

The Programme for International Student Assessment (PISA) is a triennial survey of 15-year-old students that assesses the extent to which they have acquired the key knowledge and skills essential for full participation in society. The assessment focuses on proficiency in reading, mathematics, science and an innovative domain. In 2018, the innovative domain was global competence.

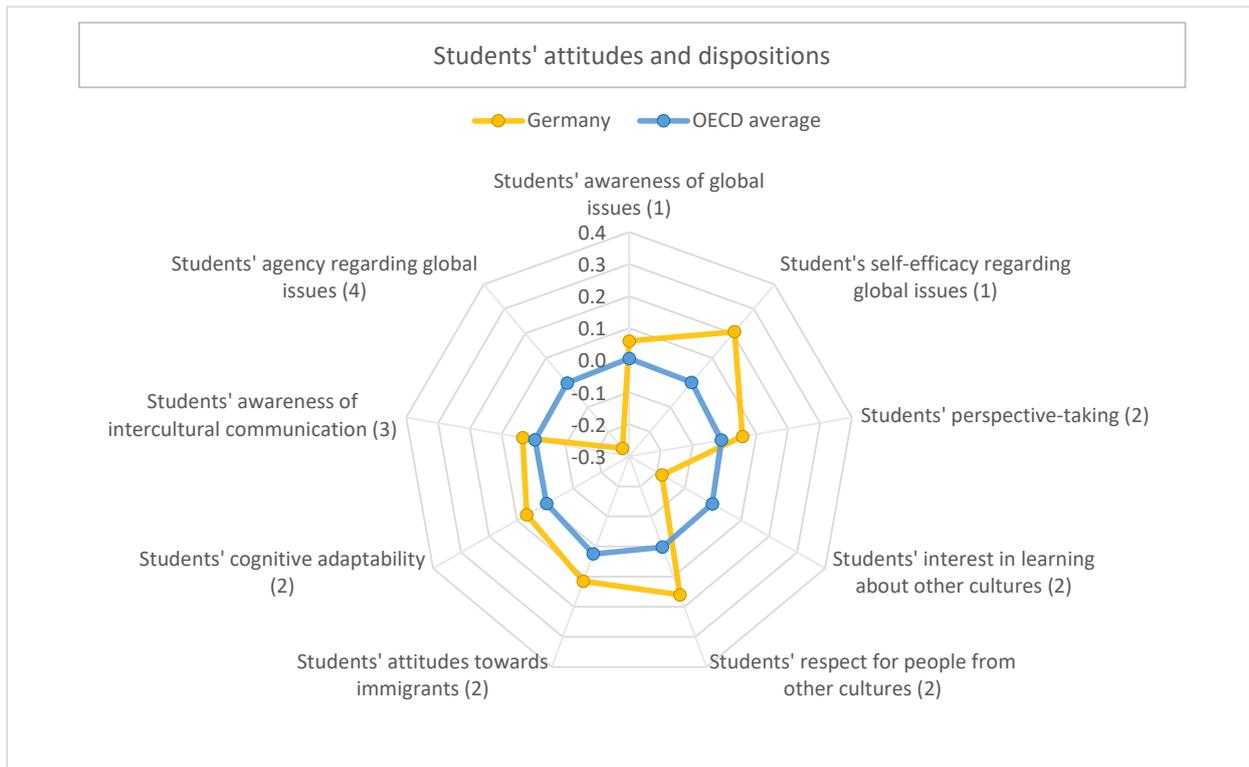
## Germany

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. 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. Students in Germany completed the questionnaire only.

### Key Findings

- Students in Germany reported levels of self-efficacy regarding global issues, respect for people from other cultures, and attitudes towards immigrants that are positive and higher than the OECD average. They reported levels of awareness of global issues, perspective taking, cognitive adaptability and awareness of intercultural communication that are slightly higher than the OECD average.
- By contrast, students reported levels of interest in learning about other cultures and agency regarding global issues that are below OECD average.

**Figure 1. Students' attitudes and dispositions**



**Note:** (1) is for the first dimension of global competence, (2) is for the second dimension, (3) is for the third dimension and (4) is for the fourth dimension.

**Source:** OECD, PISA 2018 Database, Table V1.B1.6.6.

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

The first dimension of global competence focuses on students' ability to combine knowledge about the world and critical understanding when they form opinions about a local or global issue.

