3.4) ‡	25.8	(3.7) ‡	75.5	(3.7)
Ceuta Comunidad Valenciana	17.5						86.8			(0.9) †	88.0		23.0			
Extremadura	14.9	(1.1) †	82.5 85.1	(1.1) †	13.2 12.4	(1.0) † (1.0)	86.8	(1.0) † (1.0)	12.0 11.3		88.7	(0.9) † (1.1)	20.4	(1.5) †	77.0 79.6	(1.5) 1 (1.0)
Galicia	14.9	(0.8)	85.3	(1.1)	11.0	(0.9)	89.0	(0.9)	9.5	(1.1)	90.5	(0.6)	20.4	(0.9)	79.6 79.8	(0.9)
Gancia La Rioja	13.1	(0.8)	86.9	(0.8)	9.9	(0.9)	90.1	(0.9)	9.5	(0.6)	90.5	(0.6)	18.0	(1.1)	79.8 82.0	(0.9)
La Rioja Madrid	15.4	(0.9)					89.6		1				ł			
			84.6	(0.7)	10.4	(0.6)		(0.6)	10.9	(0.6)	89.1	(0.6)	19.1	(0.7)	80.9	(0.7)
Melilla Murcia	14.7	(2.3)	85.3	(2.3)	14.5	(2.5)	85.5	(2.5)	11.8	(2.8)	88.2	(2.8)	15.6	(2.7)	84.4	(2.7)
	14.9	(0.6)	85.1	(0.6)	10.5	(0.7)	89.5	(0.7)	11.3	(1.1)	88.7	(1.1)	19.5	(1.1)	80.5	(1.1)
Navarre	15.6	(1.0)	84.4	(1.0)	11.0	(1.2)	89.0	(1.2)	9.3	(1.0)	90.7	(1.0)	19.7	(1.4)	80.3	(1.4)
United Kingdom																
England	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Northern Ireland	m	m	m	m	m	m	m	m	m	m (O.F.)	m	m (O.E)	m	m	m	m (0.7)
Scotland*	15.1	(0.7)	84.9	(0.7)	14.6	(8.0)	85.4	(8.0)	8.7	(0.5)	91.3	(0.5)	16.8	(0.7)	83.2	(0.7)
Wales	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

<sup>\*</sup> PISA adjudicated region.

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of awareness of intercultural communication is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B2.4.1 [4/6] **Awareness of intercultural communication** Based on students' reports

_	ased on students reports																
					Pe	ercentage whose n				d/agreed from the				le			
		"I carefu	lly observ	e their re	actions"			eck that v g each ot ctly"		"I listen	carefully	to what th	ney say"	"I cho	ose my w	ords care	fully"
		Disag	disagree	Agre strongly	y agree	Disagr strongly	disagree	Agre strongly	/ agree	Disagi strongly	disagree	Agre strongly	y agree	Disage strongly	disagree	Agre strongly	agree
50	lycontina	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Argentina CABA*	19.2	(1.2)	80.8	(1.2)	18.0	(1.1)	82.0	(1.1)	12.0	(0.9)	88.0	(0.9)	18.1	(0.9)	81.9	(0.9)
art	CADA Cordoba*	21.7	(1.1)	78.3	` ′	22.2	(0.9)	77.8	(0.9)	17.0	(0.9)	83.0	(0.9)	22.0	(1.1)	78.0	(0.9)
	PBA*	20.6	` '		(1.1)	21.5	` ′	77.8 78.5	. ,		` '		` '		` ′	76.0 79.9	. ,
	гва" Tucuman*	22.0	(1.3) (1.2) †	79.4 78.0	(1.3) (1.2) †	23.1	(1.4)	76.9	(1.4) (1.4) †	14.7 17.3	(1.1)	85.3 82.7	(1.1) (1.0) †	20.1 22.9	(1.2)	79.9 77.1	(1.2) (1.2) †
	Brazil	22.0	(1.2) 1	70.0	(1.2) 1	23.1	(1.4) †	70.9	(1.4) 1	17.3	(1.0) †	02.7	(1.0) 1	22.9	(1.2) †	//.1	(1.2) 1
	Middle-West	18.4	(2 E) +	81.6	(2.5) †	14.8	(1.9) †	85.2	(1.9) †	15.4	(1.7) †	84.6	(1.7) †	17.7	(2.1) †	82.3	(2.1) †
	North	21.0	(2.5) † (1.9) †	79.0	(1.9) †	17.1	(1.7) †	82.9	(1.9) †	18.1	(1.7) †	81.9	(1.7) †	22.8		77.2	(2.1) †
	Northeast	19.9	` ′	80.1	` ′	16.8	` ′	83.2	(1.0) †	16.2	(0.9) †	83.8	(0.9) †	20.7	(2.1) † (1.0) †	79.3	(1.0) †
	South	13.6	(1.1) † (1.2) †	86.4	(1.1) † (1.2) †	13.3	(1.0) † (1.2) †	86.7	(1.0) †	11.0	(0.9) 1	89.0	(0.9) 1	20.7	(1.0) †	79.3	(1.0) †
	Southeast	17.1	(0.8) †	82.9	(0.8) †	16.3	(0.8) †	83.7	(0.8) †	13.0	(0.8) †	87.0	(0.8) †	21.4	(0.9) †	78.6	(0.9) †
,	ndonesia	17.1	(0.6) 1	02.9	(0.6) 1	10.5	(0.0) 1	03.7	(0.6) 1	13.0	(0.0) 1	67.0	(0.0) 1	21.4	(0.9) 1	76.0	(0.9) 1
		12.9	(1.0)	87.1	(1.0)	10.8	(1.0)	89.2	(1.0)	9.2	(0.7)	90.8	(0.7)	10.1	(1.0)	89.9	(1.0)
	DI Yogyakarta DKI Jakarta	10.2	(0.9)	89.8	(1.0)	9.8	(1.0)	90.2	(1.0)	6.6	(0.7) (0.6)	90.8	(0.7) (0.6)	10.1	(1.0) (0.9)	89.9	(1.0) (0.9)
	(azakhstan	10.2	(0.9)	09.0	(0.9)	9.0	(0.0)	90.2	(0.0)	0.0	(0.0)	93.4	(0.0)	10.1	(0.9)	09.9	(0.9)
	Akmola region	29.0	(1.7) +	71.0	(1.7) +	21.1	(1 0) +	78.9	(1 0) +	18.7	(1.0) +	81.3	(1.0) +	23.4	(2.0) +	76.6	(2.0) †
	Aktobe region	29.0	(1.7) † (1.7)	70.8	(1.7) † (1.7)	24.9	(1.8) † (1.5)	75.1	(1.8) † (1.5)	18.8	(1.9) † (1.5)	81.2	(1.9) † (1.5)	22.4	(2.0) † (1.0)	77.6	(1.0)
	Almaty	26.6	(2.0)	73.4	(2.0)	20.1	(1.8)	79.9	(1.8)	18.1	(2.0)	81.9	(2.0)	22.4	(1.0)	78.0	(1.0)
	Almaty region	28.3	(1.8)	73.4	(2.0)	23.3	(1.0)	79.9 76.7	(1.8)	17.5	(2.0)	82.5	(2.0)	21.3	(1.2)	78.7	(1.2)
	Astana Astana	26.2	(1.2)	73.8	(1.0)	21.5	(1.3)	78.5	(1.3)	16.7	(1.3)	83.3	(1.3)	23.1	(1.8)	76.9	(1.8)
	Atyrau region	31.4	(1.8)	68.6	(1.8)	26.4	(2.3)	73.6	(2.3)	22.8	(1.6)	77.2	(1.6)	24.0	(1.4)	76.0	(1.4)
	East-Kazakhstan region	26.0	(2.0)	74.0	(2.0)	22.2	(1.7)	77.8	(1.7)	18.0	(1.4)	82.0	(1.4)	21.9	(1.4)	78.1	(1.4)
	Karagandy region	29.8	(2.0)	70.2	(2.0)	20.9	(2.0)	79.1	(2.0)	18.5	(1.4)	81.5	(1.4)	24.4	(1.9)	75.6	(1.9)
	Kostanay region	26.8	(1.3)	73.2	(1.3)	21.2	(1.4)	78.8	(1.4)	17.9	(1.7)	82.1	(1.7)	23.6	(1.4)	76.4	(1.4)
	Kyzyl-Orda region	24.9	(1.3)	75.1	(1.3)	21.5	(1.4)	78.5	(1.4)	17.3	(1.0)	82.6	(1.0)	17.5	(1.4)	82.5	(1.0)
	Manqistau region	33.3	(2.3)	66.7	(2.3)	25.0	(1.8)	75.0	(1.8)	23.0	(1.8)	77.0	(1.8)	24.3	(1.7)	75.7	(1.7)
	North-Kazakhstan region	27.8	(1.5)	72.2	(1.5)	22.9	(1.4)	77.1	(1.4)	18.6	(1.3)	81.4	(1.3)	24.2	(1.3)	75.8	(1.7)
	Pavlodar region	30.4	(1.9)	69.6	(1.9)	23.8	(1.7)	76.2	(1.7)	20.5	(1.6)	79.5	(1.6)	25.3	(1.9)	74.7	(1.9)
	South-Kazakhstan region	33.2	(2.1)	66.8	(2.1)	24.0	(1.6)	76.2	(1.7)	20.3	(1.0)	79.6	(1.0)	22.1	(1.6)	77.9	(1.6)
	West-Kazakhstan region	29.8	(1.7)	70.2	(1.7)	22.3	(1.0)	77.7	(1.0)	20.4	(2.2)	79.0	(2.2)	23.5	(1.5)	76.5	(1.5)
	Zhambyl region	24.7	(1.4)	75.3	(1.7)	22.9	(1.8)	77.1	(1.7)	17.0	(1.1)	83.0	(1.1)	17.8	(1.6)	82.2	(1.6)
	Russia	24.7	(1.4)	1 J.J	(1.4)	22.3	(1.0)	//.1	(1.0)	17.0	(1.1)	0.00	(1.1)	17.0	(1.0)	02.2	(1.0)
	Moscow city	24.8	(0.7)	75.2	(0.7)	18.3	(0.5)	81.7	(0.5)	13.3	(0.5)	86.7	(0.5)	22.4	(0.7)	77.6	(0.7)
	Moscow region*	32.0	(1.2)	68.0	(1.2)	24.1	(1.5)	75.9	(0.5)	19.5	(1.3)	80.5	(0.3)	25.0	(1.2)	75.0	(1.2)
	Republic of Tatarstan*	31.3	(0.7)	68.7	(0.7)	23.8	(0.6)	76.2	(0.6)	18.6	(0.6)	81.4	(0.6)	24.4	(0.6)	75.6	(0.6)
_	Republic of Tuturstall	۵۱.۵	(0./)	00.7	(0.7)	23.0	(0.0)	/ 0.2	(0.0)	10.0	(0.0)	01.4	(0.0)	24.4	(0.0)	13.0	(0.0)

<sup>\*</sup> PISA adjudicated region.

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of awareness of intercultural communication is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

4. This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B2.4.1 [5/6] **Awareness of intercultural communication** Based on students' reports

·			Pe	ercentage o	f students w	no disagre	ed/agreed tha	it, when tal	king to peop	le		
	"1 0	nive concre	te examples to				nt from theirs,		"If there i		with commu	
	19		ny ideas"	,	"I ex	plain thing	s very carefully	/"			(e.g. by using J, writing etc.)	
	Disagre strongly d		Agree or stro	ngly agree S.E.	Disagre strongly di %		Agree or stroi	ngly agree	Disagre strongly di %		Agree or str	ongly agree
? Canada	70	3.E.	70	3.E.	70	3.E.	70	3.E.	70	3.E.	70	3.5.
Canada Alberta	17.6	(0.9)	82.4	(0.9)	15.2	(1.0)	84.8	(1.0)	11.2	(0.9)	88.8	(0.9)
British Columbia	20.1	(1.0)	79.9	(1.0)	19.1	(1.1)	80.9	(1.1)	12.6	(0.9)	87.4	(0.9)
Manitoba	19.9	(1.2)	80.1	(1.2)	20.5	(1.1)	79.5	(1.1)	14.6	(1.0)	85.4	(1.0)
New Brunswick	19.3	(1.6)	80.7	(1.6)	19.3	(1.4)	80.7	(1.4)	13.9	(1.1)	86.1	(1.1)
Newfoundland and Labrador	15.9	(1.5)	84.1	(1.5)	16.6	(1.5)	83.4	(1.5)	10.3	(1.1)	89.7	(1.1)
Nova Scotia	17.4	(0.9)	82.6	(0.9)	19.3	(1.1)	80.7	(1.1)	12.2	(1.0)	87.8	(1.0)
Ontario	18.1	(0.6)	81.9	(0.6)	16.9	(0.7)	83.1	(0.7)	11.3	(0.7)	88.7	(0.7)
Prince Edward Island	15.5	(2.2)	84.5	(2.2)	18.1	(2.3)	81.9	(2.3)	12.6	(2.1)	87.4	(2.1)
Quebec	13.1	(0.5)	86.9	(0.5)	18.6	(0.7)	81.4	(0.7)	11.3	(0.7)	88.7	(0.7)
Saskatchewan	19.3	(1.1)	80.7	(1.1)	18.5	(0.7)	81.5	(0.7)	13.8	(0.7)	86.2	(0.8)
Colombia	19.5	(1.1)	00.7	(1.1)	10.5	(0.5)	01.5	(0.5)	13.0	(0.0)	00.2	(0.0)
Bogotá	16.4	(1.1)	83.6	(1.1)	20.4	(1.2)	79.6	(1.2)	14.6	(1.0)	85.4	(1.0)
Italy	10.4	(1.1)	03.0	(1.1)	20.4	(1.2)	79.0	(1.2)	14.0	(1.0)	03.4	(1.0)
Bolzano	24.0	(1.4)	76.0	(1.4)	29.9	(1.4)	70.1	(1.4)	18.7	(1.2)	81.3	(1.2)
		(1.4)		(1.4)		(1.4)		(1.4)		(1.2)		(1.2)
Sardegna	17.4	(1.1)	82.6	(1.1)	25.3	(1.2)	74.7	(1.2)	16.0	(1.3)	84.0	(1.3)
Toscana	17.2	(1.3)	82.8	(1.3)	24.3	(1.3)	75.7	(1.3)	13.6	(1.0)	86.4	(1.0)
Trento	16.9	(1.3)	83.1	(1.3)	26.6	(1.3)	73.4	(1.3)	14.7	(1.3)	85.3	(1.3)
Spain	404	(4.4) ±	04.0	(4.4) ±	22.7	(4.4) ±	76.0	(4.4) ±	42.5	(4.4) ±	06.5	(4.4) ±
Andalusia	18.1	(1.1) †	81.9	(1.1) †	23.7	(1.4) †	76.3	(1.4) †	13.5	(1.1) †	86.5	(1.1) †
Aragon	16.9	(0.9)	83.1	(0.9)	23.0	(1.2)	77.0	(1.2)	12.2	(1.1)	87.8	(1.1)
Asturias Balancia Talancia	16.3	(0.8)	83.7	(0.8)	19.6	(0.8)	80.4	(0.8)	11.8	(0.8)	88.2	(0.8)
Balearic Islands	16.0	(1.0)	84.0	(1.0)	22.6	(1.2)	77.4	(1.2)	11.7	(0.9)	88.3	(0.9)
Basque Country	16.3	(0.9) †	83.7	(0.9) †	23.8	(0.9) †	76.2	(0.9) †	13.1	(0.7) †	86.9	(0.7) †
Canary Islands	15.1	(0.9)	84.9	(0.9)	21.7	(0.9)	78.3	(0.9)	12.5	(0.8)	87.5	(0.8)
Cantabria	14.2	(0.8)	85.8	(0.8)	17.8	(1.0)	82.2	(1.0)	9.5	(0.7)	90.5	(0.7)
Castile and Leon	14.1	(0.9)	85.9	(0.9)	17.4	(1.1)	82.6	(1.1)	9.5	(1.0)	90.5	(1.0)
Castile-La Mancha	16.2	(1.1)	83.8	(1.1)	20.5	(1.4)	79.5	(1.4)	11.5	(0.8)	88.5	(0.8)
Catalonia	18.4	(1.3)	81.6	(1.3)	26.8	(1.3)	73.2	(1.3)	13.5	(1.3)	86.5	(1.3)
Ceuta	19.3	(3.4) ‡	80.7	(3.4) ‡	25.5	(3.1) ‡	74.5	(3.1) ‡	15.4	(2.9) ‡	84.6	(2.9) ‡
Comunidad Valenciana	18.6	(1.2) †	81.4	(1.2) †	25.2	(1.5) †	74.8	(1.5) †	13.1	(1.1) †	86.9	(1.1) †
Extremadura	15.8	(1.0)	84.2	(1.0)	21.6	(1.1)	78.4	(1.1)	11.8	(1.0)	88.2	(1.0)
Galicia	17.6	(0.9)	82.4	(0.9)	19.5	(1.0)	80.5	(1.0)	10.3	(0.7)	89.7	(0.7)
La Rioja	12.9	(0.8)	87.1	(0.8)	18.2	(1.1)	81.8	(1.1)	10.2	(0.8)	89.8	(0.8)
Madrid	15.9	(0.8)	84.1	(0.8)	20.6	(0.7)	79.4	(0.7)	11.1	(0.5)	88.9	(0.5)
Melilla	14.4	(2.5)	85.6	(2.5)	16.9	(2.6)	83.1	(2.6)	8.7	(2.2)	91.3	(2.2)
Murcia	15.1	(0.9)	84.9	(0.9)	20.0	(1.0)	80.0	(1.0)	10.7	(8.0)	89.3	(0.8)
Navarre	15.7	(1.1)	84.3	(1.1)	20.6	(1.1)	79.4	(1.1)	11.6	(0.8)	88.4	(0.8)
United Kingdom												
England	m	m	m	m	m	m	m	m	m	m	m	m
Northern Ireland	m	m	m	m	m	m	m	m	m	m	m	m
Scotland*	18.4	(0.6)	81.6	(0.6)	17.9	(0.9)	82.1	(0.9)	15.3	(0.7)	84.7	(0.7)
Wales	m	m	m	m	m	m	m	m	m	m	m	m

<sup>\*</sup> PISA adjudicated region.

