

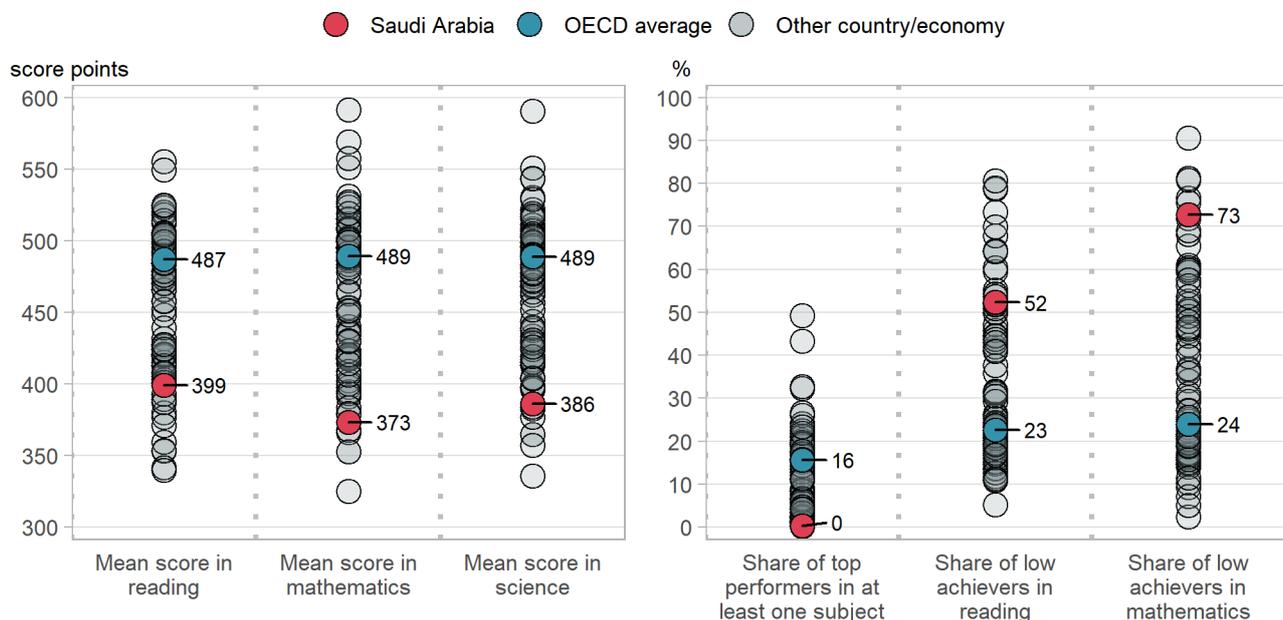
PROGRAMME FOR INTERNATIONAL STUDENT ASSESSMENT (PISA) RESULTS FROM PISA 2018

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), and on students' well-being.

Saudi Arabia

What 15-year-old students in Saudi Arabia know and can do

Figure 1. Snapshot of performance in reading, mathematics and science



Note: Only countries and economies with available data are shown.
Source: OECD, PISA 2018 Database, Tables I.1 and I.10.1.

- Students in Saudi Arabia scored lower than the OECD average in reading, mathematics and science.
- Compared to the OECD average, a smaller proportion of students in Saudi Arabia performed at the highest levels of proficiency (Level 5 or 6) in at least one subject; at the same time a smaller proportion of students achieved a minimum level of proficiency (Level 2 or higher) in all three subjects.

What students know and can do in reading

- In Saudi Arabia, 48% of students attained at least Level 2 proficiency in reading. These students can identify the main idea in a text of moderate length, find information based on explicit, though sometimes complex criteria, and can reflect on the purpose and form of texts when explicitly directed to do so.
- Almost no student was a top performer in reading, meaning that they attained Level 5 or 6 in the PISA reading test. At these levels, students can form a full and detailed understanding of a text whose content or form is unfamiliar and deal with concepts that are contrary to expectations. In 20 education systems, including those of 15 OECD countries, more than 10% of 15-year-old students were top performers.