- Students in Germany reported some of the highest levels of self-efficacy regarding global issues, scoring substantially higher than the OECD average, along with students in Albania, the Dominican Republic, Peru and the United Arab Emirates. In particular, they were the most confident when discussing the different reasons why people become refugees, with 88% saying that they could do the task easily or with some effort (OECD average 77%). Students were also very confident on explaining why some countries suffer more from global climate change than others (77%, compared to the OECD average of 72%). Students in Germany were the least confident on explaining how carbon-dioxide emissions affect global climate change (61%, compared to the OECD average of 63%) and how economic crises in single countries affect the global economy (60%, compared to the OECD average of 61%).
- On awareness of global issues, students reported levels that are similar to those observed on average across all OECD countries and similar to those in France, Peru, Serbia and Spain. Students were the most aware of gender equality, with 85% of them reporting that they know about the topic or are very familiar with it (OECD average 83%). This is followed by awareness about climate change and global warming (83%, compared to the OECD average of 78%), migration (83%, compared to the OECD average of 79%), causes of poverty (82%, compared to

the OECD average of 78%) and hunger and malnutrition in different parts of the world (80%, compared to the OECD average of 78%).

## Understand and appreciate the perspectives and worldviews of others

The second dimension of global competence focuses on students' ability to understand and appreciate the perspectives and worldviews of others.

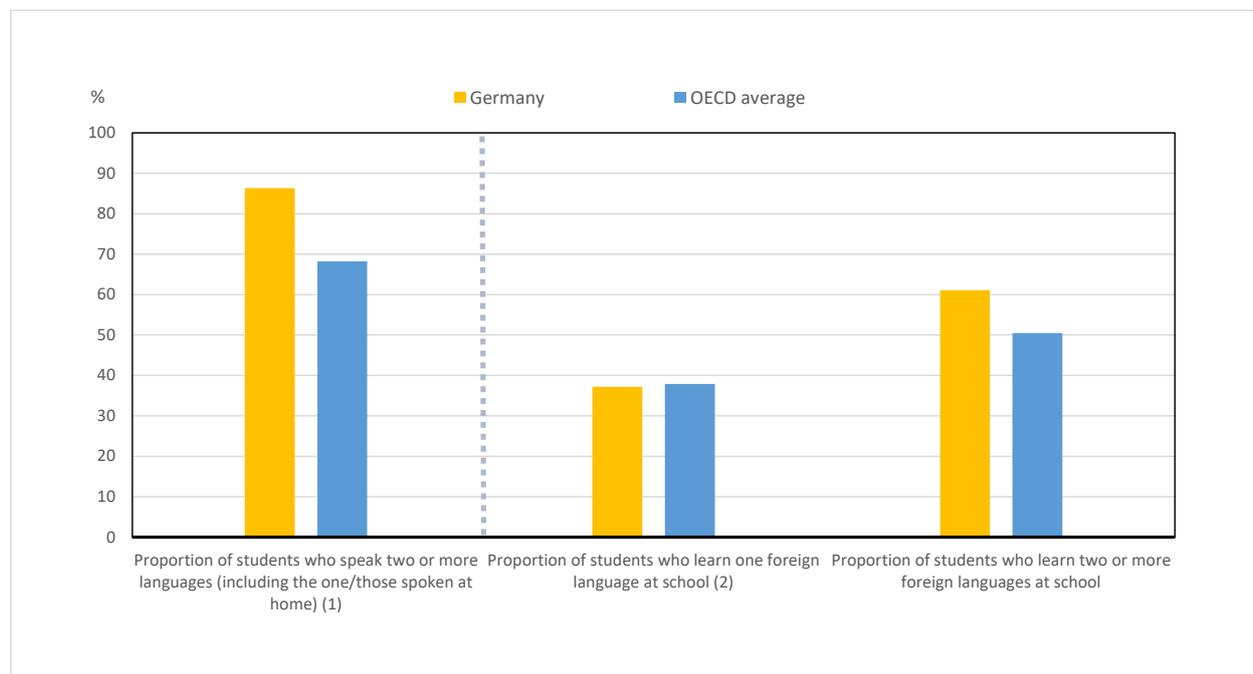
- When asked to describe their ability to understand the perspectives of others, 69% of students reported that they try to understand their friends better by imagining how things look from their perspective (OECD average 64%). Some 69% reported that they believe that there are two sides to every question and they try to look at them both (OECD average 63%). About 64% reported that they try to look at everyone's side of a disagreement when they make a decision (OECD average 59%), and about 53% reported that before criticising someone, they try to imagine how they would feel if they were in their place (OECD average 55%). Only 35% of students reported that when they are upset at someone, they try to take the perspective of that person for a while (OECD average 40%). On the scaled index of perspective taking, students in Germany reported levels similar to the OECD average and to those in Estonia, Indonesia, Serbia and Ukraine.
- Students reported markedly lower levels of interest in learning about other cultures, as Germany scored significantly below the OECD average and among the four countries with the lowest scores (the other three are Hungary, Italy and the Slovak Republic). About half of the students reported that they want to learn how people live in different countries and how people from various cultures see the world. Slightly fewer students (47%, compared to the OECD average of 54%) reported that they are interested in finding out about the traditions of other cultures, and even fewer (31%, compared to the OECD average of 40%) said that they want to learn about the religions of the world.
- Even though students in Germany did not report great interest in learning about other cultures, they reported high levels of respect for people from other cultures. The average on this index was positive and higher than the OECD average and similar to values observed in France, New Zealand, Portugal and the United Arab Emirates. The proportion of students responding positively exceeded 80% on all questionnaire items used in constructing this index, with the largest proportions observed for respecting people from other cultures as equal human beings, with 87% of students reporting that the statement reflects their beliefs (OECD average 82%).
- Students also reported positive attitudes towards immigrants that are higher than the OECD average. In particular, 86% of students agreed or strongly agreed that immigrant children should have the same opportunities for education that other children in the country have (OECD average 85%). Some 83% agreed or strongly agreed that immigrants should have the same rights that everyone else in the country has (OECD average 80%). Fewer students agreed or strongly agreed that immigrants who live in a country for several years should be able to vote (74%, compared to the OECD average of 72%) and that immigrants should be able to continue their customs and lifestyles (73%, compared to the OECD average of 76%).
- Students in Germany reported levels of cognitive adaptability that are slightly higher than the OECD average. They were relatively confident on changing their behaviour to meet the needs of new situations, on overcoming difficulty in interacting with people from other cultures, on adapting to different situations even when under stress or pressure and on resolving difficult situations with other people. More than 60% of students gave positive answers on all those questionnaire items.

