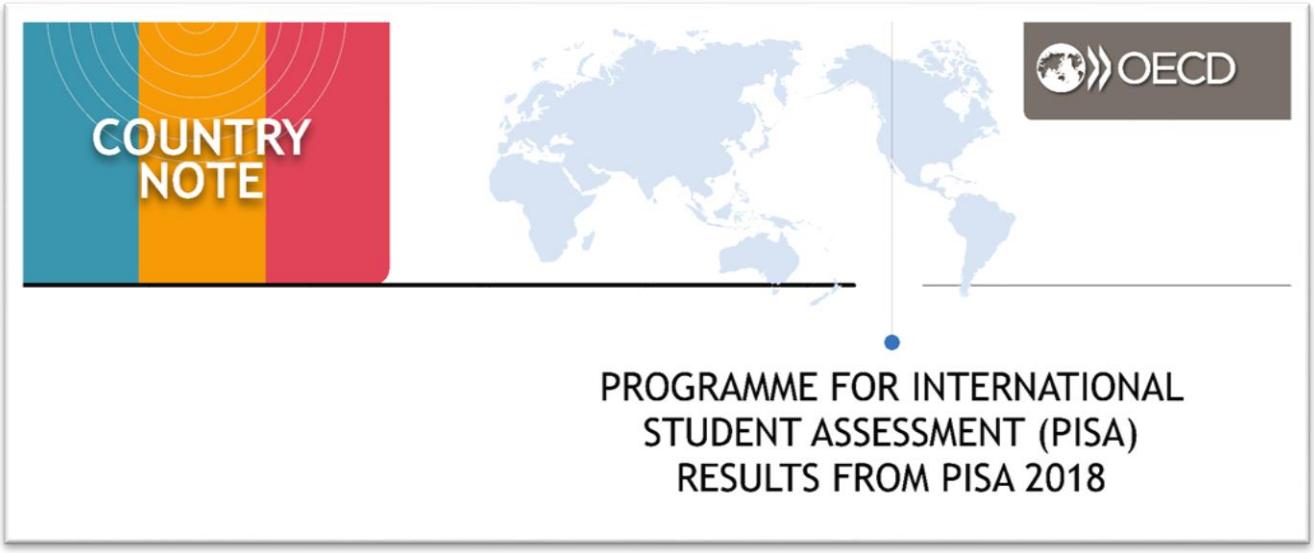

The Programme for International Student Assessment (PISA) is a triennial survey of 15-year-old students around the world that assesses the extent to which they have acquired the key knowledge and skills essential for full participation in society. In parallel, PISA also looks into the policies and practices used in schools and school systems, and their relationship with education outcomes more generally, through background questionnaires. *PISA 2018 Volume V: Effective Policies, Successful Schools* presents these results.

As PISA consistently finds, after a certain threshold is reached, it's not how much money a country invests in its education system that makes the greatest difference, but rather how that money is allocated. When governments have to make tough choices about how to spend their money most effectively, especially in times of economic challenges, they can see – through PISA – which subgroup of students (or schools) may be most affected by a crisis, and which policies and practices have the strongest associations with performance, equity in education and student well-being. They can then make the necessary trade-offs and spending decisions, to meet the specific needs of their students, based on hard data.

Mexico

Key findings

- In Mexico, 98% of students had attended pre-primary education at least one year and 87% of students had attended for at least two years.
- Fewer students reported to have repeated a grade in 2018 compared with 2003. Students who had not repeated a grade were almost 80% more likely to believe that their intelligence is something they can change compared with students who had repeated a grade.
- In Mexico, 34% of students attend a school with an effective online learning platform, while on average across OECD countries, more than 50% of students attend such schools. Socio-economic disparities observed in Mexico are amongst the largest: 67% of students in advantaged schools attended a school whose principal reported that the school has an effective online learning platform, while only 13% of students in disadvantaged schools attended such a school.
- In Mexico, the ratio of computers to students was 0.25 and 10% of computers available in school were portable computers, which are below the averages across OECD countries.
- In Mexico, socio-economic disparities in learning time in regular school lessons were only observed in foreign language lessons. Advantaged students spent 22 minutes more per week in foreign language lessons than disadvantaged students in Mexico. The disparities were below the OECD average (42 minutes).