What students know and can do in mathematics

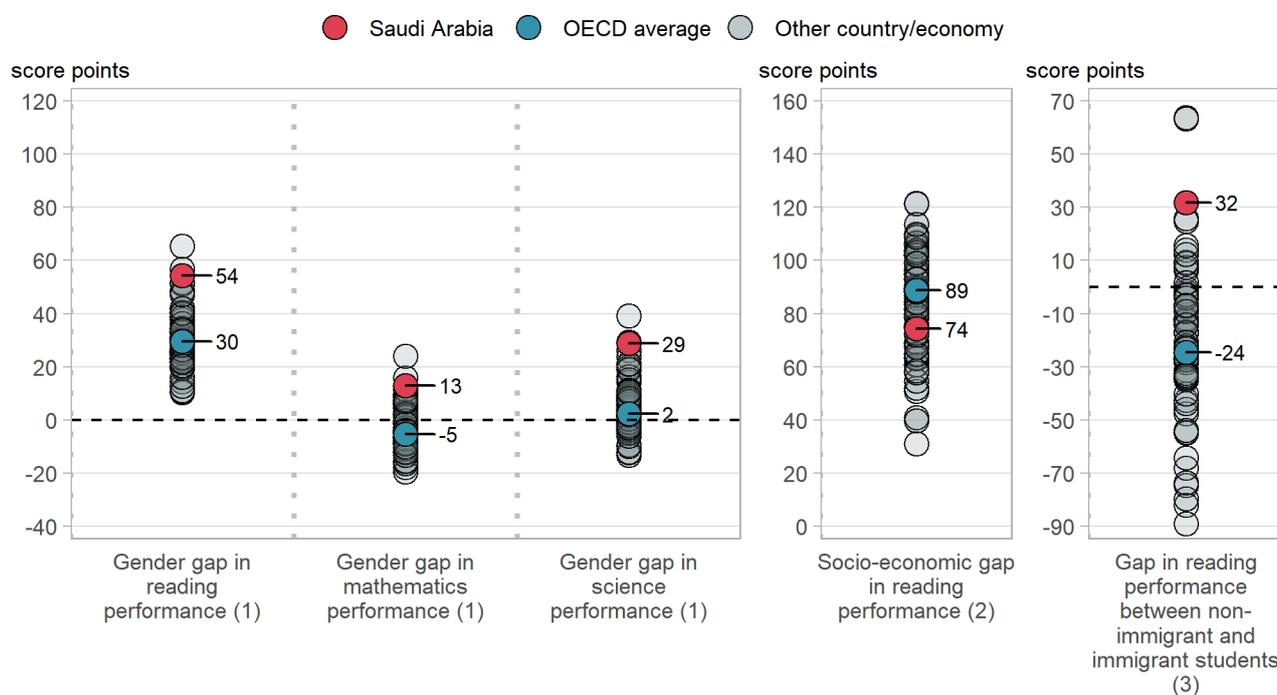
- Some 27% of students in Saudi Arabia attained Level 2 or higher in mathematics. These students can interpret and recognise, without direct instructions, how a (simple) situation can be represented mathematically (e.g. comparing the total distance across two alternative routes, or converting prices into a different currency). The share of 15-year-old students who attained minimum levels of proficiency in mathematics (Level 2 or higher) varied widely – from 98% in Beijing, Shanghai, Jiangsu and Zhejiang (China) to just 2% in Zambia, which participated in the PISA for Development assessment in 2017. On average across OECD countries, 76% of students attained at least Level 2 proficiency in mathematics.
- “Around 1% of students scored at Level 5 or higher in mathematics. Six Asian countries and economies had the largest shares of students who did so: Beijing-Shanghai-Jiangsu-Zhejiang (China) (just over 44%), Singapore (nearly 37%), Hong Kong (China) (29%), Macao (China) (nearly 28%), Chinese Taipei (just over 23%) and Korea (just over 21%). These students can model complex situations mathematically, and can select, compare and evaluate appropriate problem-solving strategies for dealing with them.

What students know and can do in science

- Some 38% of students in Saudi Arabia attained Level 2 or higher in science. These students can provide possible explanations in familiar contexts or draw conclusions based on simple investigations.
- Almost no student was a top performer in science, meaning that they were proficient at Level 5 or 6. These students can creatively and autonomously apply their knowledge of and about science to a wide variety of situations, including unfamiliar ones.