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

The third dimension of global competence is the ability to engage in effective communication across cultures. Students who are proficient in this aspect of global competence are likely to be aware of the nuances of intercultural communication, to be multilingual and to have contact with people from different cultural backgrounds.

- Students in Germany reported levels of awareness of intercultural communication similar to the OECD average and to levels in Brunei Darussalam, Israel, Peru and Romania. Out of the seven questionnaire items used in the construction of this index, a majority of students (exceeding 80%) agreed or strongly agreed with the following three statements: “I frequently check that we are understanding each other correctly”; “I listen carefully to what others say”; and “If there is a problem with communication, I find ways around it”. The proportions across OECD countries on these statements varied around 80%.
- Most students in Germany are multilingual, with 86% reporting that they speak two or more languages (OECD average 68%). About 37% of them reported that they learn one foreign language at school (OECD average 38%), and 61% reported that they learn two or more (OECD average 50%). Only 2% reported that they do not learn any foreign languages at school.
- Speaking and learning multiple languages is positively and sometimes strongly associated with students’ global and intercultural attitudes and dispositions, even after accounting for students’ and schools’ socio-economic profiles.

**Figure 2. Language speaking and learning**



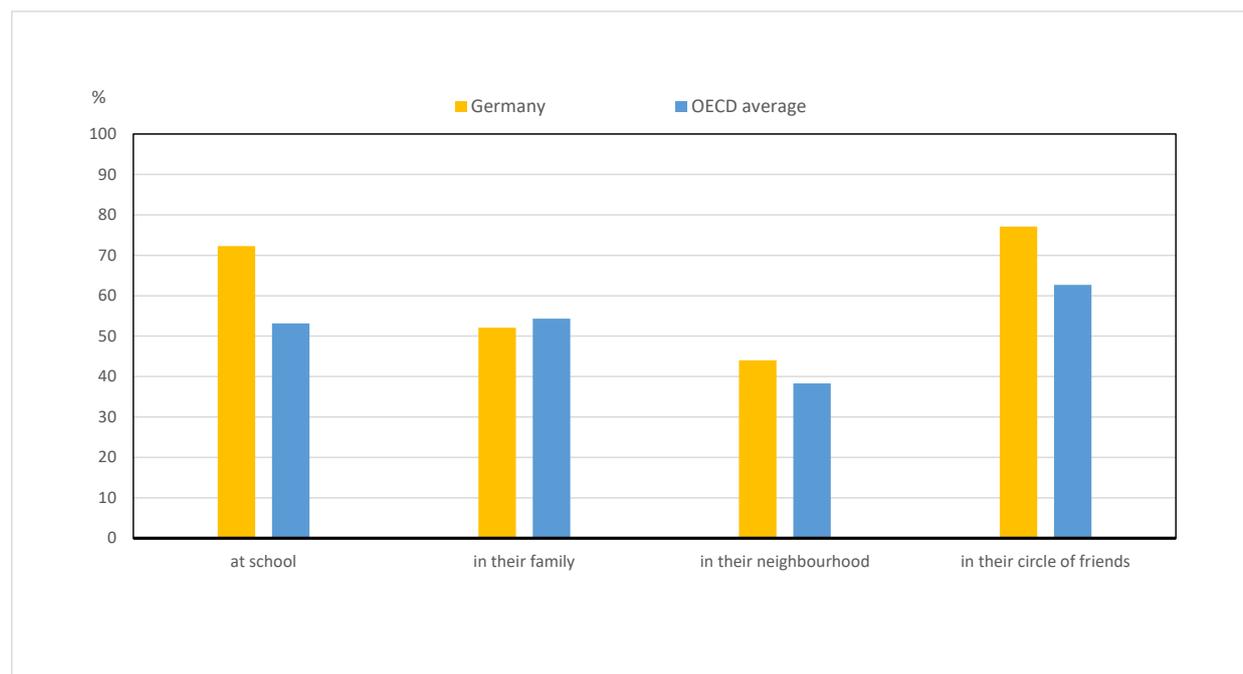
**Notes:** 1. Students were asked the following question: "How many languages, including the language(s) you speak at home, do you and your parents speak well enough to converse with others?"

2. Students reported on the number of foreign languages they learned at their school in the year they sat the PISA test.

**Source:** OECD, PISA 2018 Database, Table V1.B1.4.10.

- Most students reported that they have contact with people from other countries: at school (72%, compared to the OECD average of 53%), in their circle of friends (77%, compared to the OECD average of 63%), in their family (52%, compared to the OECD average of 54%) and in their neighbourhood (44%, compared to the OECD average of 38%).
- In Germany, having contact with people from other countries at school is positively correlated with students' global and intercultural attitudes and dispositions, even after accounting for students' and schools' socio-economic profiles.

**Figure 3. Contact with people from other countries**



Source: OECD, PISA 2018 Database, Table V1.B1.4.4.

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

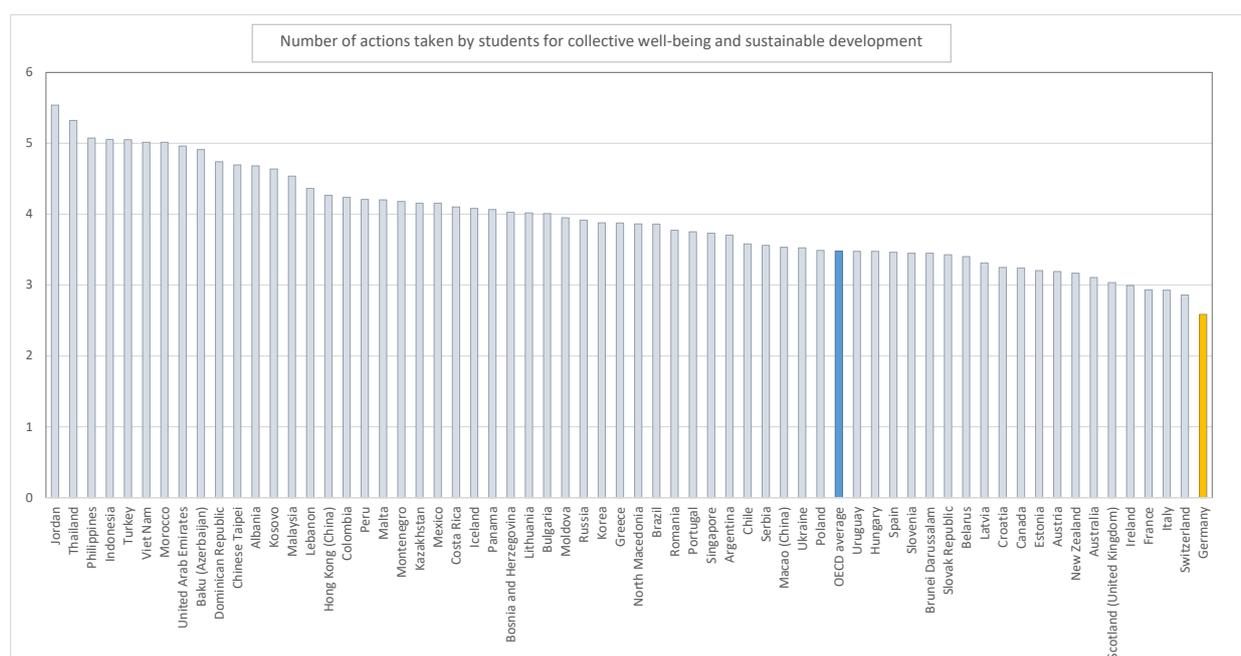
The fourth dimension of global competence is about taking action for sustainable development and collective well-being, which is the ultimate goal of the three dimensions explored previously.

