

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 around the world that assesses the extent to which they have acquired the key knowledge and skills essential for full participation in society. The assessment focuses on the core school subjects of reading, mathematics and science. Students' proficiency in an innovative domain is also assessed; in 2018, this domain was global competence.

Philippines

Key findings

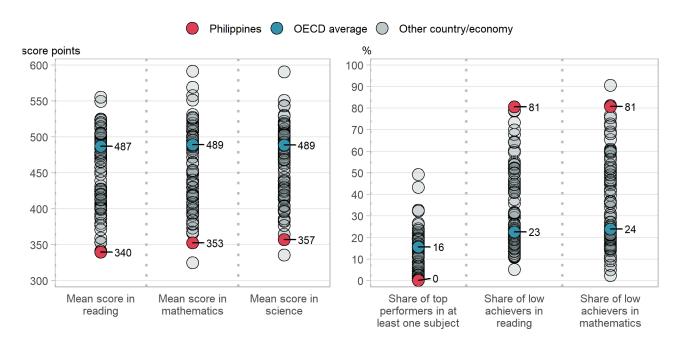
- Fifteen-year-old students in the Philippines scored lower in reading, mathematics and science than those in most of the countries and economies that participated in PISA 2018. The country's average score in reading was 340 score points, on a par with that of the Dominican Republic. No country scored lower than the Philippines and the Dominican Republic. In mathematics and science, students in the Philippines scored 353 and 357 points, respectively, on a par with performance in Panama. The Philippines outperformed the Dominican Republic in mathematics and science. Over 80% of students in the Philippines did not reach a minimum level of proficiency in reading, which is one of the largest shares of low performers amongst all PISA-participating countries and economies.
- It is important to interpret these findings in context.
 - Expenditure per student in the Philippines was the lowest amongst all PISA-participating countries/economies and 90% lower than the OECD average. By comparison, expenditure per student in Indonesia was 83% lower than the OECD average and students there outperformed students in the Philippines, although their scores were still lower than those of students in between 66 and 70 other countries/economies. Students in the Dominican Republic scored at the same level or lower than students in the Philippines, while expenditure per student in the Dominican Republic was three times greater than that in the Philippines.
 - Only 68% of 15-year-olds in the Philippines were covered by the PISA sample. In most countries, low coverage can be mainly attributed to 15-year-olds who were no longer enrolled in school or who had been held back in primary school. Only Baku (Azerbaijan), Brazil, Colombia, Costa Rica, Jordan, Mexico, Morocco and Panama had lower coverage rate than the Philippines.
 - Some 94% of 15-year-old students in the Philippines speak a language other than the test language (i.e. English) at home most of the time. This was the second highest percentage amongst all PISA-participating countries/economies. The highest was observed in Lebanon, where 98% of students do not speak the language of instruction at home.
- Socio-economically advantaged students outperformed disadvantaged students in reading by 88 score
 points in the Philippines, which is similar to the average difference between the two groups (89 score
 points) across OECD countries.
- There was a significant gender gap in reading in favour of girls (27 score points), which is similar to the average across OECD countries (30 score points). Girls also outperformed boys in mathematics by 12

score points unlike the average across OECD countries, where boys outperformed girls by 5 score points. Boys and girls in the Philippines performed similarly in science.

- Ensuring an inclusive environment at school is even more important in the Philippines than across OECD countries: every unit increase in the index of sense of belonging at school was associated with an increase of more than 20 score points in reading, compared to the OECD average of 4 score points. However, in the Philippines, 65% of students reported being bullied at least a few times a month, compared to 23% on average across OECD countries; 26% of students (OECD average: 16%) agreed or strongly agreed that they feel lonely at school; and 35% (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. At the same time, the level of parental involvement in school activities is higher than in OECD countries, on average.
- A majority of students in the Philippines expressed a fear of failure. Some 72% agreed or strongly
 agreed that, when they fail, they worry about what others think of them (OECD average: 56% of
 students). In almost every education system, including in the Philippines, girls expressed greater fear
 of failure than boys, and this gender gap was considerably wider amongst top-performing students.
- In most education systems, including the Philippines, students who hold a growth mindset (they disagreed or strongly disagreed with the statement "Your intelligence is something about you that you can't change very much") tend to report less fear of failure. In the Philippines, 31% of students hold a growth mindset, which is one of the lowest proportions amongst PISA-participating countries and economies (OECD average: 63%).