Where All Students Can Succeed

Figure 2. Differences in performance and expectations related to personal characteristics



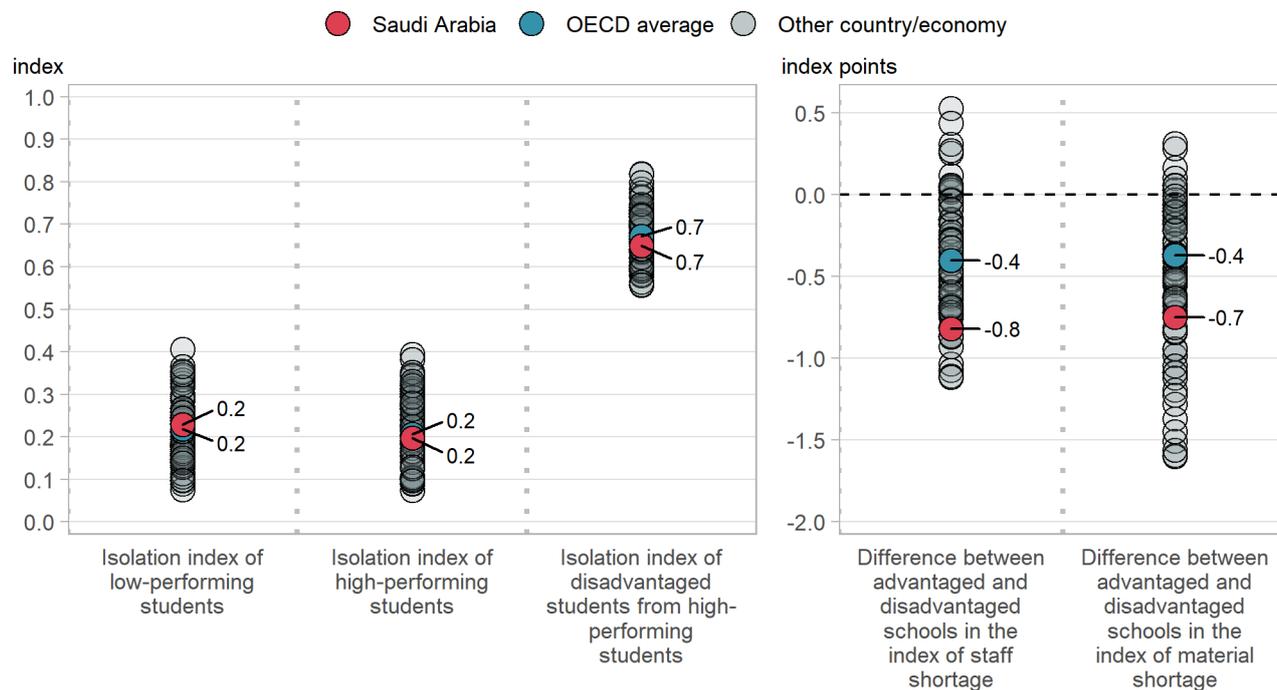
Notes: Only countries and economies with available data are shown. (1) Girls' minus boys' performance; (2) Advantaged minus disadvantaged students' performance; (3) Immigrants' minus non-immigrants' performance in reading; After accounting for students' and schools' socio-economic profile.

Source: OECD, PISA 2018 Database, Tables II.B1.2.3, II.B1.7.1 and II.B1.9.3.

Equity related to socio-economic status

- In Saudi Arabia, advantaged students outperformed disadvantaged students in reading by 74 score points in PISA 2018. This is smaller than the average difference between the two groups (89 score points) across OECD countries.
- Some 0% of advantaged students in Saudi Arabia, but almost no disadvantaged student, were top performers in reading in PISA 2018. On average across OECD countries, 17% of advantaged students, and 3% of disadvantaged students, were top performers in reading.
- Socio-economic status was also a strong predictor of performance in mathematics and science in all PISA participating countries. It explained 11% of the variation in mathematics performance in PISA 2018 in Saudi Arabia (compared to 14% on average across OECD countries), and 11% of the variation in science performance (compared to the OECD average of 13% of the variation).
- Some 11% of disadvantaged students in Saudi Arabia were able to score in the top quarter of reading performance, indicating that disadvantage is not destiny. On average across OECD countries, 11% of disadvantaged students scored amongst the highest performers in reading in their countries.
- In Saudi Arabia, low- and high-performing students are clustered in certain schools at the same extent as the OECD average.