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of awareness of intercultural communication is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B2.4.1 [6/6] **Awareness of intercultural communication** Based on students' reports

				Per	centage of	students who	disagre <u>e</u>	d/agreed that	, when ta <u>lk</u>	ing to people			
					whose nati	ve language i	s different	from theirs, t	hey do the	following:			
		"I g	jive concret explain n	te examples to ny ideas"	,	"I exp	olain thing	s very carefully	<b>/</b> "	I find ways	around it (	with commun e.g. by using g writing etc.)"	
		Disagre strongly di	isagree	Agree or stro	3, 3	Disagre strongly di	sagree	Agree or stror	3, 3	Disagre strongly di	sagree	Agree or stroi	5,5
V Ara	entina	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
a -	ABA*	19.3	(0.9)	80.7	(0.9)	23.8	(0.8)	76.2	(0.8)	13.7	(0.9)	86.3	(0.9)
art S	ordoba*	22.2	(1.1)	77.8	(1.1)	24.8	(1.1)	75.2	(1.1)	18.2	(0.9)	81.8	(0.9)
	3A*	21.2	(0.9)	77.8	(0.9)	21.3	(1.1)	78.7	(1.1)	17.6	(1.2)	82.4	(1.2)
	oa Icuman*	22.4	(1.0) †	77.6	(1.0) †	23.2	(1.2) †	76.7	(1.2) †	19.1	(1.2) †	80.9	(1.2) †
Braz		22.4	(1.0) 1	//.0	(1.0) 1	23.2	(1.2) 1	70.0	(1.2) 1	13.1	(1.2) 1	00.9	(1.2) 1
	iiddle-West	15.6	(1.9) †	84.4	(1.9) †	21.3	(1.7) †	78.7	(1.7) †	14.8	(2.0) †	85.2	(2.0) †
	orth	22.0	(1.4) †	78.0	(1.4) †	24.4	(2.1) †	75.6	(2.1) †	17.3	(1.8) †	82.7	(1.8) †
	ortheast	20.2	(1.4) †	79.8	(1.4) 1	21.1	(1.1) †	78.9	(1.1) †	18.2	(0.9) †	81.8	(0.9) †
	outh	17.5	(1.5) †	82.5	(1.5) †	22.8	(1.1) †	77.2	(1.5) †	14.7	(1.4) †	85.3	(1.4) †
	outheast	17.3	(0.8) †	82.8	(0.8) †	21.2	(0.8) †	78.8	(0.8)	16.2	(0.6) †	83.8	(0.6) †
	onesia	17.2	(0.0) 1	02.0	(0.6) 1	21.2	(0.0) 1	70.0	(0.6) 1	10.2	(0.0) 1	03.0	(0.0) 1
	Yoqyakarta	11.3	(0.9)	88.7	(0.9)	8.9	(0.6)	91.1	(0.6)	10.9	(0.9)	89.1	(0.9)
	a Jakarta A Jakarta	8.9	(0.9)	91.1	(0.9)	8.2	(0.8)	91.8	(0.0)	10.9	(0.9)	90.0	(1.0)
	akhstan	0.9	(0.9)	91.1	(0.9)	0.2	(0.0)	91.0	(0.6)	10.0	(1.0)	90.0	(1.0)
	akiistaii amola region	21.1	(1.7) †	78.9	(1.7) †	22.4	(1.7) †	77.6	(1.7) †	22.2	(1.8) †	77.8	(1.8) †
	anota region atobe region	18.2	(1.7) 1	81.8	(1.7)	23.4	(2.0)	76.6	(2.0)	20.1	(1.5)	77.8	(1.5)
	maty	17.4	(1.3)	82.6	(1.3)	23.4	(1.4)	76.8	(1.4)	18.4	(1.1)	81.6	(1.1)
	maty region	16.3	(1.5)	83.7	(1.5)	18.3	(1.4)	81.7	(1.4)	17.2	(2.0)	82.8	(2.0)
	tana	20.5	(1.6)	79.5	(1.6)	25.8	(1.7)	74.2	(1.7)	19.1	(2.0)	80.9	(2.0)
	yrau region	20.3	(1.6)	79.3	(1.6)	24.8	(1.5)	75.2	(1.5)	24.5	(1.7)	75.5	(1.7)
	ıst-Kazakhstan region	16.4	(1.5)	83.6	(1.5)	21.3	(1.5)	78.7	(1.5)	18.0	(1.6)	82.0	(1.7)
	ragandy region	19.3	(1.8)	80.7	(1.8)	24.0	(1.7)	76.7	(1.7)	21.3	(2.0)	78.7	(2.0)
	estanay region	19.0	(1.3)	81.0	(1.3)	24.3	(1.6)	75.7	(1.6)	20.5	(1.2)	79.5	(1.2)
	zyl-Orda region	15.7	(1.2)	84.3	(1.2)	15.3	(1.1)	84.7	(1.0)	16.8	(1.4)	83.2	(1.4)
•	angistau region	21.3	(1.2)	78.7	(1.2)	24.8	(1.1)	75.2	(1.1)	21.3	(1.4)	78.7	(1.4)
	orth-Kazakhstan region	20.3	(1.5)	79.7	(1.5)	26.8	(1.7)	73.2	(1.7)	23.0	(1.7)	77.0	(1.7)
	vlodar region	20.8	(1.5)	79.2	(1.5)	24.5	(1.4)	75.5	(1.4)	23.7	(1.7)	76.3	(1.7)
	uth-Kazakhstan region	18.5	(1.3)	81.5	(1.3)	19.4	(1.8)	80.6	(1.8)	17.4	(1.5)	82.6	(1.5)
	est-Kazakhstan region	20.1	(1.5)	79.9	(1.5)	23.5	(1.9)	76.5	(1.9)	20.7	(1.4)	79.3	(1.4)
	nambyl region	15.9	(1.5)	84.1	(1.5)	17.1	(1.3)	82.9	(1.3)	17.0	(0.9)	83.0	(0.9)
Russ	, ,	15.5	(1.5)	04.1	(1.5)	17.1	(0.1)	02.3	(1.5)	17.0	(0.5)	05.0	(0.5)
	oscow city	18.1	(0.5)	81.9	(0.5)	30.0	(0.6)	70.0	(0.6)	15.9	(0.6)	84.1	(0.6)
	oscow city oscow region*	22.5	(1.0)	77.5	(1.0)	29.9	(1.2)	70.0	(1.2)	19.9	(1.1)	80.1	(1.1)
	epublic of Tatarstan*	20.8	(0.6)	79.2	(0.6)	30.6	(0.6)	69.4	(0.6)	21.0	(0.6)	79.0	(0.6)

<sup>\*</sup> PISA adjudicated region.

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of awareness of intercultural communication is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

 $<sup>4. \</sup> This \ measure \ corresponds \ to \ the \ intra-class \ correlation \ (rho), \ multiplied \ by \ 100.$ 

Table VI.B2.5.1 [1/6] Agency regarding global issues

						Global mi	ndedness					
								Variation in	n the index <sup>1</sup>			
	Mean		Standard		Total va		Variation scho	ools <sup>3</sup>	sch		Proport variation between	that lies schools <sup>4</sup>
	Mean	S.E.	S.D.	S.E.	Variance	S.E.	Variance	S.E.	Variance	S.E.	%	S.E.
Canada Alberta	0.17	(0.00)	1.00	(0.00)	1.10	(0.00)	0.04	(0.04)	1.10	(0.05)	0.7	(0.6)
	0.17	(0.02)	1.08	(0.03)	1.18	(0.06)	0.01	(0.01)	1.16	(0.05)	0.7	(0.6)
British Columbia	0.14	(0.03)	0.97	(0.03)	0.94	(0.05)	0.02	(0.01)	0.93	(0.05)	1.8	(1.1)
Manitoba	0.14	(0.03)	1.05	(0.03)	1.10	(0.05)	0.01	(0.01)	1.14	(0.07)	0.5	(0.8)
New Brunswick	0.09	(0.03)	1.08	(0.03)	1.16	(0.07)	0.04	(0.02)	1.14	(0.07)	3.1	(1.6)
Newfoundland and Labrador	0.10	(0.03)	0.93	(0.03)	0.86	(0.06)	0.01	(0.01)	0.86	(0.05)	0.8	(1.1)
Nova Scotia	0.07	(0.03)	0.99	(0.03)	0.98	(0.06)	0.02	(0.02)	0.96	(0.06)	1.6	(1.8)
Ontario	0.15	(0.02)	1.05	(0.02)	1.10	(0.04)	0.01	(0.01)	1.09	(0.04)	1.0	(0.5)
Prince Edward Island	0.04	(0.07)	0.97	(0.05)	0.96	(0.12)	0.00	C	0.96	(0.18)	0.0	C
Quebec	0.26	(0.03)	1.09	(0.02)	1.19	(0.04)	0.03	(0.01)	1.16	(0.04)	2.6	(8.0)
Saskatchewan	0.05	(0.03)	1.04	(0.02)	1.08	(0.05)	0.01	(0.01)	1.08	(0.05)	1.2	(0.6)
Colombia												
Bogotá	0.18	(0.02)	0.90	(0.02)	0.81	(0.04)	0.02	(0.01)	0.78	(0.04)	2.6	(1.0)
Italy												
Bolzano	-0.17	(0.03)	0.91	(0.02)	0.83	(0.04)	0.04	(0.02)	0.78	(0.05)	4.9	(2.0)
Sardegna	-0.17	(0.03) †	0.93	(0.03) †	0.87	(0.05)	0.01	(0.01) †	0.84	(0.06) †	1.0	(8.0)
Toscana	-0.08	(0.03)	0.82	(0.02)	0.67	(0.04) †	0.01	(0.01)	0.65	(0.04)	1.8	(1.2)
Trento	-0.06	(0.02)	0.86	(0.03)	0.72	(0.05) †	0.04	(0.02)	0.67	(0.05)	5.4	(2.1)
Spain												
Andalusia	0.24	(0.03) †	1.10	(0.03) †	1.21	(0.06)	0.01	(0.01) †	1.21	(0.06) †	0.6	(0.8)
Aragon	0.24	(0.04)	1.08	(0.03)	1.16	(0.07)	0.02	(0.01)	1.14	(0.06)	1.5	(1.1)
Asturias	0.25	(0.02)	1.03	(0.02)	1.06	(0.04)	0.02	(0.01)	1.06	(0.05)	1.6	(1.0)
Balearic Islands	0.16	(0.03)	0.96	(0.03)	0.93	(0.06)	0.01	(0.01)	0.93	(0.06)	1.3	(0.7)
Basque Country	0.23	(0.02) †	1.01	(0.02) †	1.03	(0.04)	0.01	(0.01) †	1.02	(0.04) †	1.2	(0.7)
Canary Islands	0.35	(0.03)	1.00	(0.03)	1.00	(0.05)	0.00	С	1.00	(0.05)	0.0	С
Cantabria	0.25	(0.03)	1.01	(0.03)	1.02	(0.05)	0.00	С	1.01	(0.05)	0.0	C
Castile and Leon	0.28	(0.03)	0.94	(0.03)	0.89	(0.05)	0.01	(0.01)	0.88	(0.05)	1.2	(0.8)
Castile-La Mancha	0.27	(0.03)	0.99	(0.02)	0.98	(0.05)	0.01	(0.01)	0.96	(0.05)	0.9	(1.0)
Catalonia	0.08	(0.03) †	0.94	(0.03) †	0.89	(0.05)	0.01	(0.01) †	0.89	(0.05) †	1.1	(1.1)
Ceuta	0.28	(0.11) ‡	1.15	(0.07) ‡	1.33	(0.16)	0.00	c ‡	1.33	(0.27) ‡	0.0	C
Comunidad Valenciana	0.22	(0.04) †		(0.03) †		(0.06)	0.01	(0.01) †	1.01	(0.06) †	0.9	(1.3)
Extremadura	0.26	(0.03)	0.99	(0.02)	0.99	(0.04)	0.00	(0.01)	0.99	(0.05)	0.2	(0.7)
Galicia	0.31	(0.03)	0.98	(0.02)	0.97	(0.05)	0.01	(0.01)	0.94	(0.04)	0.9	(0.8)
La Rioja	0.29	(0.02)	0.98	(0.02)	0.95	(0.05)	0.04	(0.01)	0.91	(0.06)	3.7	(1.5)
Madrid	0.29	(0.02)	1.01	(0.02)	1.02	(0.04)	0.02	(0.01)	1.00	(0.04)	1.5	(0.5)
Melilla	0.23	(0.02)		(0.02)		(0.04)	0.02	(0.01) c †		(0.04)	ł	(U.J)
Murcia	0.23	(0.07)	0.95	(0.07)	0.90	(0.15)	0.00	(0.01)	0.89	(0.03)	1.1	(0.9)
Navarre	0.27	(0.03)	1.03	(0.02)	1.06	(0.03)	0.01	(0.01)	1.03	(0.04)	1.5	(0.7)
United Kingdom	0.50	(0.03)	1.05	(0.03)	1.00	(0.07)	0.02	(0.01)	1.03	(0.03)	1.5	(0.7)
England	m	m	m	m	m	m	m	m	m	m	m	m
Northern Ireland			m m		m m	m					m	m
Northern Irelana Scotland*	m o o e	(0, 03)	m non	(0, 03)	m n o o a	m (0.04)	m 0.02	m (0.01)	m 0.91	(0 03)	m 2.7	m (0.9)
Scotiana" Wales	-0.05 m	(0.02) m	0.92 m	(0.02) m	0.84 m	(0.04) m	0.02 m	(0.01) m	0.81 m	(0.03) m	2.7 m	(0.8) m

<sup>\*</sup> PISA adjudicated region.

**Notes**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

See Table VI.B1.5.3 for national data.

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of global mindedness is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B2.5.1 [2/6] Agency regarding global issues

						Global mi	ndedness					
								Variation in	the index <sup>1</sup>			
	Mean		Standard		Total va		Variation scho	ols <sup>3</sup>	scho		Proport variation between	that lies schools <sup>4</sup>
	Mean	S.E.	S.D.	S.E.	Variance	S.E.	Variance	S.E.	Variance	S.E.	%	S.E.
Argentina  CABA*  Cordoba*												
E CABA*	0.00	(0.03)	0.89	(0.02)	0.80	(0.04)	0.02	(0.01)	0.78	(0.04)	2.2	(1.1)
	-0.04	(0.02)	0.91	(0.02)	0.82	(0.03)	0.02	(0.01)	0.80	(0.04)	2.2	(0.9)
PBA*	-0.07	(0.03) †	0.93	(0.02) †	0.86	(0.04)	0.01	(0.01) †	0.85	(0.04) †		(1.2)
Tucuman*	0.00	(0.03) †	0.94	(0.03) †	0.85	(0.05)	0.02	(0.01) †	0.82	(0.04) †	2.1	(1.3)
Brazil												
Middle-West	0.04	(0.06) †	0.92	(0.04) †	0.81	(0.08)	0.02	(0.02) †	0.78	(0.08) †	2.6	(2.0)
North	-0.01	(0.03) †	0.92	(0.04) †	0.85	(0.08)	0.00	(0.02) †	0.88	(0.07) †	0.3	(2.2)
Northeast	-0.06	(0.03) †	0.99	(0.02) †	0.99	(0.05)	0.04	(0.01) †	0.90	(0.04) †	4.0	(1.3)
South	-0.04	(0.03) †	0.95	(0.04) †	0.88	(0.07)	0.01	(0.01) †	0.86	(0.07) †	1.3	(1.4)
Southeast	-0.04	(0.02) †	0.96	(0.02) †	0.91	(0.04)	0.01	(0.01) †	0.90	(0.04) †	1.1	(0.8)
Indonesia												
DI Yogyakarta	0.01	(0.03)	0.81	(0.03)	0.66	(0.05) †	0.03	(0.01)	0.61	(0.05)	4.2	(1.0)
DKI Jakarta	0.05	(0.03)	0.82	(0.02)	0.67	(0.04) †	0.03	(0.01)	0.64	(0.04)	4.5	(1.4)
Kazakhstan												
Akmola region	-0.10	(0.04) †	1.05	(0.04) †	1.12	(0.08)	0.04	(0.02) †	1.09	(0.08) †	3.5	(1.6)
Aktobe region	-0.04	(0.04)	1.08	(0.04)	1.17	(0.09)	0.03	(0.01)	1.22	(0.08)	2.6	(1.0)
Almaty	-0.09	(0.04)	1.11	(0.03)	1.15	(0.08)	0.05	(0.02)	1.14	(0.09)	4.4	(1.7)
Almaty region	0.06	(0.05)	1.11	(0.03)	1.23	(80.0)	0.02	(0.02)	1.21	(0.10)	2.0	(1.4)
Astana	-0.13	(0.04)	1.09	(0.03)	1.20	(0.08)	0.03	(0.02)	1.17	(0.08)	2.7	(1.3)
Atyrau region	-0.12	(0.04)	1.06	(0.03)	1.08	(0.09)	0.03	(0.02)	1.08	(0.09)	2.7	(1.6)
East-Kazakhstan region	-0.03	(0.04)	1.10	(0.03)	1.21	(0.08)	0.03	(0.01)	1.22	(0.08)	2.4	(1.2)
Karagandy region	-0.15	(0.04)	1.02	(0.03)	1.04	(80.0)	0.04	(0.01)	0.99	(0.07)	3.5	(1.3)
Kostanay region	-0.08	(0.04)	1.15	(0.05)	1.31	(0.12)	0.05	(0.02)	1.28	(0.10)	3.8	(1.8)
Kyzyl-Orda region	0.20	(0.04)	1.22	(0.04)	1.57	(0.13)	0.06	(0.03)	1.54	(0.14)	3.8	(1.9)
Mangistau region	-0.02	(0.03)	1.15	(0.03)	1.33	(0.09)	0.01	(0.01)	1.36	(0.11)	0.7	(0.8)
North-Kazakhstan region	-0.15	(0.04)	1.09	(0.04)	1.25	(0.11)	0.02	(0.01)	1.12	(0.08)	2.1	(1.1)
Pavlodar region	-0.15	(0.04)	1.10	(0.03)	1.22	(0.07)	0.03	(0.02)	1.13	(0.10)	2.7	(1.3)
South-Kazakhstan region	0.08	(0.02)	1.11	(0.04)	1.22	(0.09)	0.00	(0.01)	1.22	(0.06)	0.1	(0.5)
West-Kazakhstan region	0.02	(0.05)	1.17	(0.03)	1.37	(0.07)	0.09	(0.04)	1.24	(0.07)	7.0	(2.8)
Zhambyl region	0.09	(0.04) †	1.16	(0.04) †	1.31	(0.10)	0.03	(0.02) †	1.31	(0.10) †	1.9	(1.2)
Russia		(,		(,		,		, ,		( , -		, , ,
Moscow city	-0.31	(0.01) †	0.96	(0.02) †	0.92	(0.04)	0.00	c t	0.92	(0.03) †	0.0	С
Moscow region*	-0.29	(0.03)	1.06	(0.03)	1.12	(0.06)	0.00	(0.01)	1.08	(0.06)	0.3	(0.8)
Republic of Tatarstan*	-0.21	(0.02)	1.07	(0.02)	1.15	(0.04)	0.01	(0.01)	1.19	(0.04)	1.0	(0.5)

<sup>\*</sup> PISA adjudicated region.

