
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. 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.

France

Key findings

- Amongst countries and economies whose cumulative expenditure was greater than USD 50 000 per student, which include France, higher expenditure on education was not significantly associated with higher scores in the PISA reading test. While cumulative expenditure per student from the age of 6 to 15 is around USD 90 000 in France, Ireland and Italy, students in Ireland scored higher than students in France in reading and students in Italy scored lower than students in France.
- A vast majority of 15-year-old students in France – 98% – had attended pre-primary school for at least one year. However, slightly fewer disadvantaged students had attended pre-primary school than advantaged students (97% for disadvantaged students and 99% for advantage student).
- In France, the percentage of students in disadvantaged schools who were enrolled in a vocational programme was almost twice as high as the OECD average: 43% vs. 22%.
- In France, there is less inequality overall in the distribution of material resources but, according to principals' reports, both advantaged and disadvantaged schools lack certain resources, such as laptops and an effective online learning platform, more than on average across OECD countries.
- In France, socio-economic disparities in learning time in regular school lessons were observed in mathematics, science and foreign-language lessons, with the biggest gap observed for science lessons. In France, students in upper secondary schools tended to spend more time in foreign-language lessons and science lessons than students in lower secondary schools.

- After accounting for students' and schools' socio-economic profile, students in vocational programmes in France were less likely than students in general programmes to believe that their intelligence is something they can change.

In France, more than 95% of students had attended at least two years of pre-primary education – which is related to better reading performance at age 15 – compared to 80% on average across OECD countries

- On average across OECD countries, students who had attended pre-primary education for at least two years but less than three scored at least 23 points higher in reading than students who had not attended or had attended for less than one year, after taking into account both schools' and students' socio-economic profile. But no performance difference was observed between students who had attended pre-primary education between one and two years, and those who had attended for three years or more, both before and after accounting for students' and schools' socio-economic profile (Table V.B1.2.5).
- Similarly, in France, students who had attended pre-primary school for at least two years outperformed those students who had not attended or had attended for less than a year by 51 score points, even after accounting for students' and schools' socio-economic profile.
- In France, there is a difference in pre-primary attendance between advantaged and disadvantaged students: 0.8% of advantaged students compared with 2.8% of disadvantaged students had not attended or had attended pre-primary education for less than one year. However, this difference is much smaller than the OECD average difference, where 3% of advantaged and 10% of disadvantaged students had not attended or had attended for less than one year (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 just over the age of 14, while in France students are 15 years old at the age of first selection.
- In France, students in general (academic) programmes scored 70 points higher in reading than those in vocational programmes, after accounting for students' and schools' socio-economic profile, compared with the OECD average difference of 28 points (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.
- Some 22% 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 France, the percentage of students in disadvantaged schools who were enrolled in a vocational programme was much higher – 43% – than the 1.4% of students in advantaged schools who were enrolled in such a programme (Table V.B1.3.2).

Grade repetition and early tracking affect disadvantaged students disproportionately and are negatively related to holding a growth mindset

- In France, and on average across OECD countries, a socio-economically disadvantaged student was more than twice as likely as an advantaged student to have repeated a grade at least once, even if both students scored the same on the PISA reading test. 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 (Figure V.2.6).

- In France, the percentage of students who hold a growth mindset (i.e. they believe that their intelligence is something they can change) was 10 percentage points higher amongst advantaged students than amongst disadvantaged students, compared to the OECD average difference of 12 percentage points in favour of advantaged students (Table III.B1.14.3).
- In France, and on average across OECD countries, students who had not repeated a grade in primary or secondary school were almost 50% more likely to endorse a growth mindset, even after accounting for students' and schools' socio-economic profile (Figure V.2.13).
- Similarly, tracking between schools and programmes of general and vocational orientation is related to holding a growth mindset. In France, students enrolled in a general/academic school or programme were 19% more likely to endorse a growth mindset than students in vocational schools/programmes, after accounting for students' and schools' socio-economic profile, greater than the average difference across OECD countries (12%).

Principals in France reported fewer shortages of education staff in 2018 than in 2015

- In France, and on average across OECD countries, principals reported fewer shortages of education staff in 2018 than in 2015 (Table V.B1.4.2).
- According to principals' reports in France, and on average across OECD countries, a shortage of education staff is the biggest hindrance to learning (Figure V.4.3).
- In France, perceived shortages of education staff were not related to student achievement in reading, after accounting for students' and schools' socio-economic profile. Overall, in 17 countries and economies, students attending schools with more shortages scored lower in reading than students in schools with fewer shortages of staff, even after accounting for students' and schools' socio-economic profile (Table V.B1.4.1 and Figure V.4.2).