Figure 3. School segregation and gap in material and staff shortage between advantaged and disadvantaged schools



Notes: Only countries and economies with available data are shown. The isolation indices ranging from 0 (no segregation) to 1 (full segregation) measure whether low-/high-performing students or disadvantaged students are more or less concentrated in some schools. See detailed description of the indices in Volume II Chapter X.

Source: OECD, PISA 2018 Database, Tables II.B1.4.1, II.B1.4.8, II.B1.5.13 and II.B1.5.14.

- School principals in Saudi Arabia reported a higher level of staff and a higher level of material shortage than the OECD average; and school principals of disadvantaged schools more often reported staff shortage than principals of advantaged schools. In Saudi Arabia, 53% of students enrolled in a disadvantaged school and 40% of students enrolled in an advantaged school attend a school whose principal reported that the capacity of the school to provide instruction is hindered at least to some extent by a lack of teaching staff. On average across OECD countries, 34% of students in disadvantaged schools and 18% of students in advantaged schools attend such a school.

Equity related to gender

- While in most OECD countries boys outperformed girls in mathematics, in Saudi Arabia girls outperformed boys in this domain. While girls slightly outperformed boys in science (by two score points) on average across OECD countries in PISA 2018, in Saudi Arabia girls outperformed boys in science by 29 score points.

Equity related to immigrant background

- In 2018, some 12% of students in Saudi Arabia had an immigrant background. Amongst these immigrant students, one in six were socio-economically disadvantaged.
- The average difference in reading performance between immigrant and non-immigrant students in Saudi Arabia was 36 score points in favour of immigrant students. After accounting for students' and schools' socio-economic profile the difference shrank to 32 score points.

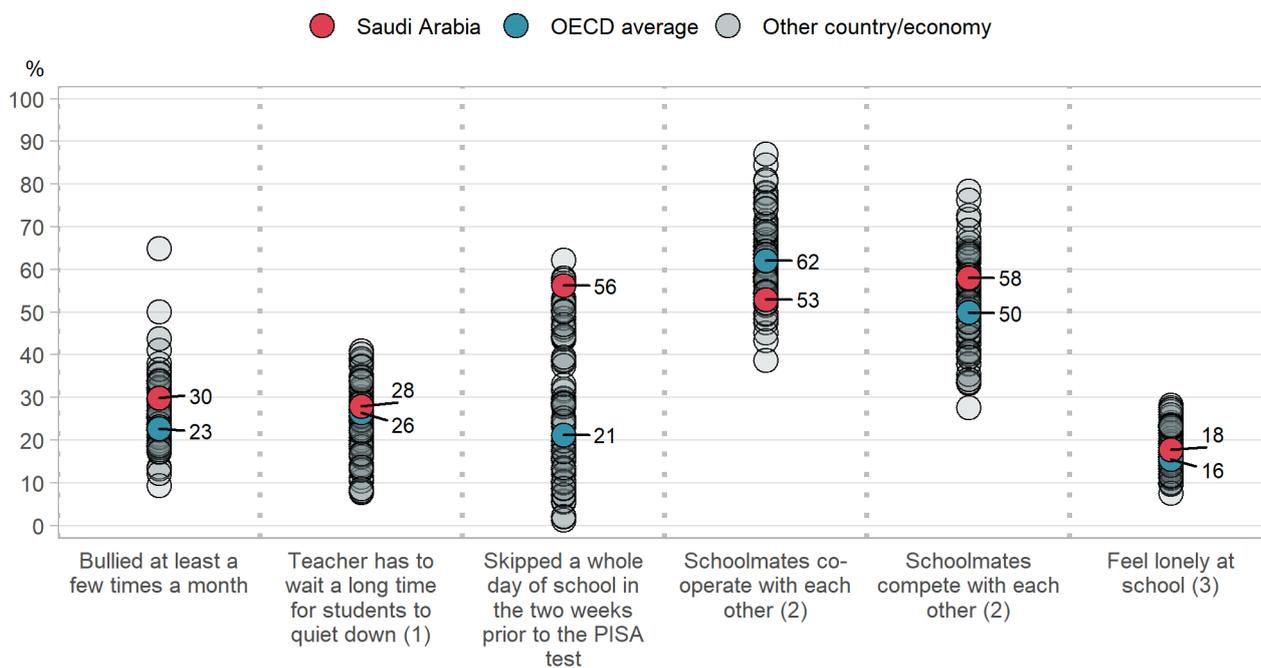
- Even though immigrant students tend to be disadvantaged, some are able to attain academic excellence. Some 39% of immigrant students scored in the top quarter of reading performance in Saudi Arabia. Across OECD countries, 17% of immigrant students performed at that level.