**Notes**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

See Table VI.B1.5.3 for national data.

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of global mindedness is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B2.5.1 [3/6] **Agency regarding global issues** Based on students' reports

			Perc	entage of s	tudents who	disagreed	/agreed with	the followin	ng statement	s:		
	"I tl		self as a citizer world"	1	som	ie people ii , I feel a re	oor conditions n the world liv sponsibility to g about it"	e			viour can imp er countries"	act
	Disagre strongly di	isagree	Agree or stro	3, 3	Disagre strongly d	isagree	Agree or stro	3, 3	Disagre strongly d	isagree	Agree or stro	<u> </u>
Consider	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Canada Alberta	45.7	(4.0)	04.2	(4.0)	20.2	(4.0)	60.7	(4.0)	22.2	(0.0)	67.7	(0.0)
	15.7	(1.0)	84.3	(1.0)	30.3	(1.0)	69.7	(1.0)	32.3	(0.9)	67.7	(0.9)
British Columbia	14.5	(0.8)	85.5	(0.8)	31.1	(1.2)	68.9	(1.2)	35.4	(1.3)	64.6	(1.3)
Manitoba	15.5	(1.0)	84.5	(1.0)	29.3	(1.2)	70.7	(1.2)	34.8	(1.3)	65.2	(1.3)
New Brunswick	16.2	(1.3)	83.8	(1.3)	30.3	(1.3)	69.7	(1.3)	38.3	(1.9)	61.7	(1.9)
Newfoundland and Labrador	12.7	(1.3)	87.3	(1.3)	29.9	(1.8)	70.1	(1.8)	37.7	(1.8)	62.3	(1.8)
Nova Scotia	15.5	(1.2)	84.5	(1.2)	33.3	(1.4)	66.7	(1.4)	40.5	(1.5)	59.5	(1.5)
Ontario	16.7	(8.0)	83.3	(0.8)	29.9	(0.9)	70.1	(0.9)	33.0	(1.0)	67.0	(1.0)
Prince Edward Island	13.5	(1.6)	86.5	(1.6)	32.1	(2.4)	67.9	(2.4)	37.4	(2.6)	62.6	(2.6)
Quebec	13.7	(0.6)	86.3	(0.6)	26.4	(1.0)	73.6	(1.0)	35.0	(0.9)	65.0	(0.9)
Saskatchewan	16.2	(0.9)	83.8	(0.9)	33.9	(1.2)	66.1	(1.2)	34.9	(1.3)	65.1	(1.3)
Colombia												
Bogotá	15.4	(0.7)	84.6	(0.7)	22.8	(1.0)	77.2	(1.0)	33.4	(1.1)	66.6	(1.1)
Italy												
Bolzano	31.2	(1.5)	68.8	(1.5)	38.9	(1.6)	61.1	(1.6)	47.9	(1.4)	52.1	(1.4)
Sardegna	21.9	(1.2) †	78.1	(1.2) †	35.9	(1.1) †	64.1	(1.1) †	50.4	(1.4) †	49.6	(1.4)
Toscana	20.9	(1.7)	79.1	(1.7)	30.1	(1.3)	69.9	(1.3)	45.0	(1.5)	55.0	(1.5)
Trento	20.9	(1.4)	79.1	(1.4)	31.7	(1.6)	68.3	(1.6)	44.9	(1.7)	55.1	(1.7)
Spain												
Andalusia	15.0	(0.9) †	85.0	(0.9) †	27.7	(1.4) †	72.3	(1.4) †	36.7	(1.4) †	63.3	(1.4)
Aragon	10.9	(1.0)	89.1	(1.0)	27.0	(1.3)	73.0	(1.3)	36.9	(1.6)	63.1	(1.6)
Asturias	12.2	(0.7)	87.8	(0.7)	29.2	(1.2)	70.8	(1.2)	37.7	(1.0)	62.3	(1.0)
Balearic Islands	11.3	(1.0)	88.7	(1.0)	27.3	(1.2)	72.7	(1.2)	44.4	(1.1)	55.6	(1.1)
Basque Country	14.5	(0.9) †	85.5	(0.9) †	26.4	(1.0) †	73.6	(1.0) †	37.4	(1.3) †	62.6	(1.3)
Canary Islands	9.7	(0.9)	90.3	(0.9)	23.9	(1.1)	76.1	(1.1)	33.7	(1.2)	66.3	(1.2)
Cantabria	10.2	(1.0)	89.8	(1.0)	26.7	(1.2)	73.3	(1.2)	39.5	(1.7)	60.5	(1.7)
Castile and Leon	8.5	(0.8)	91.5	(0.8)	24.6	(1.3)	75.4	(1.3)	37.1	(1.3)	62.9	(1.3)
Castile-La Mancha	9.7	(1.1)	90.3	(1.1)	23.4	(1.3)	76.6	(1.3)	36.5	(1.4)	63.5	(1.4)
Catalonia	12.6	(1.2) †	87.4	(1.2) †	30.0	(1.6) †	70.0	(1.6) †	43.7	(1.4) †	56.3	(1.4)
Ceuta	21.9	(4.1) ‡	78.1	(4.1) ‡	31.4	(4.7) ‡	68.6	(4.7) ‡	36.1	(4.6) ‡	63.9	(4.6)
Comunidad Valenciana	10.9	(0.9) †		(0.9) †	27.2	(1.5) †	72.8	(1.5) †	37.4	(1.6) †	62.6	(1.6)
Extremadura	9.7	(1.1)	90.3	(1.1)	23.9	(1.1)	76.1	(1.1)	36.3	(1.4)	63.7	(1.4)
Galicia	8.9	(0.8)	91.1	(0.8)	23.2	(1.1)	76.8	(1.1)	34.2	(1.1)	65.8	(1.1)
La Rioja	8.7	(0.8)	91.3	(0.8)	25.4	(1.3)	74.6	(1.3)	36.3	(1.3)	63.7	(1.3)
Madrid	10.5	(0.7)	89.5	(0.7)	24.6	(0.9)	75.4	(0.9)	37.4	(1.1)	62.6	(1.1)
Melilla	9.9	(2.4) †		(2.4) †	19.7	(3.2) †		(3.2) †	43.5	(4.1) †	56.5	(4.1)
Murcia	8.6	(0.6)	91.4	(0.6)	25.3	(1.3)	74.7	(1.3)	38.7	(1.4)	61.3	(1.4)
Navarre	12.4	(1.1)	87.6	(1.1)	23.7	(1.1)	76.3	(1.1)	31.4	(1.2)	68.6	(1.2)
United Kingdom	12.1	(1.1)	37.3	()	23.7	(1.1)	, 0.5	()	31.1	(1.4)	30.0	(1.2)
England	m	m	m	m	m	m	m	m	m	m	m	m
Northern Ireland	m	m	m	m	m	m	m	m	m	m	m	m
Scotland*	18.6	(0.7)	81.4	(0.7)	33.6	(1.1)	66.4	(1.1)	47.3	(1.1)	52.7	(1.1)
Wales	m	(0.7) m	m	(0.7) m	 m	(1.1) m	m	(1.1) m	47.5 m	(1.1) m	m	(1.1) m

<sup>\*</sup> PISA adjudicated region.

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of global mindedness is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

 $<sup>4. \</sup> This \ measure \ corresponds \ to \ the \ intra-class \ correlation \ (rho), \ multiplied \ by \ 100.$ 

Table VI.B2.5.1 [4/6] Agency regarding global issues

Bused on students reports			Perc	entage of s	tudents who	disagreed	/agreed with t	the followir	ng statements	5:		
	"I ti		self as a citizen world"		som	ie people ii	oor conditions n the world live sponsibility to g about it"	e			viour can imp er countries"	act
	Disagre strongly di	isagree	Agree or stror	3, 3	Disagre strongly di	isagree	Agree or stroi	3, 3	Disagre strongly di	sagree	Agree or stro	
10. A	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Cordoba*	47.4	(4.4)	02.6	(4.4)	22.5	(4.0)	67.5	(4.0)	40.0	(4.4)	F2.0	(4.4)
된 CABA*	17.4	(1.1)	82.6	(1.1)	32.5	(1.9)	67.5	(1.9)	48.0	(1.4)	52.0	(1.4)
	20.1	(1.2)	79.9	(1.2)	32.9	(1.2)	67.1	(1.2)	44.3	(1.3)	55.7	(1.3)
PBA*	21.3	(1.2) †	1	(1.2) †	31.1	(1.2) †		(1.2) †	47.9	(1.4) †	52.1	(1.4) †
Tucuman*	22.1	(1.4) †	77.9	(1.4) †	30.6	(1.7) †	69.4	(1.7) †	42.6	(1.5) †	57.4	(1.5) †
Brazil Middle-West	10.0	(2.5) +	00.2	(2.5) +	24.4	(2.0) +	70.6	(2.0) +	40.6	(2.4) +	F0.4	(2.4) ±
	19.8	(2.5) †		(2.5) †	21.4	(2.9) †		(2.9) †	49.6	(2.4) †	50.4	(2.4) †
North	23.8	(1.9) †	76.2	(1.9) †	20.4	(2.1) †	1	(2.1) †	52.4	(2.0) †	47.6	(2.0) †
Northeast	25.1	(1.4) †	1	(1.4) †	22.8	(1.0) †		(1.0) †	52.1	(1.4) †	47.9	(1.4) †
South	19.1	(1.4) †	80.9	(1.4) †	21.3	(1.5) †	78.7	(1.5) †	53.6	(1.5) †	46.4	(1.5) †
Southeast	22.4	(1.0) †	77.6	(1.0) †	22.8	(0.8) †	77.2	(0.8) †	55.6	(1.2) †	44.4	(1.2) †
Indonesia	42.7	(4.0)	07.2	(4.0)	22.2	(4.4)	76.0	(4.4)	20.4	(4.5)	60.0	(4.5)
DI Yogyakarta	12.7	(1.0)	87.3	(1.0)	23.2	(1.4)	76.8	(1.4)	30.1	(1.5)	69.9	(1.5)
DKI Jakarta	15.5	(1.1)	84.5	(1.1)	21.6	(1.3)	78.4	(1.3)	33.5	(1.5)	66.5	(1.5)
Kazakhstan	26.2	(2 0) ±	72.7	(2.0) +	22.7	(1 7) ±	66.2	(1.7) +	42.7	(1.6) +	56.3	(1 C) ±
Akmola region	26.3	(2.0) †	73.7	(2.0) †	33.7	(1.7) †	66.3	(1.7) †	43.7	(1.6) †	56.3	(1.6) †
Aktobe region	24.9	(1.5)	75.1	(1.5)	28.6	(1.4)	71.4	(1.4)	38.0	(1.9)	62.0	(1.9)
Almaty	23.8	(1.2)	76.2	(1.2)	34.4	(1.8)	65.6	(1.8)	42.7	(1.9)	57.3	(1.9)
Almaty region	24.5	(2.3)	75.5	(2.3)	23.4	(2.4)	76.6	(2.4)	33.9	(2.2)	66.1	(2.2)
Astana	25.5	(1.8)	74.5	(1.8)	34.9	(1.5)	65.1	(1.5)	43.2	(2.2)	56.8	(2.2)
Atyrau region	27.8	(1.4)	72.2	(1.4)	28.0	(1.9)	72.0	(1.9)	41.3	(2.0)	58.7	(2.0)
East-Kazakhstan region	23.8	(2.1)	76.2	(2.1)	33.6	(2.2)	66.4	(2.2)	40.2	(2.2)	59.8	(2.2)
Karagandy region	24.9	(1.6)	75.1	(1.6)	37.2	(1.7)	62.8	(1.7)	43.9	(1.6)	56.1	(1.6)
Kostanay region	23.9	(1.5)	76.1	(1.5)	33.6	(1.5)	66.4	(1.5)	42.8	(2.1)	57.2	(2.1)
Kyzyl-Orda region	19.3	(1.1)	80.7	(1.1)	19.8	(1.2)	80.2	(1.2)	27.1	(1.7)	72.9	(1.7)
Mangistau region	27.3	(1.5)	72.7	(1.5)	29.3	(1.3)	70.7	(1.3)	36.7	(1.6)	63.3	(1.6)
North-Kazakhstan region	24.2	(1.3)	75.8	(1.3)	39.1	(2.2)	60.9	(2.2)	45.1	(2.0)	54.9	(2.0)
Pavlodar region	28.4	(1.7)	71.6	(1.7)	37.4	(1.4)	62.6	(1.4)	41.0	(2.1)	59.0	(2.1)
South-Kazakhstan region	23.6	(1.5)	76.4	(1.5)	23.3	(1.5)	76.7	(1.5)	32.5	(2.0)	67.5	(2.0)
West-Kazakhstan region	23.2	(1.4)	76.8	(1.4)	29.1	(2.3)	70.9	(2.3)	36.6	(1.6)	63.4	(1.6)
Zhambyl region	22.7	(1.8) †	77.3	(1.8) †	24.9	(1.9) †	75.1	(1.9) †	35.8	(2.3) †	64.2	(2.3) †
Russia	25.5	(0.0)	64-	(0.0)	10.6	(0.0)	50.6	(0.0)	50-	(0.7)	44.5	(0.7)
Moscow city	35.3	(0.9) †	1	(0.9) †	42.0	(0.8) †		(0.8) †	58.7	(0.7) †	41.3	(0.7) †
Moscow region*	36.2	(1.2)	63.8	(1.2)	41.2	(1.0)	58.8	(1.0)	54.5	(1.4)	45.5	(1.4)
Republic of Tatarstan*	29.0	(0.6)	71.0	(0.6)	36.0	(0.7)	64.0	(0.7)	50.8	(0.8)	49.2	(8.0)

<sup>\*</sup> PISA adjudicated region.

**Notes**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

See Table VI.B1.5.3 for national data.

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of global mindedness is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B2.5.1 [5/6] **Agency regarding global issues** Based on students' reports