- When it comes to students' agency regarding global issues, students in Germany scored much lower than the OECD average, along with students in Hungary, Latvia, the Russian Federation and the Slovak Republic. About or slightly more than 60% of students agreed or strongly agreed with the following statements: "Looking after the global environment is important to me"; "It is right to boycott companies that are known to provide poor workplace conditions for their employees"; and "I think of myself as a citizen of the world".
- Students were asked eight questions about actions they take for sustainability and collective well-being. Students in Germany took about 3 actions while, on average across OECD countries, students took 3.5 actions. The actions that were most common in Germany were: reducing energy use at home, with 65% of students reporting that they do so (OECD average 71%); keeping oneself informed about world events using social media (45%, compared to the OECD average of 64%); choosing certain products for ethical and environmental reasons (39%, compared to the OECD average of 45%); and reading websites on international social issues (35%, compared

to the OECD average of 46%). The least common actions taken by students are: participating in activities promoting gender equality (20%, compared to the OECD average of 33%); boycotting companies for political, ethical or environmental reasons (19%, compared to the OECD average of 27%); and signing environmental or social petitions (16%, compared to the OECD average of 25%).

- The number of actions for sustainability and collective well-being was positively associated with students' attitudes and dispositions. This association was not attenuated when students' and schools' socio-economic profiles were accounted for.

**Figure 4. Taking action for sustainability and collective well-being**



**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 number of actions taken by students for collective well-being and sustainable development.

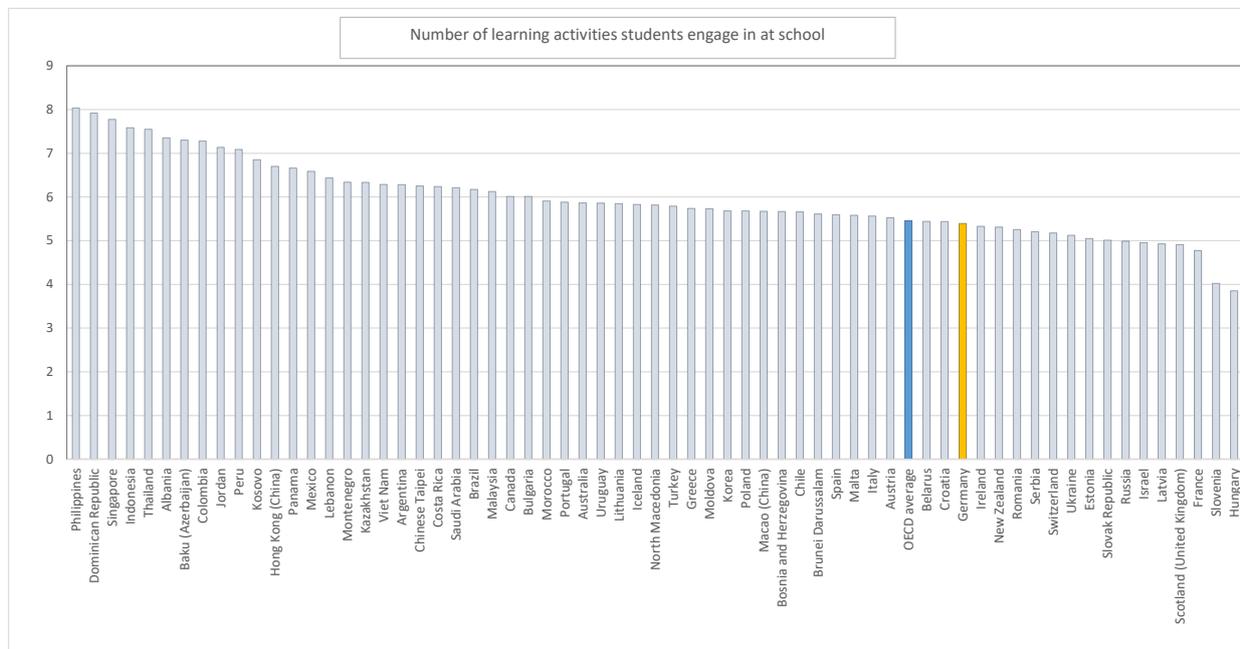
**Source:** OECD, PISA 2018 Database, Table V1.B1.5.18 and Table VI.B1.5.9.