What School Life Means for Students' Lives

How is the school climate in Saudi Arabia?

- In Saudi Arabia, 30% of students reported being bullied at least a few times a month, compared to 23% on average across OECD countries. Yet, 75% of students in Saudi Arabia (and 88% of students on average across OECD countries) agreed or strongly agreed that it is a good thing to help students who cannot defend themselves.
- Some 28% of students in Saudi Arabia (OECD average: 26%) reported that, in every or most language-of-instruction lessons, their teacher has to wait a long time for students to quiet down. In Saudi Arabia, students who reported that, in every or most lessons, the teacher has to wait a long time for students to quiet down scored 15 score points lower in reading than students who reported that this never happens or happens only in some lessons, after accounting for socio-economic status.
- On average across OECD countries, 21% of students had skipped a day of school and 48% of students had arrived late for school in the two weeks prior to the PISA test. In Saudi Arabia, 56% of students had skipped a day of school and 55% of students had arrived late for school during that period. In most countries and economies, frequently bullied students were more likely to have skipped school, whereas students who valued school, enjoyed a better disciplinary climate, scored higher in the reading assessment and received greater emotional support from parents were less likely to have skipped school.

Figure 4. School climate



Notes: Only countries and economies with available data are shown. (1) In every or most language-of-instruction lessons; (2) Very or extremely true; (3) Agreed or strongly agreed.

Source: OECD, PISA 2018 Database, Tables III.B1.2.1, III.B1.3.1, III.B1.4.1, III.B1.8.1, III.B1.8.2 and III.B1.9.1

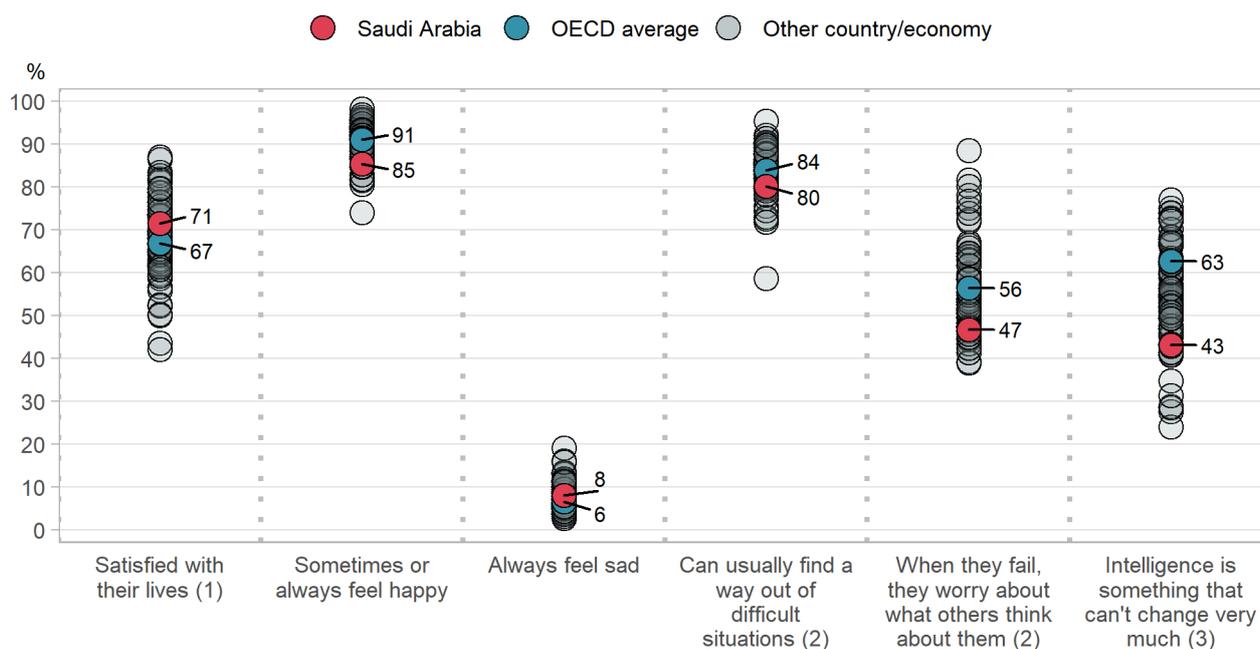
- Some 75% of students in Saudi Arabia (OECD average: 74%) agreed or strongly agreed that their teacher shows enjoyment in teaching. In most countries and economies, including in Saudi Arabia, students scored higher in reading when they perceived their teacher as more enthusiastic, especially when students said their teachers are interested in the subject.