·			Perc	entage of s	tudents who	disagreed.	/agreed with t	the followin	ng statement	s:		
	are	e known to kplace con	ott companies o provide poor ditions for the oyees"				thing about th f the world"	e			er the global mportant to m	ne"
	Disagre strongly di	isagree	Agree or stro		Disagre strongly di	sagree	Agree or stro		Disagre strongly d	isagree	Agree or stro	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Canada Alberta												
	24.4	(1.0)	75.6	(1.0)	34.3	(1.1)	65.7	(1.1)	21.8	(1.0)	78.2	(1.0)
British Columbia	26.2	(1.2)	73.8	(1.2)	33.6	(1.3)	66.4	(1.3)	20.6	(1.2)	79.4	(1.2)
Manitoba	29.0	(1.2)	71.0	(1.2)	34.4	(1.2)	65.6	(1.2)	21.9	(1.2)	78.1	(1.2)
New Brunswick	34.1	(1.5)	65.9	(1.5)	38.0	(1.6)	62.0	(1.6)	24.5	(1.4)	75.5	(1.4)
Newfoundland and Labrador	28.1	(1.6)	71.9	(1.6)	36.1	(1.7)	63.9	(1.7)	23.0	(1.6)	77.0	(1.6)
Nova Scotia	28.4	(1.2)	71.6	(1.2)	40.3	(1.7)	59.7	(1.7)	24.0	(1.4)	76.0	(1.4)
Ontario	24.7	(0.9)	75.3	(0.9)	32.7	(1.1)	67.3	(1.1)	21.9	(8.0)	78.1	(8.0)
Prince Edward Island	28.5	(2.4)	71.5	(2.4)	38.5	(3.0)	61.5	(3.0)	23.8	(2.2)	76.2	(2.2)
Quebec	27.3	(0.9)	72.7	(0.9)	39.9	(1.1)	60.1	(1.1)	15.2	(8.0)	84.8	(8.0)
Saskatchewan	33.6	(1.2)	66.4	(1.2)	35.6	(1.4)	64.4	(1.4)	25.5	(1.3)	74.5	(1.3)
Colombia												
Bogotá	39.3	(1.1)	60.7	(1.1)	27.7	(1.3)	72.3	(1.3)	12.3	(1.0)	87.7	(1.0)
Italy												
Bolzano	39.7	(1.7)	60.3	(1.7)	50.3	(1.5)	49.7	(1.5)	27.3	(1.4)	72.7	(1.4)
Sardegna	43.7	(1.4) †	56.3	(1.4) †	43.8	(1.3) †	56.2	(1.3) †	30.9	(1.5) †	69.1	(1.5) †
Toscana	41.0	(1.3)	59.0	(1.3)	39.3	(1.4)	60.7	(1.4)	27.0	(1.3)	73.0	(1.3)
Trento	40.7	(1.8)	59.3	(1.8)	35.4	(1.6)	64.6	(1.6)	26.9	(1.5)	73.1	(1.5)
Spain												
Andalusia	33.2	(0.8) †	66.8	(0.8) †	32.8	(1.4) †	67.2	(1.4) †	16.7	(1.0) †	83.3	(1.0) †
Aragon	30.5	(1.5)	69.5	(1.5)	32.7	(1.3)	67.3	(1.3)	16.7	(1.1)	83.3	(1.1)
Asturias	28.9	(1.2)	71.1	(1.2)	33.7	(1.1)	66.3	(1.1)	18.2	(1.0)	81.8	(1.0)
Balearic Islands	37.2	(1.2)	62.8	(1.2)	31.5	(1.2)	68.5	(1.2)	17.1	(0.9)	82.9	(0.9)
Basque Country	28.4	(1.1) †		(1.1) †	32.0	(1.1) †	68.0	(1.1) †	17.3	(0.8) †	82.7	(0.8) †
Canary Islands	29.2	(1.4)	70.8	(1.4)	29.2	(1.2)	70.8	(1.2)	13.2	(1.0)	86.8	(1.0)
Cantabria	27.8	(1.2)	72.2	(1.2)	32.3	(1.2)	67.7	(1.2)	16.9	(0.8)	83.1	(0.8)
Castile and Leon	26.6	(1.3)	73.4	(1.3)	31.2	(1.5)	68.8	(1.5)	13.7	(0.8)	86.3	(0.8)
Castile-La Mancha	28.1	(1.5)	71.9	(1.5)	33.5	(1.4)	66.5	(1.4)	14.1	(1.1)	85.9	(1.1)
Catalonia	37.2	(1.8) †		(1.8) †	39.6	(1.7) †	60.4	(1.7) †	21.8	(1.5) †	78.2	(1.5) †
Ceuta	32.3	(4.6) ‡		(4.6) ‡	30.0	(4.4) ‡	70.0	(4.4) ‡	19.0	(3.6) ‡		(3.6) ‡
Comunidad Valenciana	32.8	(1.9) †		(1.9) †	32.1	(1.9) †	67.9	(1.9) †	16.7	(1.5) †		(1.5) †
Extremadura	31.9	(1.4) †		(1.4) †	31.5	(1.2)	68.5	(1.2)	15.7	(1.0) †		(1.0) †
Galicia	27.1	(1.5)	72.9	(1.5)	33.6	(1.3)	66.4	(1.3)	13.7	(0.9)	86.2	(0.9)
La Rioja	26.7	(1.4)	73.3	(1.4)	32.4	(1.4)	67.6	(1.4)	14.3	(1.1)	85.7	(1.1)
Madrid	28.8	(0.8)	71.2	(0.8)	32.4	(0.9)	67.8	(0.9)	15.2	(0.7)	84.8	(0.7)
Melilla			1				ł					
Murcia	34.5	(3.7) †	1	(3.7) †	37.0	(3.6) †	63.0	(3.6) †	19.2	(3.0) †	80.8	(3.0) †
Murcia Navarre	29.1 29.2	(1.3)	70.9 70.8	(1.3)	32.1 29.1	(1.1)	67.9	(1.1)	14.1 16.1	(1.2)	85.9	(1.2)
	29.2	(1.4)	/0.6	(1.4)	29.1	(1.1)	70.9	(1.1)	16.1	(0.9)	83.9	(0.9)
United Kingdom												
England	m	m	m	m	m	m	m	m	m	m	m	m
Northern Ireland	m	m	m	m	m	m	m	m	m	m	m	m (1.0)
Scotland*	29.6	(1.0)	70.4	(1.0)	45.6	(1.1)	54.4	(1.1)	28.4	(1.0)	71.6	(1.0)
Wales	m	m	m	m	m	m	m	m	m	m	m	m

<sup>\*</sup> PISA adjudicated region.

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of global mindedness is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

 $<sup>4. \</sup> This \ measure \ corresponds \ to \ the \ intra-class \ correlation \ (rho), \ multiplied \ by \ 100.$ 

Table VI.B2.5.1 [6/6] Agency regarding global issues

•			Perc	entage of s	tudents who	disagreed	/agreed with t	the followin	ng statements	S:		
	are	known to kplace con	ott companies provide poor ditions for thei byees"				thing about th f the world"	e			er the global mportant to m	e"
	Disagre strongly di		Agree or stror	ngly agree S.E.	Disagre strongly di		Agree or stroi	ngly agree S.E.	Disagre strongly di %		Agree or stror	ngly agree S.E.
<b>2</b> Argentina	70	3.L.	70	J.L.	70	3.1.	70	3.6.	70	3.L.	70	J.L.
CABA*  Cordoba*	38.6	(1.2)	61.4	(1.2)	42.8	(1.4)	57.2	(1.4)	18.4	(1.2)	81.6	(1.2)
Cordoba*	43.5	(1.4)	56.5	(1.4)	38.4	(1.5)	61.6	(1.5)	21.3	(1.0)	78.7	(1.0)
PBA*	42.4	(1.3) †	57.6	(1.3) †	42.9	(1.2) †	57.1	(1.2) †	21.9	(1.2) †	78.1	(1.2) †
Tucuman*	43.3	(1.4) †	56.7	(1.4) †	37.5	(1.5) †	62.5	(1.5) †	20.7	(1.5) †	79.3	(1.5) †
Brazil	13.3	(1.1)	30.7	(1.1)	57.5	(1.5) 1	02.5	(1.5)	20.7	(1.5)	75.5	(1.5) 1
Middle-West	51.3	(2.5) †	48.7	(2.5) †	29.6	(2.0) †	70.4	(2.0) †	17.7	(2.2) †	82.3	(2.2) †
North	45.8	(2.9) †	54.2	(2.9) †	34.5	(2.4) †	65.5	(2.4) †	17.8	(2.0) †	82.2	(2.0) †
Northeast	50.6	(1.2) †	49.4	(1.2) †	36.3	(1.2) †	63.7	(1.2) †	17.8	(1.0) †	82.2	(1.0) †
South	48.4	(1.7) †	51.6	(1.7) †	36.9	(1.7) †	63.1	(1.7) †	20.0	(1.5) †	80.0	(1.5) †
Southeast	49.7	(1.2) †	50.3	(1.2) †	37.0	(1.1) †	63.0	(1.1) †	18.7	(0.8) †	81.3	(0.8) †
Indonesia												` '
DI Yoqyakarta	40.2	(1.6)	59.8	(1.6)	40.2	(1.9)	59.8	(1.9)	11.7	(0.9)	88.3	(0.9)
DKI Jakarta	39.5	(1.5)	60.5	(1.5)	41.9	(1.7)	58.1	(1.7)	11.8	(0.9)	88.2	(0.9)
Kazakhstan				. ,								
Akmola region	38.0	(2.4) †	62.0	(2.4) †	50.5	(1.7) †	49.5	(1.7) †	24.3	(1.6) †	75.7	(1.6) †
Aktobe region	37.2	(1.4)	62.8	(1.4)	46.5	(2.1)	53.5	(2.1)	22.2	(1.5)	77.8	(1.5)
Almaty	38.1	(1.9)	61.9	(1.9)	45.9	(2.1)	54.1	(2.1)	26.5	(1.4)	73.5	(1.4)
Almaty region	37.0	(1.7)	63.0	(1.7)	37.5	(1.4)	62.5	(1.4)	20.0	(1.9)	80.0	(1.9)
Astana	36.6	(1.7)	63.4	(1.7)	48.9	(1.4)	51.1	(1.4)	26.0	(1.4)	74.0	(1.4)
Atyrau region	39.5	(1.8)	60.5	(1.8)	46.4	(1.8)	53.6	(1.8)	22.7	(1.4)	77.3	(1.4)
East-Kazakhstan region	34.3	(2.5)	65.7	(2.5)	44.1	(2.3)	55.9	(2.3)	21.2	(2.0)	78.8	(2.0)
Karagandy region	37.8	(1.6)	62.2	(1.6)	51.4	(1.5)	48.6	(1.5)	25.7	(1.9)	74.3	(1.9)
Kostanay region	34.2	(1.7)	65.8	(1.7)	47.9	(2.5)	52.1	(2.5)	24.9	(1.5)	75.1	(1.5)
Kyzyl-Orda region	31.8	(1.7)	68.2	(1.7)	30.5	(1.9)	69.5	(1.9)	16.3	(1.1)	83.7	(1.1)
Mangistau region	35.5	(1.4)	64.5	(1.4)	39.0	(1.5)	61.0	(1.5)	23.9	(1.4)	76.1	(1.4)
North-Kazakhstan region	39.5	(2.0)	60.5	(2.0)	52.0	(2.0)	48.0	(2.0)	26.6	(1.6)	73.4	(1.6)
Pavlodar region	35.8	(1.2)	64.2	(1.2)	47.3	(1.3)	52.7	(1.3)	31.2	(1.4)	68.8	(1.4)
South-Kazakhstan region	33.5	(1.4)	66.5	(1.4)	36.7	(1.7)	63.3	(1.7)	17.7	(1.2)	82.3	(1.2)
West-Kazakhstan region	34.0	(1.5)	66.0	(1.5)	43.4	(2.0)	56.6	(2.0)	22.5	(1.8)	77.5	(1.8)
Zhambyl region	32.0	(1.9) †	68.0	(1.9) †	37.6	(2.7) †	62.4	(2.7) †	19.6	(2.1) †	80.4	(2.1) †
Russia												
Moscow city	39.2	(0.7) †	60.8	(0.7) †	57.8	(0.8) †	42.2	(0.8) †	36.2	(0.7) †	63.8	(0.7) †
Moscow region*	38.9	(1.5)	61.1	(1.5)	54.7	(1.6)	45.3	(1.6)	36.0	(1.2)	64.0	(1.2)
Republic of Tatarstan*	38.0	(0.7)	62.0	(0.7)	52.0	(1.0)	48.0	(1.0)	30.6	(0.7)	69.4	(0.7)

<sup>\*</sup> PISA adjudicated region.

**Notes**: Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered.

See Table VI.B1.5.3 for national data.

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of global mindedness is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

Table VI.B2.6.1 [1/6] Performance on the global competence test

			Performance or	the cognitive test			
	Mean		Standard dev	iation	Average residuals, performance in mathem (i.e. relative		
	Mean score	S.E.	S.D.	S.E.	Mean score	S.E.	Significance <sup>5</sup>
Canada  Alberta							
<b>Ö</b> Alberta	565	(5.9)	103	(3.0)	21.2	(5.1)	0
British Columbia	548	(6.0)	108	(2.5)	17.2	(4.1)	0
Manitoba	522	(4.9)	98	(2.6)	14.3	(4.3)	0
New Brunswick	516	(6.9)	102	(3.6)	10.2	(7.4)	0
Newfoundland and Labrador	546	(7.4)	97	(2.7)	23.3	(7.7)	0
Nova Scotia	545	(5.1)	102	(3.3)	19.3	(5.3)	0
Ontario	559	(4.2)	102	(2.1)	24.7	(2.5)	0
Prince Edward Island	542	(14.2)	105	(6.6)	26.0	(13.1)	0
Quebec	556	(4.6)	98	(2.3)	22.0	(3.3)	0
Saskatchewan	527	(4.0)	92	(2.3)	12.9	(3.7)	0
Colombia							
Bogotá	496	(5.0)	90	(2.7)	25.9	(1.8)	0
Spain**							
Andalusia	501	(5.2)	98	(2.3)	15.8	(2.7)	0
Aragon	526	(6.9)	98	(2.3)	19.7	(5.9)	0
Asturias	527	(6.9)	97	(2.0)	16.5	(7.7)	0
Balearic Islands	513	(7.0)	90	(2.4)	m	m	
Basque Country	515	(5.5)	95	(1.7)	18.3	(5.4)	0
Canary Islands	501	(5.6)	94	(2.1)	13.6	(4.4)	0
Cantabria	526	(6.8)	93	(1.7)	22.7	(7.3)	0
Castile and Leon	534	(5.8)	95	(2.2)	21.1	(4.3)	0
Castile-La Mancha	512	(6.3)	96	(2.0)	15.4	(4.6)	0
Catalonia	515	(4.7)	99	(2.4)	13.0	(3.1)	0
Ceuta	438	(14.6)	91	(4.0)	8.5	(14.0)	0
Comunidad Valenciana	506	(5.0)	94	(2.1)	15.1	(3.3)	0
Extremadura	499	(8.3)	95	(2.0)	14.7	(7.8)	0
Galicia	520	(5.4)	97	(2.0)	6.0	(4.7)	0
La Rioja	513	(8.9)	98	(2.3)	21.0	(9.9)	0
Madrid	519	(3.9)	97	(1.7)	23.8	(3.2)	0
Melilla	473	(11.4)	94	(5.0)	15.9	(11.4)	0
Murcia	519	(5.9)	101	(2.3)	22.3	(4.4)	0
Navarre	521	(8.6)	95	(2.7)	23.8	(7.9)	0
United Kingdom							
Scotland*	534	(4.9)	107	(3.5)	20.6	(4.1)	0

<sup>\*</sup> PISA adjudicated region.

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. See Table VI.B1.6.1 for national data.

Only the 27 countries and economies that conducted the global competence test are shown.

<sup>\*\*</sup>In 2018, some regions in Spain conducted their high-stakes exams for tenth-grade students earlier in the year than in the past, which resulted in the testing period for these exams coinciding with the end of the PISA testing window. Because of this overlap, a number of students were negatively disposed towards the PISA test and did not try their best to demonstrate their proficiency. For details, see PISA 2018 Results Volume I, Annex 9.

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of self-efficacy regarding global issues is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

<sup>5.</sup> Significance shows if relative performance is significantly higher (+1), lower(-1) than the all-country average, or if the difference is non-significant (0).

Table VI.B2.6.1 [2/6] Performance on the global competence test

				Performance on	the cognitive test			
		Mean		Standard devi	ation	Average residuals, after accounting for performance in mathematics, reading and science (i.e. relative performance)		
		Mean score	S.E.	S.D.	S.E.	Mean score	S.E. S	Significance <sup>5</sup>
ers	Indonesia							
Partners	DI Yogyakarta	445	(4.7)	72	(2.7)	1.7	(2.4)	-1
Ба	DKI Jakarta	438	(6.0)	73	(4.0)	-1.4	(2.1)	-1
	Kazakhstan							
	Akmola region	408	(4.8)	73	(2.5)	-12.2	(3.8)	-1
	Aktobe region	403	(6.3)	71	(3.5)	-6.6	(5.0)	-1
	Almaty	441	(6.8)	82	(4.3)	-7.4	(4.0)	-1
	Almaty region	394	(5.8)	68	(3.2)	-0.1	(4.9)	-1
	Astana	437	(7.8)	82	(4.1)	-12.7	(5.1)	-1
	Atyrau region	378	(5.4)	66	(3.3)	0.6	(5.1)	-1
	East-Kazakhstan region	422	(6.6)	74	(3.8)	-8.9	(5.2)	-1
	Karagandy region	435	(7.2)	81	(4.5)	-11.0	(3.9)	-1
	Kostanay region	433	(4.8)	74	(2.7)	-9.7	(3.6)	-1
	Kyzyl-Orda region	384	(5.2)	62	(2.9)	-12.6	(5.7)	-1
	Mangistau region	387	(6.0)	69	(3.7)	-2.3	(5.2)	-1
	North-Kazakhstan region	426	(5.3)	74	(2.6)	-11.3	(3.7)	-1
	Pavlodar region	418	(5.9)	78	(3.3)	-5.4	(4.2)	-1
	South-Kazakhstan region	385	(4.8)	66	(2.2)	-11.0	(4.1)	-1
	West-Kazakhstan region	408	(5.5)	70	(3.4)	-0.1	(3.8)	-1
	Zhambyl region	399	(4.8)	65	(2.3)	-8.4	(5.0)	-1
	Russia							
	Moscow city	537	(3.1)	85	(1.9)	-7.3	(1.6)	-1
	Moscow region*	489	(4.5)	87	(2.4)	-12.9	(1.5)	-1
	Republic of Tatarstan*	465	(3.1)	86	(1.9)	-16.1	(1.3)	-1

<sup>\*</sup> PISA adjudicated region.

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<sup>\*\*</sup>In 2018, some regions in Spain conducted their high-stakes exams for tenth-grade students earlier in the year than in the past, which resulted in the testing period for these exams coinciding with the end of the PISA testing window. Because of this overlap, a number of students were negatively disposed towards the PISA test and did not try their best to demonstrate their proficiency. For details, see PISA 2018 Results Volume I, Annex 9.

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of self-efficacy regarding global issues is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

<sup>5.</sup> Significance shows if relative performance is significantly higher (+1), lower(-1) than the all-country average, or if the difference is non-significant (0).

Table VI.B2.6.1 [3/6] Performance on the global competence test

				Variation in	performance <sup>1</sup>			
	Total variat	ion <sup>2</sup>	Variation betwee	n schools <sup>3</sup>	Variation within	schools	Proportion of variation between scho	
	Variance	S.E.	Variance	S.E.	Variance	S.E.	%	S.E.
Canada Alberta								
5 Alberta	10736	(631)	2012	(524)	8821	(601)	18.6	(4.3)
British Columbia	11647	(529)	1763	(370)	9936	(370)	15.1	(2.9)
Manitoba	9560	(519)	1149	(384)	8455	(354)	11.9	(3.5)
New Brunswick	10316	(731)	837	(353)	9516	(637)	8.0	(3.0)
Newfoundland and Labrador	9419	(533)	406	(189)	9108	(505)	4.3	(2.0)
Nova Scotia	10377	(727)	905	(355)	9498	(679)	8.7	(3.0)
Ontario	10407	(426)	1492	(275)	8963	(286)	14.3	(2.3)
Prince Edward Island	11906	(1444)	1747	(1031)	10203	(1140)	14.7	(7.8)
Quebec	9678	(462)	1795	(325)	7826	(334)	18.6	(2.8)
Saskatchewan	8523	(415)	635	(269)	7796	(372)	7.5	(2.9)
Colombia								
Bogotá	8045	(484)	2522	(461)	5452	(373)	31.6	(4.3)
Spain**								
Andalusia	9510	(440)	888	(272)	8602	(362)	9.3	(2.7)
Aragon	9520	(455)	905	(238)	8729	(366)	9.4	(2.3)
Asturias	9361	(383)	750	(200)	8499	(343)	8.1	(2.0)
Balearic Islands	8190	(428)	749	(209)	7530	(509)	9.0	(2.3)
Basque Country	9041	(321)	949	(226)	8039	(348)	10.5	(2.3)
Canary Islands	8793	(389)	958	(276)	7882	(425)	10.8	(2.9)
Cantabria	8694	(320)	559	(165)	8049	(346)	6.5	(1.9)
Castile and Leon	9016	(418)	781	(264)	8387	(348)	8.5	(2.7)
Castile-La Mancha	9273	(380)	758	(221)	8521	(354)	8.2	(2.3)
Catalonia	9779	(475)	1054	(359)	8660	(361)	10.8	(3.3)
Ceuta	8339	(725)	923	(443)	7396	(965)	11.2	(5.3)
Comunidad Valenciana	8827	(396)	1035	(258)	7714	(380)	11.8	(2.8)
Extremadura	8951	(373)	919	(238)	8008	(366)	10.3	(2.5)
Galicia	9433	(396)	631	(151)	8718	(341)	6.7	(1.5)
La Rioja	9599	(448)	1158	(417)	8512	(453)	12.0	(3.8)
Madrid	9391	(323)	1447	(221)	8016	(252)	15.3	(2.0)
Melilla	8881	(939)	1004	(662)	8008	(906)	11.2	(7.1)
Murcia	10247	(456)	1388	(406)	8958	(414)	13.4	(3.4)
Navarre	9117	(508)	1422	(363)	7633	(443)	15.7	(3.5)
United Kingdom		(===/		(===/		( /		(=)
Scotland*	11494	(760)	958	(299)	10464	(663)	8.4	(2.4)

<sup>\*</sup> PISA adjudicated region.