## Learning for global competence

- Students were asked ten questions about different global and intercultural learning activities they engage in at school. On average across OECD countries, students reported that they engage in about 5.5 activities. In Germany, students engaged in 5.4 activities.
- The most common learning activity students engage in was learning about different cultures, with 81% of students saying they do (OECD average 76%). This was followed by learning about the interconnectedness of countries' economies (69%, compared to the OECD average of 55%) and learning how to solve conflicts with other people (65%, compared to the OECD average of 64%). The least common activities were reading newspapers, looking for news on the Internet or watching the news together during classes (39%, compared to the OECD average of 41%) and participating in events celebrating cultural diversity throughout the school year (25%, compared to the OECD average of 41%).

- In Germany, as in other countries, participating in global and intercultural learning activities is positively associated with all students' attitudes and dispositions.

**Figure 5. Engagement with global and intercultural learning activities**



**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 listed in descending order of the number of learning activities students engage in at school.

**Source:** OECD, PISA 2018 Database, Table V1.B1.7.1.

- More than 80% of students in Germany attended schools where school principals reported that global issues such as climate change, causes of poverty and migration are covered in the curriculum (OECD averages varied around 80%). Topics related to intercultural understanding, such as knowledge of different cultures, respect for cultural diversity and critical thinking, are also commonly covered in the curriculum.
- In schools attended by 15-year-olds, on average 51% of teachers reported needing professional development for teaching in multicultural and multilingual settings (overall average of 54%). About 40% of teachers reported needing training for communication with people from different cultures or countries (overall average 46%), and 31% reported needing training for teaching about equity and diversity (overall average of 42%).

## 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; Germany implemented the global competence questionnaire. PISA 2018 also included an assessment of young people's financial literacy, which was optional for countries and economies. Results for reading, mathematics and science were released on 3 December 2019, results for financial literacy on 7 May 2020 and results for global competence on 22 October 2020. Germany did not implement the financial literacy module.

### **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. In Germany, 5 451 students, in 226 schools, completed the assessment, representing 734 915 of the 15-year-old students (99% of the total population of 15-year-olds).

### **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. Germany implemented both the teacher and parent questionnaires.
- Countries/economies could also chose to distribute three other optional questionnaires for students: 52 countries/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. Singapore implemented the Information and Communications Technology (ICT) familiarity and the educational expectations questionnaires.

## References

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>

## Map of PISA countries and economies



### OECD member countries

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

### Partner countries and economies in PISA 2018

Albania  
Argentina  
Baku (Azerbaijan)  
Belarus  
Bosnia and Herzegovina  
Brazil  
Brunei Darussalam  
B-S-J-Z (China)\*\*  
Bulgaria  
Costa Rica  
Croatia  
Cyprus<sup>1</sup>  
Dominican Republic  
Georgia  
Hong Kong (China)  
Indonesia  
Jordan  
Kazakhstan  
Kosovo  
Lebanon  
Macao (China)  
Malaysia  
Malta  
Republic of Moldova  
Montenegro  
Morocco  
Republic of North Macedonia  
Panama  
Peru  
Philippines  
Qatar  
Romania  
Russian Federation  
Saudi Arabia  
Serbia  
Singapore  
Chinese Taipei  
Thailand  
Ukraine  
United Arab Emirates  
Uruguay  
Viet Nam

### Partner countries and economies in previous cycles

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

\* Puerto Rico participated in the PISA 2015 assessment (as an unincorporated territory of the United States).

\*\* 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.

1. **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.

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Data can also be found on line by following the **StatLinks**  under the tables and charts in the publication.

Explore, compare and visualise more data and analysis using: <http://gpseducation.oecd.org/>.

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