- In Saudi Arabia, 53% of students reported that their schoolmates co-operate with each other (OECD average: 62%) and 58% reported that they compete with each other (OECD average: 50%).
- Some 18% of students in Saudi Arabia (OECD average: 16%) agreed or strongly agreed that they feel lonely at school.

How do students in Saudi Arabia feel about their lives and learning?

- In Saudi Arabia, 71% of students (OECD average: 67%) reported that they are satisfied with their lives (students who reported between 7 and 10 on the 10-point life-satisfaction scale).
- Some 85% of students in Saudi Arabia reported sometimes or always feeling happy and about 8% of students reported always feeling sad. In most countries and economies, students were more likely to report positive feelings when they reported a stronger sense of belonging at school and greater student co-operation, and were also more likely to express sadness when they were bullied more frequently.
- In Saudi Arabia, 80% of students agreed or strongly agreed that they can usually find a way out of difficult situations (OECD average: 84%), and 47% agreed or strongly agreed that, when they fail, they worry about what others think of them (OECD average: 56% of students).
- A majority of students across OECD countries holds a growth mindset (they disagreed or strongly disagreed with the statement "Your intelligence is something about you that you can't change very much"). In Saudi Arabia, 43% of students hold a growth mindset.

Figure 5. Student well-being and growth mindset



Notes: Only countries and economies with available data are shown. (1) Between 7 and 10 on the life-satisfaction scale; (2) Agreed or strongly agreed; (3) Disagreed or strongly disagreed.

Source: OECD, PISA 2018 Database, Tables III.B1.11.1, III.B1.12.1, III.B1.12.2, III.B1.13.1, III.B1.13.2 and III.B1.14.1

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. Results are released on 3 December 2019 and in 2020.

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 Saudi Arabia, 6 136 students, in 235 schools, completed the assessment, representing 354 013 15-year-old students (85% 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.
- 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.

References

OECD (2019), *PISA 2018 Results (Volume I): What Students Know and Can Do*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/5f07c754-en>

OECD (2019), *PISA 2018 Results (Volume II): Where All Students Can Succeed*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/b5fd1b8f-en>

OECD (2019), *PISA 2018 Results (Volume III): What School Life Means for Students' Lives*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/acd78851-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
Cyprus¹
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: Beijing, Shanghai, Jiangsu and Zhejiang. In PISA 2015, the four PISA participating Chinese provinces 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.

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document, as well as any data and any map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

For more information about PISA 2018 visit <http://www.oecd.org/pisa/>

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/>.

Questions can be directed to:

PISA team
Directorate for Education and Skills
PISA@oecd.org

Country note authors:

A. Echazarra, F. Avvisati, P. Givord and M. Schwabe
Directorate for Education and Skills