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<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of self-efficacy regarding global issues is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3)

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

<sup>5.</sup> Significance shows if relative performance is significantly higher (+1), lower(-1) than the all-country average, or if the difference is non-significant (0).

Table VI.B2.6.1 [4/6] Performance on the global competence test

_			Variation in performance <sup>1</sup>							
		Total variati		Variation betweer		Variation within s		Proportion of variation that lies between schools <sup>4</sup>		
_		Variance	S.E.	Variance	S.E.	Variance	S.E.	%	S.E.	
ers	ndonesia									
Partners	DI Yogyakarta	5178	(395)	2366	(453)	2883	(230)	45.1	(5.0)	
Ъ	DKI Jakarta	5360	(588)	2457	(514)	2940	(254)	45.5	(5.2)	
- 1	Kazakhstan									
	Akmola region	5411	(444)	910	(326)	4510	(317)	16.8	(5.3)	
	Aktobe region	4974	(465)	1239	(468)	4082	(341)	23.2	(6.5)	
	Almaty	6923	(769)	1628	(734)	5039	(513)	24.3	(8.6)	
	Almaty region	4741	(488)	730	(349)	4255	(357)	14.6	(5.9)	
	Astana	6957	(818)	1849	(672)	5080	(433)	26.5	(6.8)	
	Atyrau region	4539	(576)	925	(404)	3669	(351)	20.0	(6.7)	
	East-Kazakhstan region	5382	(509)	1001	(390)	4478	(409)	18.2	(5.7)	
	Karagandy region	6855	(830)	2089	(761)	4792	(484)	30.4	(8.3)	
	Kostanay region	5370	(425)	999	(358)	4694	(483)	17.5	(5.0)	
	Kyzyl-Orda region	3812	(368)	830	(337)	3271	(299)	20.2	(6.8)	
	Mangistau region	4909	(602)	1296	(521)	3681	(392)	26.0	(7.4)	
	North-Kazakhstan region	5511	(410)	1013	(335)	4580	(385)	18.1	(4.8)	
	Pavlodar region	6265	(614)	1607	(458)	4609	(331)	25.8	(5.8)	
	South-Kazakhstan region	4403	(336)	574	(177)	3918	(315)	12.8	(3.6)	
	West-Kazakhstan region	5100	(613)	1362	(424)	3905	(391)	25.7	(6.0)	
	Zhambyl region	4290	(327)	1068	(310)	3437	(302)	23.7	(5.2)	
ı	tussia									
	Moscow city	7290	(321)	872	(148)	6491	(353)	11.8	(1.7)	
	Moscow region*	7493	(414)	1031	(232)	6507	(371)	13.7	(2.7)	
	Republic of Tatarstan*	7435	(321)	1799	(263)	5958	(220)	23.2	(2.7)	

<sup>\*</sup> PISA adjudicated region.

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<sup>\*\*</sup>In 2018, some regions in Spain conducted their high-stakes exams for tenth-grade students earlier in the year than in the past, which resulted in the testing period for these exams coinciding with the end of the PISA testing window. Because of this overlap, a number of students were negatively disposed towards the PISA test and did not try their best to demonstrate their proficiency. For details, see PISA 2018 Results Volume I, Annex 9.

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of self-efficacy regarding global issues is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

<sup>5.</sup> Significance shows if relative performance is significantly higher (+1), lower(-1) than the all-country average, or if the difference is non-significant (0).

Table VI.B2.6.1 [5/6] Performance on the global competence test

					Profic	iency on tl	he cognitive to	est				
	Below Le	evel 1	Level	1	Level	2	Level	3	Level	4	Level	5
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Canada Alberta												
O Alberta	6.0	(1.0)	11.7	(1.1)	19.2	(1.4)	23.3	(1.3)	21.7	(1.3)	18.0	(1.8)
British Columbia	9.4	(1.1)	14.1	(1.1)	19.7	(1.2)	22.1	(1.2)	19.4	(1.3)	15.3	(1.6)
Manitoba	11.3	(1.3)	17.7	(1.4)	24.2	(1.5)	23.7	(1.5)	15.5	(1.3)	7.6	(0.9)
New Brunswick	13.3	(1.9)	18.0	(1.7)	24.3	(2.0)	22.1	(2.0)	15.0	(1.6)	7.3	(1.3)
Newfoundland and Labrador	7.0	(1.3)	14.5	(1.9)	21.7	(1.9)	25.6	(1.9)	19.4	(2.0)	11.8	(1.8)
Nova Scotia	8.4	(1.2)	13.8	(1.6)	21.9	(1.5)	24.1	(1.7)	18.9	(1.7)	12.9	(1.6)
Ontario	6.2	(0.8)	12.2	(8.0)	20.4	(0.9)	23.8	(1.0)	21.2	(1.1)	16.2	(1.2)
Prince Edward Island	9.9	(3.5)	13.6	(3.1)	19.5	(2.9)	26.1	(3.5)	18.8	(3.5)	12.1	(2.9)
Quebec	6.4	(0.8)	11.4	(1.0)	20.4	(1.2)	26.1	(1.1)	21.8	(1.0)	13.9	(1.3)
Saskatchewan	8.9	(1.1)	16.6	(1.2)	25.5	(1.4)	26.1	(1.4)	15.6	(1.1)	7.3	(1.0)
Colombia												
Bogotá	14.7	(1.6)	24.3	(1.5)	26.6	(1.6)	20.0	(1.6)	10.8	(1.4)	3.6	(0.7)
Spain**												
Andalusia	16.7	(1.7)	19.7	(1.3)	24.1	(1.4)	22.5	(1.4)	12.4	(1.2)	4.4	(0.8)
Aragon	10.7	(1.4)	16.4	(1.6)	23.2	(1.7)	25.0	(1.4)	16.5	(1.7)	8.2	(1.3)
Asturias	10.4	(1.7)	17.0	(1.3)	23.4	(1.5)	24.4	(1.5)	16.9	(1.6)	7.9	(1.3)
Balearic Islands	10.8	(1.7)	19.1	(1.4)	27.2	(1.7)	24.5	(1.5)	13.6	(1.7)	4.8	(1.0)
Basque Country	11.9	(1.1)	18.3	(1.4)	25.1	(1.3)	24.4	(1.2)	14.4	(1.3)	5.9	(0.9)
Canary Islands	14.5	(1.4)	21.3	(1.8)	26.1	(1.6)	21.8	(1.4)	12.1	(1.6)	4.1	(0.7)
Cantabria	9.2	(1.8)	16.9	(1.4)	25.0	(1.4)	25.1	(1.6)	16.6	(1.4)	7.1	(1.1)
Castile and Leon	8.8	(1.2)	14.5	(1.4)	24.0	(1.5)	26.0	(1.6)	18.1	(1.4)	8.6	(1.2)
Castile-La Mancha	13.3	(1.9)	18.9	(1.4)	24.2	(1.2)	23.7	(1.5)	14.0	(1.4)	5.8	(0.9)
Catalonia	13.2	(1.4)	17.9	(1.4)	23.9	(1.5)	23.5	(1.5)	14.9	(1.2)	6.6	(1.0)
Ceuta	36.3	(6.2)	27.1	(3.6)	19.6	(4.1)	11.8	(2.9)	4.4	(1.8)	0.8	(0.6)
Comunidad Valenciana	13.6	(1.3)	19.3	(1.4)	26.9	(1.3)	22.5	(1.4)	13.1	(1.3)	4.6	(1.0)
Extremadura	15.4	(2.3)	20.9	(1.6)	25.7	(1.2)	22.2	(1.7)	11.5	(1.5)	4.2	(0.9)
Galicia	11.7	(1.5)	17.2	(1.2)	22.9	(1.3)	25.4	(1.3)	16.3	(1.1)	6.6	(1.1)
La Rioja	13.5	(1.8)	17.9	(1.8)	24.1	(1.7)	24.3	(1.4)	14.4	(2.2)	5.9	(1.4)
Madrid	11.9	(1.0)	17.5	(1.0)	24.2	(1.0)	24.1	(1.1)	15.6	(1.0)	6.7	(0.7)
Melilla	23.4	(4.7)	23.9	(3.5)	25.8	(3.5)	17.1	(3.4)	7.3	(2.1)	2.7	(1.3)
Murcia	13.4	(1.3)	16.9	(1.3)	22.0	(1.7)	24.0	(1.2)	16.7	(1.5)	7.0	(1.2)
Navarre	11.1	(2.0)	17.8	(1.7)	24.7	(1.9)	23.3	(1.6)	16.2	(1.8)	6.9	(1.7)
United Kingdom												
Scotland*	10.5	(1.1)	15.7	(1.4)	23.0	(1.1)	22.6	(1.5)	16.3	(1.2)	12.0	(1.4)

<sup>\*</sup> PISA adjudicated region.

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<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

 $<sup>4. \</sup> This \ measure \ corresponds \ to \ the \ intra-class \ correlation \ (rho), \ multiplied \ by \ 100.$ 

<sup>5.</sup> Significance shows if relative performance is significantly higher (+1), lower(-1) than the all-country average, or if the difference is non-significant (0).

Table VI.B2.6.1 [6/6] Performance on the global competence test

			Proficiency on the cognitive test										
		Below Le	evel 1	Level	1	Level	2	Level 3		Level 4		Level 5	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
ers	Indonesia												
Partners	DI Yogyakarta	28.2	(2.4)	34.9	(2.0)	23.9	(1.8)	10.9	(1.6)	2.1	(0.6)	0.1	(0.1)
Ьа	DKI Jakarta	33.1	(2.7)	33.1	(2.1)	23.0	(2.1)	8.7	(1.8)	2.0	(1.0)	0.1	(0.1)
- 1	Kazakhstan												
	Akmola region	47.1	(2.8)	31.8	(2.0)	16.0	(2.2)	4.3	(8.0)	0.7	(0.4)	0.1	(0.1)
	Aktobe region	51.4	(4.2)	31.5	(3.0)	12.5	(1.9)	3.6	(1.1)	0.9	(0.4)	0.1	(0.1)
	Almaty	33.8	(3.1)	31.3	(2.4)	20.9	(1.9)	9.5	(1.7)	3.4	(1.1)	0.9	(0.5)
	Almaty region	55.6	(3.8)	31.3	(3.0)	10.2	(2.0)	2.5	(0.8)	0.4	(0.2)	0.1	(0.1)
	Astana	34.9	(4.0)	31.7	(2.1)	20.1	(2.2)	9.4	(1.7)	3.3	(1.2)	0.5	(0.3)
	Atyrau region	65.7	(3.7)	25.6	(2.6)	6.7	(1.4)	1.5	(0.5)	0.4	(0.2)	0.1	(0.1)
	East-Kazakhstan region	39.9	(3.6)	34.2	(2.6)	18.3	(2.1)	5.7	(1.4)	1.8	(0.7)	0.2	(0.2)
	Karagandy region	35.9	(3.6)	31.2	(2.2)	20.2	(2.5)	9.8	(1.8)	2.6	(1.0)	0.3	(0.3)
	Kostanay region	34.7	(3.0)	33.9	(2.0)	20.7	(2.0)	8.8	(1.2)	1.7	(0.7)	0.1	(0.1)
	Kyzyl-Orda region	61.2	(3.4)	30.1	(2.6)	7.3	(1.5)	1.2	(0.5)	0.2	(0.1)	0.0	(0.0)
	Mangistau region	61.7	(3.6)	26.6	(2.5)	8.5	(1.7)	2.7	(0.9)	0.5	(0.3)	0.1	(0.1)
	North-Kazakhstan region	37.2	(2.8)	34.5	(1.9)	20.3	(2.0)	6.4	(1.3)	1.4	(0.5)	0.1	(0.1)
	Pavlodar region	43.8	(3.3)	29.5	(2.2)	18.4	(2.1)	6.8	(1.4)	1.4	(0.5)	0.2	(0.2)
	South-Kazakhstan region	60.4	(3.0)	29.3	(2.2)	8.6	(1.4)	1.4	(0.4)	0.3	(0.2)	0.0	(0.1)
	West-Kazakhstan region	48.3	(3.7)	32.2	(3.0)	14.6	(2.1)	4.2	(1.2)	0.7	(0.4)	0.1	(0.1)
	Zhambyl region	53.1	(3.2)	32.8	(2.4)	10.9	(1.6)	2.7	(0.7)	0.5	(0.2)	0.0	(0.1)
ı	Russia												
	Moscow city	6.2	(0.6)	14.1	(0.8)	25.7	(0.9)	28.6	(1.0)	18.6	(0.8)	6.9	(0.9)
	Moscow region*	16.0	(1.7)	24.3	(1.4)	27.4	(1.4)	20.7	(1.5)	9.6	(1.0)	2.0	(0.5)
	Republic of Tatarstan*	23.7	(1.3)	27.9	(1.0)	25.9	(1.0)	15.4	(0.7)	5.6	(0.6)	1.4	(0.3)

<sup>\*</sup> PISA adjudicated region.

Information regarding the proportion of the sample covered is shown next to the standard error. No symbol means at least 75% of the population was covered; one dagger (†) means at least 50% but less than 75%; and one double-dagger (‡) means less than 50% was covered. See Table VI.B1.6.1 for national data.

Only the 27 countries and economies that conducted the global competence test are shown.

<sup>\*\*</sup>In 2018, some regions in Spain conducted their high-stakes exams for tenth-grade students earlier in the year than in the past, which resulted in the testing period for these exams coinciding with the end of the PISA testing window. Because of this overlap, a number of students were negatively disposed towards the PISA test and did not try their best to demonstrate their proficiency. For details, see PISA 2018 Results Volume I, Annex 9.

<sup>1.</sup> Analyses are restricted to schools with the modal ISCED level for 15-year-old students. Results may thus differ from those estimated on the entire sample of 15-year-old students.

<sup>2.</sup> The total variation in the index of self-efficacy regarding global issues is calculated from the square of the standard deviation of the index within each country/economy. Due to the unbalanced, clustered nature of the data, the sum of the between- and within-school variation components, as an estimate from a sample, does not necessarily add up to the total.

<sup>3.</sup> In some countries/economies, subunits within schools were sampled instead of schools; this may affect the estimation of between-school variation components (see Annex A3).

<sup>4.</sup> This measure corresponds to the intra-class correlation (rho), multiplied by 100.

<sup>5.</sup> Significance shows if relative performance is significantly higher (+1), lower(-1) than the all-country average, or if the difference is non-significant (0).