What 15-year-old students in the Philippines 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 the Philippines scored lower than the OECD average in reading, mathematics and science.
- Compared to the OECD average, a smaller proportion of students in the Philippines 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 the Philippines, 19% 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 comprehend lengthy texts, deal with concepts that are abstract or counterintuitive, and establish distinctions between fact and opinion, based on implicit cues pertaining to the content or source of the information. 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 19% of students in the Philippines 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 95% in Macao (China) to just 2% in Zambia,

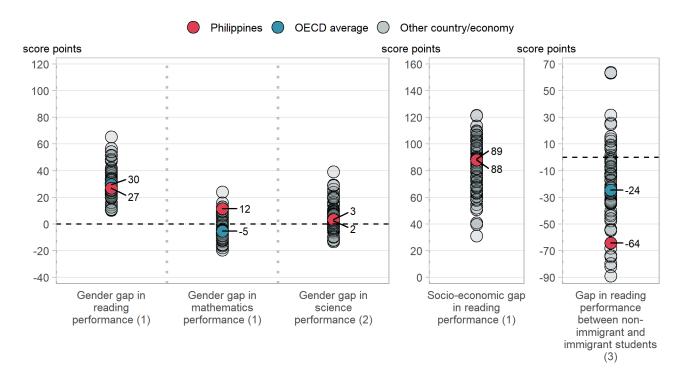
- which participated in the PISA for Development assessment in 2017. On average across OECD countries, 76% of students attained at least Level 2 proficiency in mathematics.
- Less than 1% of students scored at Level 5 or higher in mathematics. Six Asian countries and economies had the largest shares 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 22% of students in the Philippines attained Level 2 or higher in science. These students can recognise the correct explanation for familiar scientific phenomena and can use such knowledge to identify, in simple cases, whether a conclusion is valid based on the data provided.
- 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



Note: 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

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

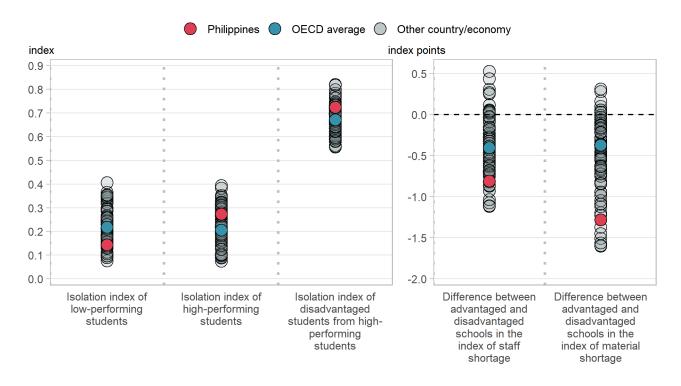
Equity related to socio-economic status

- In the Philippines, socio-economically advantaged students outperformed disadvantaged students in reading by 88 score points in PISA 2018. This is smaller than the average difference between the two groups (89 score points) across OECD countries. Advantaged students are defined as students in the top quarter of socio-economic status within their country; disadvantaged students are those in the bottom guarter of socio-economic status within their country.
- Socio-economic status was a strong predictor of performance in mathematics and science in all PISAparticipating countries. It explained 13% of the variation in mathematics performance in the Philippines (compared to 14% on average across OECD countries), and 14% of the variation in science performance (compared to the OECD average of 13% of the variation).
- Some 8% of disadvantaged students in the Philippines 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 the Philippines, low-performing students were clustered in certain schools less often than the OECD average, and high-performing students were more often clustered in certain schools. A disadvantaged student has a 14% chance, on average, of being enrolled in a school with those who score in the top quarter of reading performance (OECD average: a 17% chance).
- School principals in the Philippines reported less staff shortage and more material shortage than the OECD average, and principals of disadvantaged schools more often reported staff shortage than

principals of advantaged schools. In the Philippines, 35% of students enrolled in a disadvantaged school and 9% 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.

 According to school principals in the Philippines, 72% of teachers in advantaged schools and 95% of teachers in disadvantaged schools are professional teachers with a license from the Professional Regulatory Commission (PRC). The proportion of teachers with at least a master's degree is similar in advantaged and disadvantaged schools.

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



Note: Only countries and economies with available data are shown. Source: OECD, PISA 2018 Database, Tables II.B1.4.1, II.B1.4.8, II.B1.5.13 and II.B1.5.14.