A higher percentage of advantaged than disadvantaged students in Mexico had attended pre-primary education which is related to better reading performance at age 15

- In Mexico, 98% of students had attended pre-primary education at least one year and 87% of students had attended for at least two years. On average across OECD countries, 94% of students had attended pre-primary education at least one year and 80% of students had attended for at least two years (Table V.B1.2.1).
- On average across OECD countries, students who had attended pre-primary education for at least two years but less than three years scored 45 points higher (491 points) in reading than students who had not attended or had attended for less than one year (444 points) (Table V.B1.2.4).
- Similarly, in Mexico, students who had attended pre-primary school for at least two years but less than three years outperformed those students who had not attended or had attended for less than a year by 57 score points (427 vs. 370).
- In Mexico, 0.4% of advantaged students compared with 4.2% of disadvantaged students had not attended or had attended pre-primary education for less than one year, compared with 3% of advantaged and 10% of disadvantaged students on average across OECD countries (Table V.B1.2.2).

Early tracking does not translate into a more equitable education system

- Selecting students into different programmes at an earlier age was correlated with less equity in reading performance, even after accounting for per capita GDP (Figure V.3.9). On average across OECD countries, students are selected into different programmes at the age of 14.2, while in Mexico, the age at selection is 15 years.
- Some 23% of students in disadvantaged schools were enrolled in a vocational programme, whereas only 2% of students in advantaged schools were, on average across OECD countries. In contrast, in Mexico, similar shares of students in disadvantaged and advantaged schools were enrolled in a vocational programme: 13% of students in disadvantaged schools were enrolled in a vocational programme compared with 17% of students in advantaged schools (Table V.B1.3.2).
- In Mexico, there are no statistically significant differences in reading performance between students in general (academic) programmes and those in vocational programmes, after accounting for students' and schools' socio-economic profile, compared with the OECD average difference of 28 points in favour of students in general programmes (Table V.B1.3.2). At the system level, across OECD countries, school systems with larger shares of students in general programmes generally showed greater equity in reading performance, even after accounting for per capita GDP.
- Tracking between schools and programmes of general and vocational orientation is related to holding a growth mindset (i.e. when students believe that their intelligence is something they can change) on average across OECD countries: students in general programmes were more likely to endorse a growth mindset than students in vocational programmes (Figure V.2.14). In contrast, in Mexico, there is no difference in the likelihood of students' endorsing a growth mindset between students in vocational schools and general programmes, before and after accounting for students' and schools' socio-economic profile.

Grade repetition in Mexico had reduced between 2003 and 2018

- In 2003, 30% of students in Mexico reported to have repeated a grade at least once (the OECD average was 15%), while 15 % of students reported so in 2018 (the OECD average was 11%) (Table V.B1.2.9).
- Countries/economies with smaller shares of students who had repeated a grade showed higher mean performance and greater equity, even after accounting for per capita GDP (Table V.B1.2.11).

- Students who had not repeated a grade in primary or secondary school were almost 50% more likely than those who had repeated a grade to endorse a growth mindset, on average across OECD countries, and after accounting for students' and schools' socio-economic profile. Students in Mexico who had not repeated a grade were almost 80% more likely to hold a growth mindset (Figure V.2.13).

In Mexico, only 34% of students attend a school with an effective online learning platform, while on average across OECD countries, 54% of students attend such a school

- An effective, online learning platform – especially when remote learning becomes education's lifeline – has become a must-have if countries are to make good use of whatever computer hardware they make available to their students. Moreover, such an online platform is related to equity in student performance in all core subjects, on average, across all countries and economies, before and after accounting for per capita GDP. In Mexico, 67% of students in advantaged schools attended a school whose principal reported that the school has an effective online learning platform, while only 13% of students in disadvantaged schools attended such a school. This difference is above the average across OECD countries, with 59% of students in advantaged schools and 49% of students in disadvantaged schools attending a school whose principal reported that the school has an effective online learning platform (Table V.B1.5.16).
- In Mexico, the ratio of computers to students was 0.25 and 10% of computers available in school were portable computers, including laptops and tablets. On average across OECD countries, the ratio of computers to students was 0.83 and 40% of computers available in a school were portable computers (Tables V.B1.5.6 and V.B1.5.8).
- In Mexico, more computers were available per student in advantaged schools than in advantaged schools, but there was no difference in the prevalence of portable computers between advantaged schools and disadvantaged schools (Tables V.B1.5.6 and V.B1.5.8). The ability to provide remote education for all students depends crucially on the availability of digital devices at home. Data show that the distribution of computers at home is less equitable, so it would be particularly important to provide portable digital devices to students in disadvantaged schools.
- On average across OECD countries and in 12 countries and economies, students attending schools whose principal reported fewer shortages of material resources scored higher in reading. In contrast, in Mexico, there was no difference in reading performance between these two groups of students, after accounting for students' and schools' socio-economic profile (Table V.B1.5.2).
- Moreover, in countries and economies with higher mean performance in reading, there tended to be smaller differences in material resources between advantaged and disadvantaged schools; in some cases, disadvantaged schools tended to have more material resources than advantaged schools. In Mexico, students scored below the OECD average in reading by 67 score points, and principals of disadvantaged schools reported having less material resources than principals of advantaged schools reported (Figure V.5.11 and Table V.B1.5.2).