#### Annex B2 List of tables available on line

#### Chapter 2 Examining local, global and intercultural issues

#### https://doi.org/10.1787/888934171153

WEB Table VI.B2.2.3	Students' awareness of global issues, by student and school characteristics
WEB Table VI.B2.2.4	Self-efficacy regarding global issues
WEB Table VI.B2.2.6	Self-efficacy regarding global issues, by student and school characteristics
WEB Table VI.B2.2.7	Proportion of correct answers: Examining local, global and intercultural issues
WEB Table VI.B2.2.8	Awareness of global issues, enjoyment of reading and self-efficacy regarding global issues

#### Chapter 3 Understanding and appreciating the perspectives and worldviews of others

#### https://doi.org/10.1787/888934171153

WEB	Table VI.B2.3.3	Perspective taking, by student and school characteristics
WEB	Table VI.B2.3.4	Students' interest in learning about other cultures
WEB	Table VI.B2.3.6	Students' interest in learning about other cultures, by student and school characteristics
WEB	Table VI.B2.3.7	Respect for people from other cultures
WEB	Table VI.B2.3.9	Respect for people from other cultures, by student and school characteristics
WEB	Table VI.B2.3.10	Cognitive adaptability
WEB	Table VI.B2.3.12	Cognitive adaptability, by student and school characteristics
WEB	Table VI.B2.3.13	Students' attitudes towards immigrants
WEB	Table VI.B2.3.15	Students' attitudes towards immigrants, by student and school characteristics
WEB	Table VI.B2.3.17	Proportion of correct answers: Understanding the perspectives of others
WEB	Table VI.B2.3.18	Association between indices related to understanding the perspective of others

#### Chapter 4 Ability to engage in open, appropriate and effective communication across cultures

#### https://doi.org/10.1787/888934171153

WEB	Table VI.B2.4.3	Awareness of intercultural communication, by student and school characteristics
WEB	Table VI.B2.4.4	Association between indices covering intercultural communication
WEB	Table VI.B2.4.5	Contact with people from other countries
WEB	Table VI.B2.4.11	Languages spoken at home and learned at school
WEB	Table VI.B2.4.12	Average indices, by number of languages spoken by student
WEB	Table VI.B2.4.13	Average indices, by number of foreign languages learned by student at school

#### Chapter 5 Taking action for collective well-being and sustainable development

## https://doi.org/10.1787/888934171153

WEB Table VI.B2.5.3	Agency regarding global issues, by student and school characteristics
WEB Table VI.B2.5.5	Association between indices of taking action for collective well-being and sustainable development
WEB Table VI.B2.5.6	Proportion of correct answers: Taking action for collective well-being and sustainable development
WEB Table VI.B2.5.8	Students who take action for collective wellbeing and sustainable development
WEB Table VI.B2.5.17	Number of actions for collective well-being and sustainable development taken by students, by quarter of key indices
WEB Table VI.B2.5.18	Number of actions taken by students, by key indices, and student and school characteristics

# Chapter 6 The links between the knowledge, skills and attitudes needed to thrive in an interconnected world

#### https://doi.org/10.1787/888934171153

WEB Table VI.B2.6.3	Correlation between the four domains
WEB Table VI.B2.6.4	Performance on the global competence test, by students' characteristics
WEB Table VI.B2.6.5	Performance on the global competence test and students' attitudes and dispositions

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## Chapter 7 Education for living in an interconnected world

HILLE	15.77401.01 <u>9</u> /10.176	377606934171133
WEB	Table VI.B2.7.2	Students' self-efficacy regarding global issues, by learning activity
WEB	Table VI.B2.7.3	Students' awareness of global issues, by learning activity
WEB	Table VI.B2.7.4	Students' perspective taking, by learning activity
WEB	Table VI.B2.7.5	Interest in learning about other cultures, by learning activity
WEB	Table VI.B2.7.6	Respect for people from other cultures, by learning activity
WEB	Table VI.B2.7.7	Attitudes towards immigrants, by learning activity
WEB	Table VI.B2.7.8	Awareness of intercultural communication, by learning activity
WEB	Table VI.B2.7.9	Cognitive adaptability, by learning activity
WEB	Table VI.B2.7.10	Agency regarding global issues, by learning activity
WEB	Table VI.B2.7.12	Multicultural learning at school
WEB	Table VI.B2.7.13	Curriculum at school focusing on global issues

#### Chapter 8 Equity in providing learning opportunities for living together

WEB Table VI.B2.7.14 Curriculum at school focusing on intercultural understanding

https://doi.org/10.1787/888934171153		
WEB Table VI.B2.8.2	Access to learning activities, by students' socio-economic status	
WEB Table VI.B2.8.3	Access to learning activities, by grade repetition	
WEB Table VI.B2.8.4	Access to learning activities, by programme orientation	
WEB Table VI.B2.8.5	Access to learning activities, by school type	
WEB Table VI.B2.8.6	Access to learning activities, by schools' socio-economic profile	
WEB Table VI.B2.8.7	Students' attitudes and grade repetition	
WEB Table VI.B2.8.8	Students' attitudes and enrolment in vocational or general programmes	
WEB Table VI.B2.8.9	Students' attitudes and enrolment in public and private schools	
WEB Table VI.B2.8.10	Students' attitudes and schools' socio-economic profile	
WEB Table VI.B2.8.11	Principals' view on teachers' multicultural beliefs	
WEB Table VI.B2.8.13	Discriminatory school climate as perceived by students	

## **ANNEX B3**

# **PISA 2018 system-level indicators**

System-level data that are not derived from the PISA 2018 student or school questionnaire are extracted from the OECD's annual publication *Education at a Glance* for those countries and economies that participate in that periodic data collection. For other countries and economies, a special system-level data collection was conducted in collaboration with PISA Governing Board members and National Project Managers.

For further information see: System-level data collection for PISA 2018: Sources, comments and technical notes.pdf at www.oecd.org/pisa/.

The following tables are available on line at <a href="https://doi.org/10.1787/888934029128">https://doi.org/10.1787/888934029128</a>.

Expenditure	Table B3.1.1	Cumulative expenditure by educational institutions per student aged 6 to 15 (2015)
	Table B3.1.2	Teachers' salaries (2017)
	Table B3.1.3	Teachers' salaries (2017)
	Table B3.1.4	GDP per capita (2015, 2016, 2017, 2018)
Time and human resources	Table B3.2.1	Teachers' actual teaching time (2018)
	Table B3.2.2	Intended instruction time in compulsory general education, by age (2018)
	Table B3.2.3	School support staff
Education system characteristics	Table B3.3.1	Theoretical starting age and theoretical duration (2015)
	Table B3.3.2	Cut-off birthdate for eligibility to school enrolment and first day of the school year (2018)
	Table B3.3.3	Selecting students for different programmes (2018)
Accountability	Table B3.4.1	School inspection at the primary level (2018)
	Table B3.4.2	School inspection at the lower secondary level (2018)
	Table B3.4.3	School inspection at the upper secondary level (2018)
	Table B3.4.4	School board
Policies and curriculum	Table B3.5.1	Bullying policies
	Table B3.5.2	Civic education
School choice	Table B3.6.1	Freedom for parents to choose a public school for their child(ren) (2018)
	Table B3.6.2	Financial incentives and disincentives for school choice (2018)
	Table B3.6.3	Government regulations that apply to schools at the primary and lower secondary levels (2018)
	Table B3.6.4	Criteria used by public and private schools when assigning and selecting students (2018)
	Table B3.6.5	Expansion of school choice within the public school sector over the past 10 years (2018)
	Table B3.6.6	Government-dependent private schools and their role in providing compulsory education at the primary and lower secondary level (2018)
	Table B3.6.7	Independent private schools and their role in providing compulsory education at the primary and lower secondary level (2018)
	Table B3.6.8	Homeschooling as a legal means of providing compulsory education at the primary and lower secondary level (2018)
	Table B3.6.9	Use of public resources for transporting students (2018)
	Table B3.6.10	Responsibility for informing parents about school choices available to them (2018)
	Table B3.6.11	Availability of school vouchers (or scholarships) (2018)
	Table B3.6.12	Extent to which public funding follows students when they leave for another public or private school (2018)





# **Released test units**

#### **ANNEX C**

#### **Released test units**

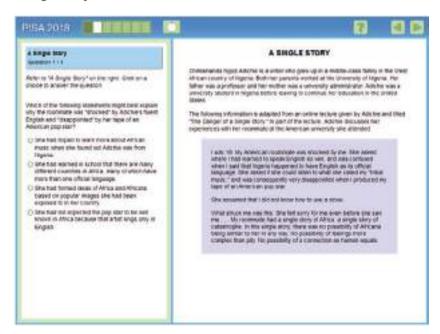
Sample global competence test items: A Single Story

Five test units were released to illustrate the cognitive assessment. In what follows, the test units are closely examined, with a focus on response modalities, levels of difficulty and scoring procedures. Screenshots of every test item are provided, along with a description of that item. The released test units are also provided on line at <a href="https://www.oecd.org/pisa/test/">www.oecd.org/pisa/test/</a>.

#### **UNIT CG123: A SINGLE STORY**

This unit features an excerpt from a lecture by the Nigerian writer Chimamanda Ngozi Adichi entitled «The Danger of a Single Story». In this excerpt, she describes the experience of realising her roommate did not see her as an individual with unique experiences and equal worth but instead, had formed a «single story» about her based on preconceived assumptions about Africa and African life. The unit begins with two questions related to this excerpt and goes on to explore how a «single story» can be created and to challenge a fictional woman's assumptions about a man in a market. The content domain of this unit was categorised as «Culture and intercultural relations», with a subdomain of «Perspective taking, stereotypes, discrimination and intolerance".

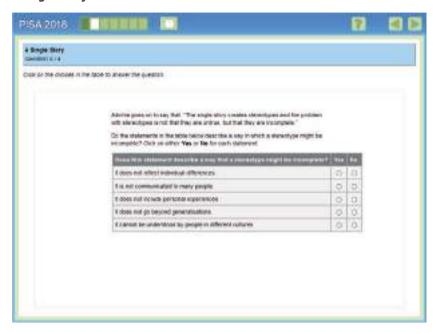
#### A Single Story: Released Item #1



This item requires the student to reflect on the perspective of Adichie's roommate and identify a possible reason the roommate may have created a «single story» of Adichie in which she was shocked by her ability to speak English and disappointed when she learned that Adichie listened to American pop music instead of «tribal music». The correct answer is C because it is the only option that explains how the roommate might have already developed an idea of who Adichie was. Here, the student must be able to accurately identify the perspective of the roommate versus Adichie's perspective and choose the option that best reflects the context.

Item Number	CG123Q01
Cognitive Process	Identify and analyse multiple perspectives
Cognitive Subprocess	Recognising perspectives and world views
Response Format	Simple Multiple Choice
Level	2

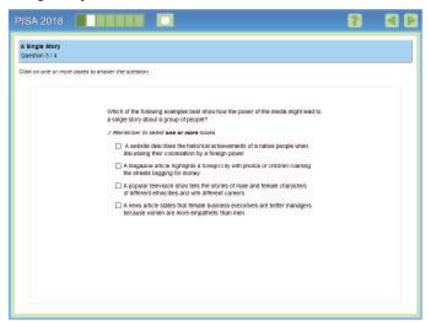
#### A Single Story: Released Item #2



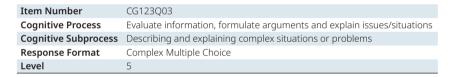
In this item, the student must evaluate each statement in the table and decide whether it describes a way that a stereotype might be incomplete. Here, the student must think more broadly than the specific stereotypes of Africa described in the scenario and consider what a stereotype is and how stereotypes lack critical information that allow them to persist. By identifying the correct answers in this item, the student demonstrates his/her ability to explain how stereotypes are created. The correct answers to this question are Yes, No, Yes, Yes, No. The statements that require a Yes response all speak to the fact that stereotypes are broad generalisations that lack any consideration of individual differences or personal experiences. Within the stereotypes that are perpetuated, there is no room to consider an individual's identity or experiences, just like the interaction between Adichie and her roommate. This item had partial-credit and full-credit scoring. To receive partial credit, four out of five statements had to be correct. To receive full credit, all five statements had to be correct. If three or fewer statements were correct, no credit was assigned. The level provided for this item is based on full credit.

Item Number	CG123Q02
Cognitive Process	Evaluate information, formulate arguments and explain issues/situations
Cognitive Subprocess	Describing and explaining complex situations or problems
Response Format	Complex Multiple Choice
Level	5

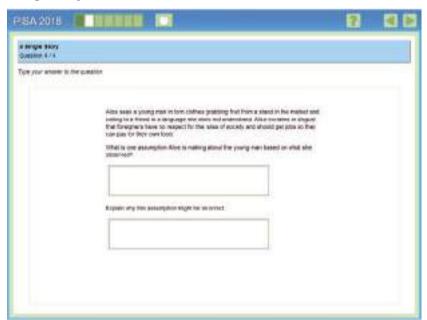
#### A Single Story: Released Item #3



This item is similar to the previous item in that the student must think more broadly about stereotypes or single stories and consider how the media may support the creation of this misinformation. Four examples of media forms and content are described, and the student must evaluate how each one may or may not support the formation of stereotypes. To receive full credit, the student needed to select both B and D. Partial credit was assigned if only B or only D was selected. If any other options were selected, no credit was assigned. By selecting the correct answers, the student demonstrates the ability to identify examples that address the complex issue of stereotype formation. The level provided for this item is based on full credit.



#### A Single Story: Released Item #4



Here, a short text is presented about a woman in a market, Alice, who observes a young man's appearance and behaviour. The text then describes how Alice perceives the young man. Two independently coded, open-ended items follow the text. In the first item, the student is are asked to read the text and simply describe, in their own words, one of Alice's assumptions about the young man. The test developers identified five possible assumptions that could be considered correct based on the information provided in the brief text. The coding guide for the correct responses is provided below.

Item Number	CG123Q04
Cognitive Process	Evaluate information, formulate arguments and explain issues/situations
<b>Cognitive Subprocess</b>	Describing and explaining complex situations or problems
Response Format	Open Response – Human Coded
Level	1

#### **Full Credit**

Code 1: Provides one of the assumptions about the young man listed below:

- 1. The young man is a foreigner.
- 2. The young man is poor or cannot pay for his food.
- 3. The young man has no job.
- 4. The young man is stealing.
- 5. The young man has (or foreigners have) no respect for the rules of society.
  - She thinks he's foreign. [1]
  - She thinks he's poor. [2]
  - He can't pay for his food. [2]
  - She thinks he doesn't have a job. [3]
  - He has not paid for the fruit. [4]
  - She thinks he has no respect for the rules. [5] This response includes information provided in the stem. However, in this case, it is accepted as evidence that the student has correctly identified an assumption that Alice made.
  - He wasn't raised well. [5] This is an acceptable paraphrase for "no respect for the rules of society".

#### A Single Story: Released Item #5



After identifying an assumption that Alice makes in the brief text, the student is then asked to explain why that assumption might be incorrect. To get full credit for this item, the student must provide a more narrow response that explains the assumption he/she provided in the previous item. For example, if "The young man is stealing" is identified as an assumption, the explanation could be "He might have already paid for the fruit". Alternatively, the student can get full credit by providing a broader, more general response that addresses the problem with making assumptions, such as "She is making a judgement without enough information". Both types of responses were given full credit, but coders were asked to attempt to assign different codes in case researchers were interested in exploring differences between students who take a more narrow approach to answering the question and those who take a broader approach. For the purpose of the main survey analyses, these categories were all treated as full credit.

Item Number	CG123Q05
Cognitive Process	Evaluate information, formulate arguments and explain issues/situations
<b>Cognitive Subprocess</b>	Describing and explaining complex situations or problems
Response Format	Open Response – Human Coded
Level	2

#### **Full Credit**

Code 11: Provides an explanation that is specific to the assumption provided in CG123Q04 AND describes why that assumption might be incorrect. The explanation may provide another interpretation for the behaviour Alice observed or refute Alice's assumptions.

- 1. Assumption: The young man is a foreigner. Explanation must focus on the language he was using.
- 2. Assumption: The young man is poor or cannot pay for his food. Explanation must focus on his torn clothes OR that he was grabbing the fruit.
- 3. Assumption: The young man has no job. Explanation must focus on his torn clothes OR that he was grabbing the fruit.
- 4. Assumption: The young man is stealing. Explanation must focus on the observation that he was grabbing the fruit.
- 5. Assumption: The young man has (or foreigners have) no respect for the rules of society. Explanation must focus on the observation that he was grabbing the fruit.
- Just because he is speaking another language does not mean he is a foreigner. [1]
- He might speak more than one language. [1]
- He might have been born in this country but speaks a different language. [1]
- Maybe it's the style for young people to wear torn clothes. [2]
- He might work at the fruit stand. [2]
- He might have permission to take the fruit from the owner of the fruit stand. [2]
- He might be asking his friend to help him pay for the fruit. [2]
- He could be wearing torn clothes because of the work he does. [3]
- Just because he is grabbing the fruit doesn't mean he isn't working. [3]
- He could have a very low-paying job and not be able to afford the food he needs. [4]
- He might know the owner of the fruit stand and is allowed to take fruit. [4 or 5]
- His family might own the fruit stand. [4 or 5]

Code 11: Provides a general explanation that describes a potential problem about making assumptions.

- She does not have enough information about this young man to make this assumption.
- She is overgeneralising.
- She is stereotyping him. [A stereotype is a type of overgeneralisation.]
- She is racist. [Judging people based on perceived race is a specific type of overgeneralisation. Related words like discriminating, prejudice, etc. are acceptable.]
- She is rushing to judgment (without enough information/without knowing or talking to this young man).

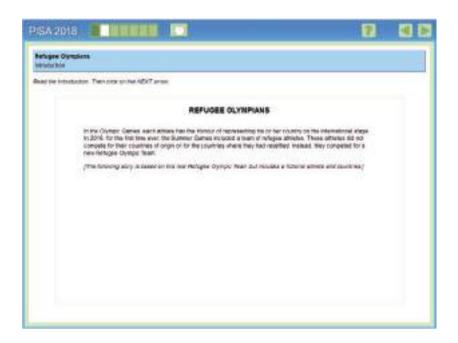
- She is judging.
- There might be other good reasons for his behaviour.
- She has a single story about him.

OR: Provides a general explanation of why an assumption based on the young man's actions might be incorrect.

- He might be acting that way because he has a disability.
- He might be showing off in front of his friend.

#### **UNIT CG134: REFUGEE OLYMPIANS**

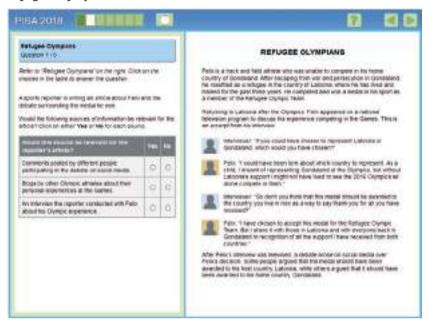
#### **Refugee Olympians: Introduction**



This unit contained an introduction screen to provide some initial context about the Refugee Olympic Team, which competed in the Olympic Games for the first time in 2016. The test developers did not want to assume that all students are familiar with this team, so background knowledge was provided to ensure that all students would have the same information to start. The rest of the unit focuses on a fictional character's participation on the Refugee Olympic Team.

The stimulus for this unit (presented on the next page) introduces Felix, an athlete who fled his homeland and has been living as a refugee in another country. He was an athlete who trained in his home country before fleeing and has been training in his new country of residence. In the stimulus, the student learns that Felix participated as a member of the Refugee Olympic Team and won a medal. The stimulus then presents an interview with Felix about his feelings on accepting the medal for the Refugee Olympic Team rather than his homeland or his current country of residence. Finally, the student learns that a debate took place on social media about his decision. The content domain of this unit was categorised as «Institutions, conflicts and human rights» with a subdomain of «Universal human rights and local traditions».

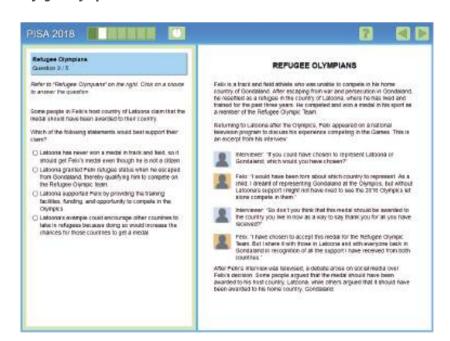
#### Refugee Olympians: Released Item #1



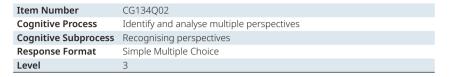
In this item, the student must consider the goal of a sports reporter who is writing an article about Felix and the debate about his Olympic medal. The student needs to evaluate whether information provided by three different sources would give the reporter the relevant information for the article. By correctly identifying which sources are relevant and which are not, the student is demonstrating the ability to evaluate and select sources. The correct answers for this item are Yes, No, Yes. Credit is only assigned if the student gets all three correct.