Equity related to gender

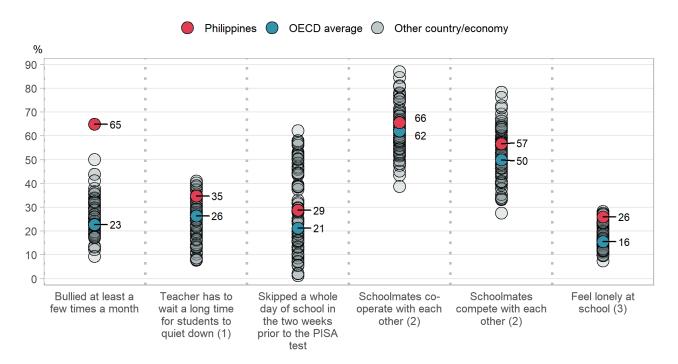
 While in most OECD countries boys outperformed girls in mathematics, in the Philippines girls outperformed boys in this domain. While girls slightly outperformed boys in science (by two score points) on average across OECD countries in PISA 2018, in the Philippines, girls and boys performed similarly in science.

What School Life Means for Students' Lives

How is the school climate in the Philippines?

- In the Philippines, 65% of students reported being bullied at least a few times a month, compared to 23% on average across OECD countries. Yet, 84% of students in the Philippines (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 35% of students in the Philippines (OECD average: 26%) reported that, in every or most language-of-instruction lessons, their teacher has to wait a long time for students to guiet down. In the Philippines, students who reported that, in every or most lessons, the teacher has to wait a long time for students to quiet down scored 33 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 the Philippines, 29% of students had skipped a day of school and 61% of students had arrived late for school during that period. In most countries and economies, including the Philippines, frequently bullied students were more likely to have skipped school, whereas students who value 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.
- Some 86% of students in the Philippines (OECD average: 74%) agreed or strongly agreed that their teacher shows enjoyment in teaching. In most countries and economies, including in the Philippines, 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 the Philippines, 66% of students reported that their schoolmates co-operate with each other (OECD average: 62%) and 57% reported that they compete with each other (OECD average: 50%).
- Some 26% of students in the Philippines (OECD average: 16%) agreed or strongly agreed that they feel lonely at school.

Figure 4. School climate



Note: 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

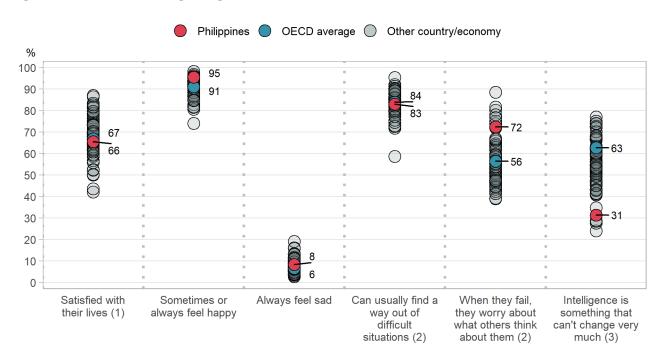
How do students in the Philippines feel about their lives?

- In the Philippines, 66% 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 95% of students in the Philippines 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. Students were more likely to express sadness when they were bullied more frequently.
- In the Philippines, 83% of students agreed or strongly agreed that they can usually find a way out of difficult situations (OECD average: 84%), and 72% agreed or strongly agreed that, when they fail, they worry about what others think of them (OECD average: 56% of students). In almost every education system, including in the Philippines, girls expressed greater fear of failure than boys, and this gender gap was considerably wider amongst top-performing students.

Do students in the Philippines hold a growth mindset?

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 the Philippines, 31% of students hold a growth mindset.

Figure 5. Student well-being and growth mindset



Note: 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.

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 the Philippines, 7 233 students, in 187 schools, completed the assessment, representing 1 400 584 of the 15-year-old students (68% 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' wellbeing.

Map of PISA countries and economies



OECD member countries

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

Japan

Korea

Latvia

Partner countries and economies in PISA 2018

Albania Malaysia Argentina Malta Baku (Azerbaijan) Moldova Belarus Montenegro Bosnia and Herzegovina Morocco Brazil North Macedonia Brunei Darussalam Panama B-S-J-Z (China)** Peru Bulgaria Philippines Costa Rica Oatar Croatia Romania Russian Federation Saudi Arabia Cyprus¹ Dominican Republic Georgia Serbia Hong Kong (China) Indonesia Singapore Chinese Taipei Thailand lordan Kazakhstan Ukraine United Arab Emirates Kosovo Lebanon Uruguay Viet Nam Macao (China)

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

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.

^{*} 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"

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.

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

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

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

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

Questions can be directed to:	Country note author:
PISA team	Filippo Besa
Directorate for Education and Skills	Directorate for Education and Skills
PISA@oecd.org	filippo.besa@oecd.org