In Mexico, and on average across OECD countries, after a certain number of hours, there are diminishing returns to spending more time in regular lessons

- On average across OECD countries, performance in reading improved with each additional hour of language-of-instruction lessons per week, up to three hours. In Mexico, performance improved up to four hours of language-of-instruction per week, but this positive association between learning time in regular language-of-instruction lessons and reading performance weakened amongst students who spent more than four hours per week in these lessons (Table V.B1.6.5).

- Consistent with the average hump-shaped pattern observed across OECD countries, system level analyses show that education systems where more students tended to spend extremely short or long hours in regular lessons tended to score lower in reading (Figures V.6.13 and V.6.14).
- In Mexico, students who spent 2 hours or less per week in language-of-instruction lessons scored at least 39 points lower than students who spent a moderate amount of time – 4 hours or less – in these lessons (Table V.B1.6.5).

Advantaged students spend more time in foreign language lessons than disadvantaged students

- On average across OECD countries, socio-economic disparities in learning time in regular school lessons are most prominent in foreign language and science lessons. Equal access to foreign language learning is related to greater equity across OECD countries. In Mexico, socio-economic disparities in learning time in regular school lessons were only observed in foreign language lessons (Table V.B1.6.3 and Figure V.6.15).
- Disadvantaged students in Mexico reported spending 2.8 hours per week in foreign language lessons, compared with 3.3 hours on average across OECD countries, while advantaged students reported spending 3.2 hours per week, compared with 4 hours, on average. This means that, in Mexico, advantaged students spent 22 minutes more than disadvantaged students in foreign language lessons (Table V.B1.6.3). This may imply that advantaged students have more opportunities to learn foreign languages than disadvantage students do, and that could lead to unequal job opportunities later on. It could also mean that certain groups of students will be unprepared for living with others from different backgrounds if exposure to other languages is related to students' ability to communicate across cultures.

In Mexico, 1 in 8 students attends a private school, but this does not necessarily translate into better performance

- In 53 out of 66 countries and economies with available data, including Mexico, the average socio-economic status of students who attended private schools was more advantaged than that of those who attended public schools (Table V.B1.7.2).
- In Mexico, after accounting for students' and schools' socio-economic profile, there were no differences in reading scores between students attending public schools and students attending private-dependent schools. In contrast, the reading scores of students attending public schools were 39 points higher than those of students attending private-independent schools. This is in contrast to the OECD average, where students attending public schools scored 6 points higher than students in private-dependent schools and 23 points higher than students in private-independent schools, after accounting for students' socio-economic profile (Tables V.B1.7.4, V.B1.7.5 and V.B1.7.6).

Various aspects of quality assurance and improvement actions at school are related to greater equity in education

- Those countries/economies that show greater equity in education tended to use student assessments more frequently to inform parents about their child's progress and identify aspects of instruction/curriculum that could be improved. For every 10 percentage-point increase in the share of parents who discussed their child's progress on the teachers' initiative, the average reading score improved by 10 points, on average across the 74 countries and economies with available data. These results imply that sharing the results of student assessments and discussing with parents their child's progress may be an effective way for schools to be accountable for their students' learning.

- In Mexico, 92% of students are in schools whose principals reported using student assessments to inform parents about their child's progress (95% on average across OECD), and 88% are in schools that use student assessments to identify aspects of instruction or the curriculum that could be improved (78% on average) (Table V.B1.8.1).
- Those countries/economies that showed greater equity in education also tend to use written specifications for student performance based on the school's initiative, seek written feedback from students based on district or national policies, and have regular consultations on school improvement at least every six months, based on district or national policies.
- In Mexico, 33% of students were in schools whose principal reported having written specifications for student performance on the school's initiative (34% on average across OECD), and 29% attended schools that reported seeking feedback from students based on district or national policies (12% on average). Some 19% were in schools that reported having regular consultations on school improvement at least every six months, based on district or national policies (11% on average) (Table V.B1.8.11).

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 Mexico, 7 299 students completed the assessment, representing 1 480 904 15-year-old students (66% 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 choose 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.

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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[1], 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.

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/.

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