Item Number	CG134Q01
Cognitive Process	Evaluate information, formulate arguments and explain issues/situations
<b>Cognitive Subprocess</b>	Selecting sources
Response Format	Complex Multiple Choice
Level	5

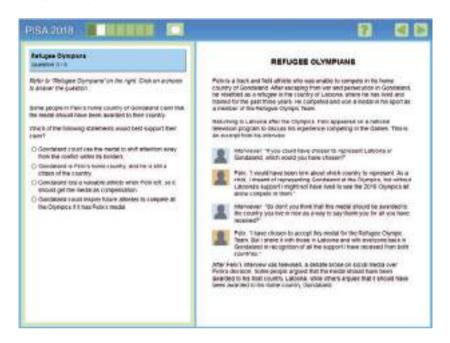
#### Refugee Olympians: Released Item #2



This item requires the student to consider the perspective of some residents of the country of Latoona, who feel the medal should have been awarded to their country, where Felix has refugee status. The correct answer is C because this statement provides the best support for this claim, the commitment Latoona made to supporting his training that should earn the medal for Latoona. The other responses are either not relevant to the specific scenario described in the stimulus or they fall short of recognising the perspective of the people described in the text.



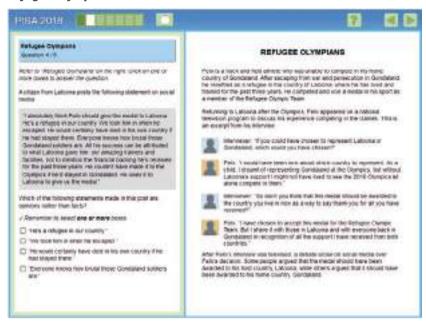
#### Refugee Olympians: Released Item #3



This item is similar to the previous item, but now the student must consider the perspective of some residents of Felix's home country, Gondaland. The answer that best demonstrates the recognition of their perspective is B.

Item Number	CG134Q03
Cognitive Process	Identify and analyse multiple perspectives
<b>Cognitive Subprocess</b>	Recognising perspectives
Response Format	Simple Multiple Choice
Level	2

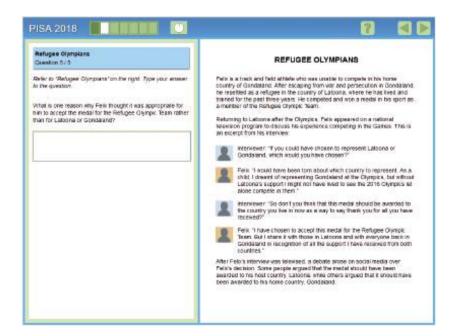
#### Refugee Olympians: Released Item #4



This item presents a short text meant to represent a post on social media. In this post, the author makes several statements to support the argument that the medal should have been awarded to Latoona, Felix's host country. The student is then asked to consider four statements from the post and identify which ones are opinions. The correct answer is C and D. If both are selected, full credit is assigned. If only C or only D is selected, partial credit is assigned. If anything else is selected, the student receives no credit. The student must evaluate the information carefully and then consider whether the statement is truly a fact or if it goes beyond a fact and reflects the opinion of the author. In this way, the student must consider the reliability of the statements, which is related to the cognitive subprocess of «Weighing sources».

Item Number	CG134Q04
Cognitive Process	Evaluate information, formulate arguments and explain issues/situations
<b>Cognitive Subprocess</b>	Weighing sources (reliability and relevance)
Response Format	Complex Multiple Choice
Level	3

#### Refugee Olympians: Released Item #5



In this last item of the unit, the student must consider Felix's perspective based on what is provided in the stimulus, go beyond what is explicitly written in the text and provide a reason for why Felix thought it was appropriate to accept the medal for the Refugee Olympic Team. Felix never directly states why he made the decision or why he thought it was the appropriate decision to make. The coding guide for this item specified ways to receive both full and partial credit. The partial-credit description represents a more literal or fact-based way to answer the question, which only refers to the fact that Felix is a refugee. Such responses are technically correct but, unlike the full-credit responses, they do not fully demonstrate an attempt to take Felix's perspective into account and construct an answer that reflects why he may have felt his decision was the most appropriate one.

Item Number	CG134Q05
Cognitive Process	Identify and analyse multiple perspectives
<b>Cognitive Subprocess</b>	Recognising perspectives
Response Format	Open Response – Human Coded
Level	4

#### **Full Credit**

Code 2: Refers to one of the following reasons why Felix may have wanted to accept the medal for the Refugee Olympic Team.

- 1. It helped resolve his conflict about which country to represent. (Note that this reason refers to an internal conflict within Felix, not a conflict between Latoona and Gondaland.)
- 2. It reflects the financial, emotional and/or training support of the Refugee Olympic Team. (Note that this information is not provided in the interview. However, it is factually correct that the Refugee Olympic team provides support for its athletes. Students may have outside knowledge of this fact and it is acceptable for them to apply this knowledge.)
- 3. It provides inspiration for other refugees.
  - There was no good way for him to decide between Latoona and Gondaland. [1]
  - He could call two countries home. [1]
  - He wanted to share it between both countries. [1]
  - He didn't want to offend either country. [1]
  - It was difficult for him to decide. [1] minimal response
  - It was Felix's training with the Refugee Olympic Team that directly supported him to win the gold model. [2]
  - He probably felt supported by the people going through the same thing he was. [2]
  - Felix should have accepted the medal for the team because it will encourage the refugees. [3]

#### **Partial Credit**

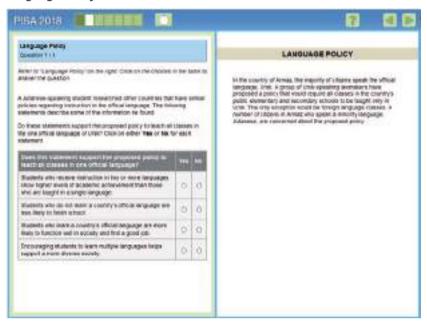
Code 1: Refers to Felix's status as a refugee or that he competed as a member of the Refugee Olympian Team.

- Felix is a refugee so the Refugee Olympic Team best represents his situation.
- He was competing for the Refugee Olympic Team.
- He was a refugee

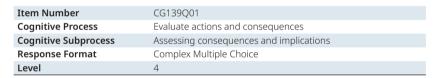
#### **UNIT CG139: LANGUAGE POLICY**

This unit is about a fictional country, Armaz, where the fictional language Ursk is spoken. A group of Ursk-speaking lawmakers proposed a policy that would require all public schools to teach all classes, except foreign language classes, in Ursk. There are a number of citizens in Armaz who speak Jutanese, which is a minority language in Armaz, but is spoken widely outside its borders. They are concerned about the effects of this policy. In this unit, PISA students must consider the impacts of the policy and reason through its possible consequences. The content domain of this unit was categorised as «Culture and intercultural relations» with a subdomain of «Perspective taking, stereotypes, discrimination and intolerance".

#### Language Policy: Released Item #1



This item presents a short text meant to represent a post on social media. In this post, the author makes several statements to support the argument that the medal should have been awarded to Latoona, Felix's host country. The student is then asked to consider four statements from the post and identify which ones are opinions. The correct answer is C and D. If both are selected, full credit is assigned. If only C or only D is selected, partial credit is assigned. If anything else is selected, the student receives no credit. The student must evaluate the information carefully and then consider whether the statement is truly a fact or if it goes beyond a fact and reflects the opinion of the author. In this way, the student must consider the reliability of the statements, which is related to the cognitive subprocess of «Weighing sources».



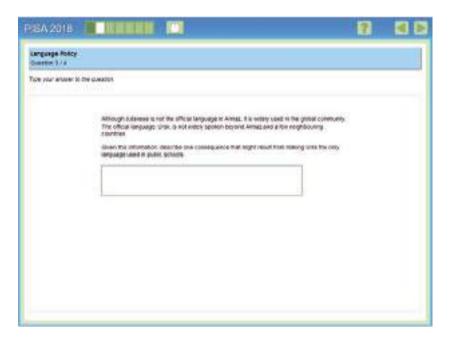
#### Language Policy: Released Item #2



Here, students must consider four possible consequences and determine which one would be the most serious if the Ursk-only policy is instituted. All consequences are possible, but one summarises a serious potential consequence of the policy. Here, B is the correct answer. In order to understand why this is the correct answer, students must consider the fact that a special school would remove Jutanese-speaking students from the general population. By isolating a group of students like this, the Ursk-speaking students would have fewer personal interactions with the Jutanese-speaking students, which could lead to Ursk-speaking students relying on generalisations and stereotypes, rather than on interactions with individuals, to get to know their Jutanese-speaking peers. This could then lead to widening divisions between Ursk and Jutanese speakers.

Item Number	CG139Q04
Cognitive Process	Evaluate actions and consequences
Cognitive Subprocess	Assessing consequences and implications
Response Format	Simple Multiple Choice
Level	3

#### Language Policy: Released Item #3



For this item, students have the opportunity to express their answer in their own words. The previous items focused on the effects of a one-language policy within one country. This item broadens the picture to consider a more global community. Earlier, the unit explained that Jutanese was a minority language within Armaz and not spoken by the majority of citizens. However, here, the student learns that Jutanese is widely used outside of Armaz, in contrast to Ursk, which is not spoken much outside Armaz and some neighbouring countries. With this information, the student must describe a possible consequence of having Ursk-only education in public schools. Students could receive credit by providing two types of responses. Responses that described a consequence that was more globally focused or expressed an effect on relationships between people or cultures in Armaz and other countries received a code of 11. Responses that described a consequence that was more locally focused or expressed an effect on life within Armaz received a code of 12. A code of 13 was applied if the response was not completely clear with respect to its global or local perspective. All three types of responses received full credit. However, these codes were developed so that distributions of global versus local responses could be examined by researchers. For the main study scaling, only full credit compared to no credit was considered.

Item Number	CG139Q05
Cognitive Process	Evaluate actions and consequences
Cognitive Subprocess	Assessing consequences and implications
Response Format	Open Response – Human Coded
Level	2

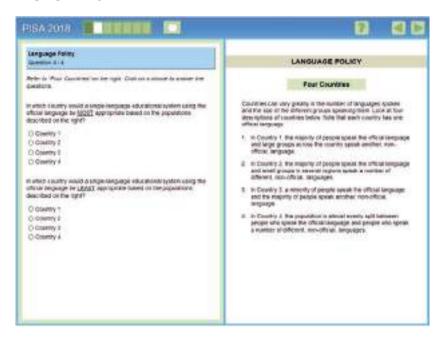
#### **Full Credit**

- Code 11: Includes one consequence associated with how interactions between people in Armaz and people in other countries might be affected as a result of making Ursk the only language used in public schools. Response should refer to one of the following:
  - 1. It could be difficult for people in Armaz to interact with people from other countries.
  - 2. It could limit access to information for people in Armaz.
  - 3. It could be an economic disadvantage for the country/the citizens of Armaz.
  - 4. It could make the global community more interested in Ursk.
  - Students may be disadvantaged when they try to communicate with people in other countries. [1]
  - People in Armaz may not be able to easily interact with visitors to their country. [1]
  - If they only know Ursk, how will they talk to people in other countries? [1]
  - The people in Armaz and neighbouring countries might lose their sense of belonging to the larger community. [1]
  - Students would have a hard time reading things on the Internet because it probably would not be translated into Ursk. [2]
  - People may have a harder time getting jobs in other countries/with international companies. [3]
  - It wouldn't be good for Armaz tourism if people there only spoke Ursk well. [3]
  - It would be hard for Armaz to do business with other countries. [3]
  - People interested in learning Ursk might visit Armaz. [4]
- Code 12: Includes one consequence associated with how life within Armaz might be affected as a result of making Ursk the only language used in public schools. Response should refer to one of the following:
  - 1. It could be a benefit for the country of Armaz.
  - 2. It could be a benefit for everyday life in Armaz.
  - 3. It could be a benefit for the Ursk language.
  - 4. It could result in communication difficulties in Armaz.
  - 5. It could result in social problems in Armaz.
  - If everyone learns Ursk, it might help people understand their history and culture. [1]
  - People in Armaz might form a stronger sense of their own culture. [1]
  - Everyone in Armaz would be able to communicate with each other. [1 or 2]
  - Students who don't speak Ursk as a first language could learn it and participate more easily in Armaz society. [2]
  - People might be able to more easily read official documents, participate in civic life, etc. [2]
  - The Ursk language is more likely to be preserved. [3]
  - It will cause language barriers between the citizens of the same country and between generations, leading to social divide. [4 and 5]
  - Jutanese speakers might have to leave Armaz because they can't communicate well. [4]
  - People who speak Jutanese in Armaz may face discrimination. [5]
  - Protests might happen as people who are not used to speaking Ursk will feel it is unecessary to learn it. [5]
  - There is no problem for students who understand Ursk. But some students who do not get used to Ursk could be bullied because of wrong use of words. [5]

Code 13: Includes a correct consequence, but it is not clear whether the response is referring to a consequence that has an effect within Armaz or a consequence that affects interactions between people in Armaz and people in other countries.

- Discrimination [Acceptable consequence, but it's not clear whether this refers to discrimination among people within Armaz or between people in other countries and people in Armaz]
- It would be hard for people to communicate. [Acceptable consequence, but it's not clear whether this refers to a communication issue within Armaz or between people in Armaz and other countries.]
- People could become more isolated. [Acceptable consequence, but it's not clear whether this refers to isolation of a group of people within Armaz or isolation of Armaz from other countries.]

#### Language Policy: Released Item #4



The stimulus describes four countries that have unique profiles of the language or languages spoken within the country. In this item, the student must consider where a single-language education system would be the most appropriate and where it would be the least appropriate. Country 2 is the **most** appropriate location for a single-language education system because a majority of the people already speak the official language. A minority of people speak a number of different languages, and these individuals are spread out across the country in different regions. Thus, in this country, it would be difficult to incorporate a common second language within the education system. Country 3, however, has only a minority of people that speak the official language. Here, a majority of the people speak a common language that is not the official language. If a one-language education policy were instituted in the official language, many citizens would face great difficulties in the education system. Therefore this is the **least** appropriate location for a single-language system. The correct answer for this item is Country 2 and Country 3.

Item Number	CG139Q02
Cognitive Process	Evaluate actions and consequences
Cognitive Subprocess	Considering actions
Response Format	Simple Multiple Choice
Level	4

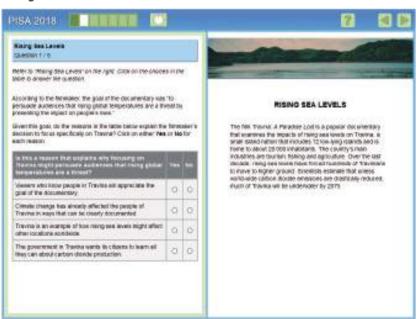
#### **UNIT CG122: RISING SEA LEVELS**

#### **Rising Sea Levels: Introduction**



This unit begins with a brief introduction that describes the effects of rising temperatures on sea levels. The introduction sets the stage for the items within the unit, which explores the effects of rising sea levels on individuals who live in areas of low elevations, such as islands and coastal areas. The unit focuses on a fictional place where sea levels have risen and displaced the inhabitants of the islands, making them climate refugees. The content domain of this unit was categorised as «Socio-economic development and interdependence" with a subdomain of «Economic interactions and interdependence". The experts also felt that this unit included content relevant to the category "Environmental sustainability" with a subdomain of "Natural resources and environmental risks".

#### Rising Sea Levels: Released Item #1

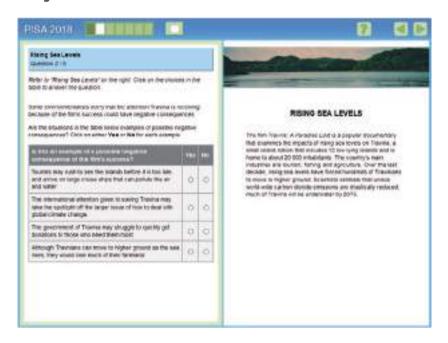


The first item in the unit presents a brief text about a fictional film, "Travina: A Paradise Lost". The documentary focuses on a fictional island nation, Travina, that has been affected by rising sea levels. Hundreds of Travinians have had to move to higher ground to escape the changes to the low-lying areas of the islands. The text also states that unless environmental conditions improve, most of Travina will be underwater by the year 2075.

With this background, the item introduces the filmmaker's goal in creating the documentary: "to persuade audiences that rising global temperatures are a threat by presenting the impact on people's lives". The item then presents four reasons that might explain why the filmmaker focused on Travina. To answer each part of the item correctly, the student must consider the filmmaker's goal and evaluate whether each statement could be a reason why Travina would present a persuasive case. In the table, the second and third statements describe reasons that support the filmmaker's goal. In both cases, the statements describe why the situation on Travina could have a broader impact on viewers, even those who live far from Travina or who do not live near the ocean. By contrast, the first and last statements do not describe why the filmmaker would use Travina as an example. These statements describe a narrow viewership and one that is likely already persuaded about the effects of rising global temperatures. Thus, to receive credit for this item, students had to respond No, Yes, Yes, No.

Item Number	CG122Q01
Cognitive Process	Evaluate information, formulate arguments and explain issues/situations
<b>Cognitive Subprocess</b>	Describing and explaining complex situations or problems
Response Format	Complex Multiple Choice
Level	4

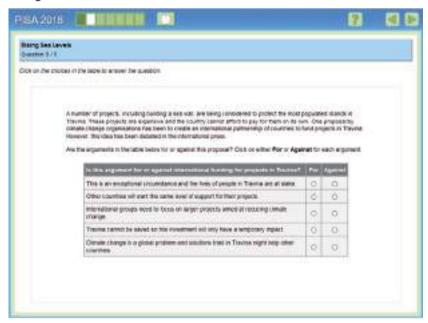
#### Rising Sea Levels: Released Item #2



Here, students must be able to identify possible negative consequences of the film's success and the attention on Travina. For each example in the table, the student must decide whether it describes a possible negative consequence. The correct answer is Yes, Yes, No, No. The first two examples describe direct possible consequences of the attention on Travina that could have additional negative effects on the island nation. The third and fourth examples are not truly consequences of the attention the film is generating for Travina. In the third example, whether the government can disburse donations to those in need has little to do with the success of the film and more to do with the government's capacity. The fourth example expresses a consequence that is related to Travinians having to move to higher ground, but this is not relevant to the success of the documentary.

Item Number	CG122Q02
Cognitive Process	Evaluate actions and consequences
<b>Cognitive Subprocess</b>	Assessing consequences and implications
Response Format	Complex Multiple Choice
Level	5

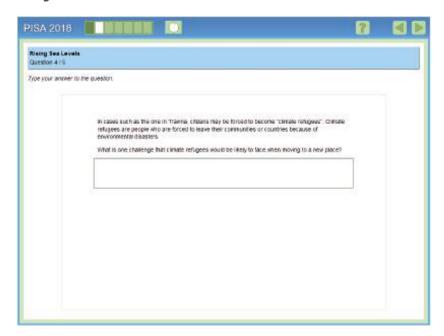
#### Rising Sea Levels: Released Item #3



This item introduces new information about projects that can be completed to help certain islands within Travina. The brief text states that Travina cannot afford these projects on its own, so some people have proposed creating an international partnership of countries that would fund these projects in Travina. The student is then asked to read five arguments and identify whether each statement is for or against the idea of international funding for projects in Travina. To receive credit on this item, students had to get all parts of the item correct. The correct answers are: For, Against, Against, Against, For.

Item Number	CG122Q03
Cognitive Process	Evaluate information, formulate arguments and explain issues/situations
<b>Cognitive Subprocess</b>	Describing and explaining complex situations or problems
Response Format	Complex Multiple Choice
Level	3

#### Rising Sea Levels: Released Item #4



This item asks the student to name one challenge that climate refugees would face when moving to a new place. This item was one of the easiest items in the Global Competence item pool. While the item is focused on a climate refugee, all refugees face a similar set of challenges when leaving their home and moving somewhere new. While the majority of PISA students were likely not refugees, the challenges of moving to a new place are those that many students can imagine or have experienced themselves. Thus, students could apply their prior knowledge to this context in order to recognise the challenges that affect climate refugees. The test developers came up with four broad categories for the challenges that would be relevant for climate refugees and others who need to relocate: communication difficulties; financial/economic difficulties; difficulties adjusting to life in a new place; and difficulties associated with leaving or losing the community or home and/or finding a new place to live. If students provided a response that fell within one of those categories, they received full credit.

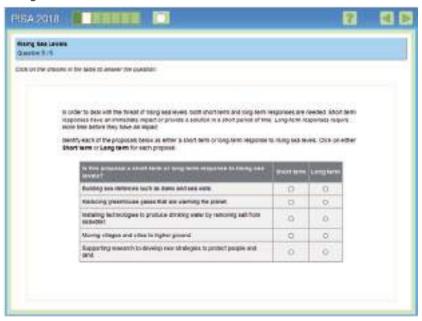
Item Number	CG122Q04
Cognitive Process	Identify and analyse multiple perspectives
<b>Cognitive Subprocess</b>	Recognising perspectives
Response Format	Open Response – Human Coded
Level	1

#### **Full Credit**

Code 1: Provides a challenge associated with someone leaving their community or country. Responses should refer to one of the following categories of challenges:

- 1. Communication
- 2. Financial/Economic
- 3. Difficulties adjusting to life in a new place
- 4. Difficulties associated with leaving or losing the community or home and/or finding a new place to live
  - They may not know the language. [1]
  - Language [1] Minimal response: The word "language" provides a strong enough connection to a communication challenge.
  - They may not know the language which could make it hard to get a job. [1 and 2]
  - They might have to move to a place that is more expensive and then life would be harder for them. [2]
  - They may be unfamiliar with the culture and not fit in. [3]
  - They might have trouble making friends because they are different. [3]
  - They may not get used to the temperature or humidity in their new home and get sick easily. [3] Responses that refer to adjusting to the climate of a new place are acceptable.
  - Discrimination [3] Minimal response: Related words such as racism, prejudice, etc. are acceptable because they provide a strong connection to a challenge refugees. might experience in adjusting to life in a new place]
  - They may not be able to move with all of their family. [4]
  - They might miss their native homeland. [4]
  - They would be sad to leave the place they called home. [4]
  - They might not be allowed into some countries. [4]

#### Rising Sea Levels: Released Item #5



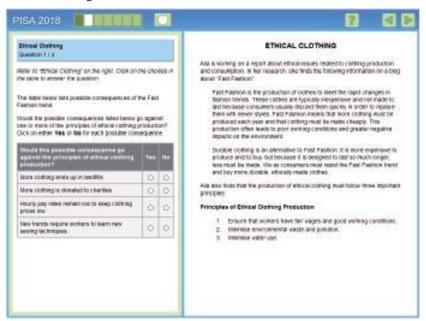
This final item asks the student to consider a set of proposals and identify which represents a short-term response (to a more immediate need) and which represents a long-term response (to more systemic causes) to rising sea levels. Here, sea defences, desalination technologies for drinking water and moving villages are all short-term responses. Each individual response might require a lot of effort and several years to complete, but they all address a more short-term, immediate response to the problems people on an island face in the midst of rising sea levels. By contrast, reducing greenhouse gases and supporting research for new protection strategies are responses that must unfold over a longer period. Each of these solutions could take decades for the results to affect people and could help tackle the systemic causes of sea level rise. This item had partial-credit and full-credit scoring. The correct responses were Short term, Long term, Short term, Long term. To receive partial credit, four out of five statements had to be correct. To receive full credit, all five statements had to be correct. If three or fewer statements were correct, no credit was assigned. The level provided for this item is based on full credit.

Item Number	CG122Q05
Cognitive Process	Evaluate actions and consequences
<b>Cognitive Subprocess</b>	Considering actions
Response Format	Complex Multiple Choice
Level	5

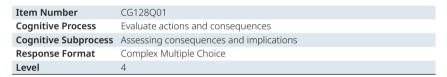
#### **UNIT CG128: ETHNICAL CLOTHING**

In this unit, students are introduced to the concept of fast fashion, which is a trend whereby clothing is inexpensive, of lesser quality and produced to meet the frequent changes in fashion trends. This clothing is not intended to be worn by consumers for several seasons. Instead, it is likely to be discarded or donated once the style has become less popular. Students also learn about an alternative concept: durable fashion. Durable clothing is more expensive, of better quality and intended to be worn for longer periods. Students are also told about three principles of ethical clothing production. Throughout the unit, students are asked to consider the consequences of clothing production and make connections with these principles. The content domain of this unit was categorised as "Environmental sustainability" with a subdomain of "Policies, practices and behaviours for environmental sustainability". The experts also felt that this unit included content relevant to the category «Socio-economic development and interdependence" with a subdomain of «Economic interactions and interdependence".

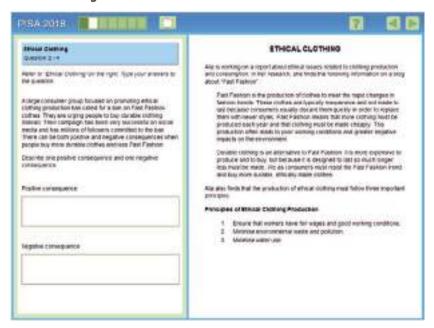
#### Ethical Clothing: Released Item #1



A list of four possible consequences of the Fast Fashion trend are presented, and students need to decide whether each consequence violates one or more of the principles of ethical clothing production. The first and third consequences violate the principles. The first consequence violates the second principle because more clothing in landfills adds to environmental waste instead of minimising it. The third consequence violates the first principle because keeping pay rates low means the company or industry is not working to ensure that workers have fair wages. The second and fourth consequences do not violate the principles. To receive credit on this item, students had to get all parts of the item correct. The correct answers are: Yes, No, Yes, No.



#### Ethical Clothing: Released Item #2



Here, the student is asked to think about what might happen if there were a ban on Fast Fashion clothes. They are asked to provide one possible positive consequence of a ban and one negative consequence. In order for students to provide either kind of consequence, they first need to think about the current effects of Fast Fashion described in the stimulus. Then they must consider what would happen if a ban went into effect, which requires the student to be able to think beyond what has been described in the unit thus far. Test developers came up with several classes of responses for both the positive and negative consequences, which are provided in the coding guide below with sample responses. For this item, full credit was given if the student could correctly describe both a positive and a negative consequence. Students received partial credit if they could accurately describe only a positive or only a negative consequence.

Item Number	CG128Q02
Cognitive Process	Evaluate actions and consequences
<b>Cognitive Subprocess</b>	Assessing consequences and implications
Response Format	Open Response – Human Coded
Level	3

#### **Full Credit**

Code 2: Includes a correct response for both the positive AND negative consequences. In general, the two consequences should appear in the correct boxes. If the student puts both responses in a single box, it must be clear that one is a positive consequence and one is a negative consequence. Correct possible consequences for each are provided below. Positive consequences – responses should refer to one of the following types of positive consequences:

- 1. Positive effects on the environment
- 2. Positive effects on workers
- 3. Positive effects for customers
- 4. Positive effects for the clothing production industry
- 5. Positive effects on fashion or clothing
  - People would wear durable clothes more often and less clothes would be thrown away. [1]
  - There would be less pollution. [1]
  - Ethical clothing reduces waste in landfills. [1]
  - Workers get fair wages. [2]
  - Workers will be treated better. [2]
  - There would be more durable clothing available. [3 or 5]
  - More durable clothing options might increase competition. [3 or 4]
  - More durable clothing factories will open. [4]
  - It could become easier and cheaper to make durable clothing. [3 or 4]
  - It will be more ethical. [5]
  - Clothing will last longer. [5]

Negative consequences – responses should refer to one of the following types of consequences:

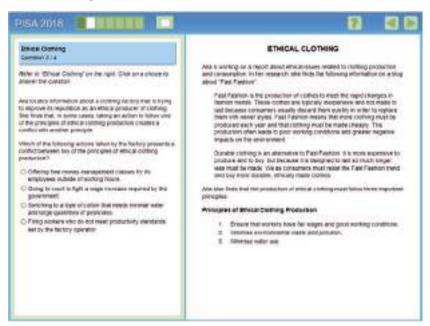
- 1. Negative effects on workers
- 2. Negative effects on customers or clothing charities
- 3. Negative effects on the clothing production industry
- 4. Negative effects on fashion or clothing
  - Some Fast Fashion factories might close because people don't buy the clothes. [1 or 3]
  - People won't have to buy as many clothes because durable clothes last longer, so there will be fewer jobs for clothing workers. [1]

- Clothing prices could go up for everyone if there is more durable clothing available than Fast Fashion. [2]
- There will be fewer style options. [2 or 4]
- Fewer clothes will be donated to charity. [2]
- Companies will make less profit with durable clothes. [3]
- If companies switch to durable clothes, they might not be as successful as they were before. [3]
- Clothes will be more boring. [4]

#### **Partial Credit**

Code 1: Includes a correct possible positive consequence OR a correct possible negative consequence. The other possible consequence is missing, incorrect, vague, insufficient or irrelevant. The correct consequence must appear in the correct box. Note: For this item, each response is evaluated independently. Therefore, this coding guide is an exception to the general principle that an incorrect portion of a response leads to a Code 0.

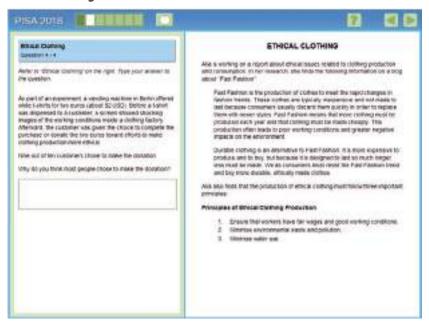
#### Ethical Clothing: Released Item #3



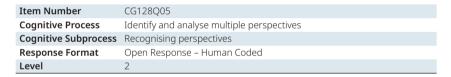
In this item, students have to think about how one action might affect another within the framing of the principles of ethical clothing. Four actions by a factory are described. Students need to read each one and identify which one causes a conflict between two of the principles. The correct answer is C. Switching to a type of cotton that needs minimal water addresses the third principle of ethical clothing (minimise water use). However, this type of cotton requires large quantities of pesticides, which violates the second principle (minimise environmental waste and pollution).

Item Number	CG128Q03
Cognitive Process	Evaluate actions and consequences
<b>Cognitive Subprocess</b>	Considering actions
Response Format	Simple Multiple Choice
Level	4

#### Ethical Clothing: Released Item #4



The last item in this unit describes an experiment that took place in Germany. A vending machine offered T-shirts for only two euros. However, before the machine dispensed the T-shirt, it presented images of the working conditions where the T-shirt was made. Then, customers were asked if they wanted to go forward with the purchase or donate the two euros to make clothing production more ethical. Students learn that in this experiment, nine out of ten customers made the donation. They are then asked to write in their own words why they think most people chose to make the donation. The test developers came up with two primary ways to receive credit for this item, both of which required students to take the perspective of the customer who just learned how the T-shirt was made.



#### **Full Credit**

Code 1: Describes a reason for making a donation that refers to an awareness of working conditions in the clothing industry or how consumer actions affect others.

- The images made people aware of the real cost of the t-shirt.
- The images encouraged people to think about how their actions affect other people.
- It made people realise the t-shirt was cheap because factories take advantage of their workers.
- Because they saw the images and they became aware. [Minimal response: Addresses the concept of awareness, but it doesn't specify what the customers became aware of.]
- They saw how hard the workers had to work.
- They didn't want to contribute to the poor working conditions.

OR: Describes a reason for making a donation that focuses on the emotions or motivations of the donors only.

- People felt guilty.
- The images made people feel bad about buying the clothes.
- They felt pressured.
- They wanted to help.
- Because they are compassionate.
- This was a simple action people could do to help workers and not feel so guilty.
- They felt it was the least they could do.



# The development and implementation of PISA: A collaborative effort

PISA is a collaborative effort, bringing together experts from the participating countries, steered jointly by their governments on the basis of shared, policy-driven interests.

A PISA Governing Board, on which each country is represented, determines the policy priorities for PISA, in the context of OECD objectives, and oversees adherence to these priorities during the implementation of the programme. This includes setting priorities for the development of indicators, for establishing the assessment instruments, and for reporting the results.

Experts from participating countries also serve on working groups that are charged with linking policy objectives with the best internationally available technical expertise. By participating in these expert groups, countries ensure that the instruments are internationally valid and take into account the cultural and educational contexts in OECD member and partner countries and economies, that the assessment materials have strong measurement properties, and that the instruments emphasise authenticity and educational validity.

Through National Project Managers, participating countries and economies implement PISA at the national level subject to the agreed administration procedures. National Project Managers play a vital role in ensuring that the implementation of the survey is of high quality, and verify and evaluate the survey results, analyses, reports and publications.

The design and implementation of the surveys, within the framework established by the PISA Governing Board, is the responsibility of external contractors. For PISA 2018, the overall management of contractors and implementation was carried out by the Educational Testing Service (ETS) in the United States as the Core A contractor. Tasks under Core A also included instrument development, development of the computer platform, survey operations and meetings, scaling, analysis and data products. These tasks were implemented in co-operation with the following subcontractors; i) the University of Luxembourg for support with test development; ii) the Unité d'analyse des systèmes et des pratiques d'enseignement (aSPe) at the University of Liège in Belgium for test development and coding training for open-response items; iii) the International Association for the Evaluation of Educational Achievement (IEA) in the Netherlands for the data management software; iv) Westat in the United States for survey operations; v) Deutsches Institut für Internationale Pädagogische Forschung (DIPF) in Germany, with co-operation from Statistics Canada, for the development of the questionnaires; and vi) HallStat SPRL in Belgium for the translation referee.

The remaining tasks related to the implementation of PISA 2018 were implemented through three additional contractors – Cores B to D. The development of the cognitive assessment frameworks for reading and global competence and of the framework for questionnaires was carried out by Pearson in the United Kingdom as the Core B contractor. Core C focused on sampling and was the responsibility of Westat in the United States in co-operation with the Australian Council for Educational Research (ACER) for the sampling software KeyQuest. Linguistic quality control and the development of the French source version for Core D were undertaken by cApStAn, who worked in collaboration with BranTra as a subcontractor.

The OECD Secretariat has overall managerial responsibility for the programme, monitors its implementation daily, acts as the secretariat for the PISA Governing Board, builds consensus among countries and serves as the interlocutor between the PISA Governing Board and the international Consortium charged with implementing the activities. The OECD Secretariat also produces the indicators and analyses and prepares the international reports and publications in co-operation with the PISA Consortium and in close consultation with member and partner countries and economies both at the policy level (PISA Governing Board) and at the level of implementation (National Project Managers).

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(\*Former PGB representative who was involved in PISA 2018)

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# PISA 2018 Results (Volume VI) ARE STUDENTS READY TO THRIVE IN AN INTERCONNECTED WORLD?

The OECD Programme for International Student Assessment (PISA) examines what students know in reading, mathematics and science, and what they can do with what they know. It provides the most comprehensive and rigorous international assessment of student learning outcomes to date. Results from PISA indicate the quality and equity of learning outcomes attained around the world, and allow educators and policy makers to learn from the policies and practices applied in other countries. This is one of six volumes that present the results of the PISA 2018 survey, the seventh round of the triennial assessment.

Volume I, What Students Know and Can Do, provides a detailed examination of student performance in reading, mathematics and science, and describes how performance has changed since previous PISA assessments.

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Volume VI, Are Students Ready to Thrive in an Interconnected World?, explores students' ability to examine local, global and intercultural issues, understand and appreciate different perspectives and world views, interact respectfully with others, and take responsible action towards sustainability and collective well-being.

Consult this publication on line at: https://doi.org/10.1787/d5f68679-en

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ISBN 978-92-64-27174-6



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