In France, even though there are small differences in the distribution of material resources, schools vary in their capacity to enhance teaching and learning using digital devices

- 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. But in France, there was no performance difference between students in schools whose principal reported fewer shortages and those in schools whose principals reported more shortages, even after accounting for students' and schools' socio-economic profile (Table V.B1.5.2).
- 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 France, students scored slightly above the OECD average in reading, while differences in material resources between advantaged and disadvantaged schools, according to principals' reports, were similar to the OECD average (Figure V.5.11 and Table V.B1.5.2).
- While the ratio of computers available to students in disadvantaged schools was greater than in advantaged schools in France, portable computers, including laptops and tablets, were lacking in both advantaged and disadvantaged schools. Less than 15% of the total number of computers available to students in disadvantaged schools were portable (38% on average across OECD countries) as were less than 23% in advantaged schools (almost 42% on average across OECD countries) (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 for schoolwork at home is not equitable in most of countries and economies participated in PISA 2018. In France, 96%

of students in advantaged schools reported to have a computer for schoolwork at home, while 82% of students in disadvantaged schools reported so (Table V.B1.9.2).

- 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 France, less than 40% of students in both advantaged and disadvantaged schools attended a school whose principal reported that the school has an effective online learning platform. On average across OECD countries, 59% of students in advantaged schools and 49% of students in disadvantaged schools attended a school whose principal reported that the school has an effective online learning platform (Table V.B1.5.16).
- There are, however, differences between advantaged and disadvantaged schools in the computing capacity of their digital devices. Some 80% of students in advantaged schools (around 75% on average across OECD countries) but only 62% of students in disadvantaged schools (similar to the OECD average, 63%) attended a school whose principal reported that the school has sufficiently powerful digital devices (Table V.B1.5.16).

In France, 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, and in France, performance in reading improved with each additional hour of language-of-instruction lessons per week, up to three hours after accounting for students' socio-economic profile. However, this positive association between learning time in regular language-of-instruction lessons and reading performance weakened amongst students who spent more than three hours per week in these lessons (Table V.B1.6.5 and V.B1.6.6).
- 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 France, students who spent 2 hours or less per week in language-of-instruction lessons, scored at least 45 points lower in reading than students who spent a moderate amount of time – 3 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, and in France, socio-economic disparities in learning time in regular school lessons are most prominent in foreign-language lessons and science lessons. In France, students in upper secondary schools tended to spend more time in foreign-language lessons and science lessons than students in lower secondary schools (Table V.B1.6.4). Equal access to foreign-language learning is related to greater equity across OECD countries (Figure V.6.15).
- Disadvantaged students in France reported spending 4 hours per week in foreign-language lessons (3.3 hours on average across OECD countries), while advantaged students reported spending 5 hours per week (4 hours on average across OECD countries). Even though both advantaged and disadvantaged students spent more time in these lessons than the OECD average, in France, advantaged students spent 60 minutes more per week 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.

- Disadvantaged students in France reported spending 2.3 hours per week in science lessons (3.2 hours on average across OECD countries), while advantaged students reported spending 3.4 hours per week (3.8 hours on average across OECD countries). In France, advantaged students spent 63 minutes more per week than disadvantaged students in foreign-language lessons (Table V.B1.6.3).

In France, one in five 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 France, 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).
- However, after accounting for students' and schools' socio-economic profile, in France, students attending public schools scored 24 points higher in reading than students attending private schools. This is above the OECD average, where students attending public schools scored 14 points higher than students in private schools, after accounting for students' socio-economic profile (Table V.B1.7.4).

Various 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 France, more than 95% of students attended a school whose principal reported using student assessments to inform parents about their child's progress (95% on average across OECD countries), and 58% were 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 show greater equity in education also tended 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 France, about 12% of students attended a school whose principal reported having written specifications for student performance on the school's initiative (34% on average across OECD countries), and 5% were in schools that seek feedback from students based on district or national policies (12% on average). Only 3% were in schools that have 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 France, 6 308 students, in 252 schools, completed the assessment, representing 756 477 of the 15-year-old students (91% 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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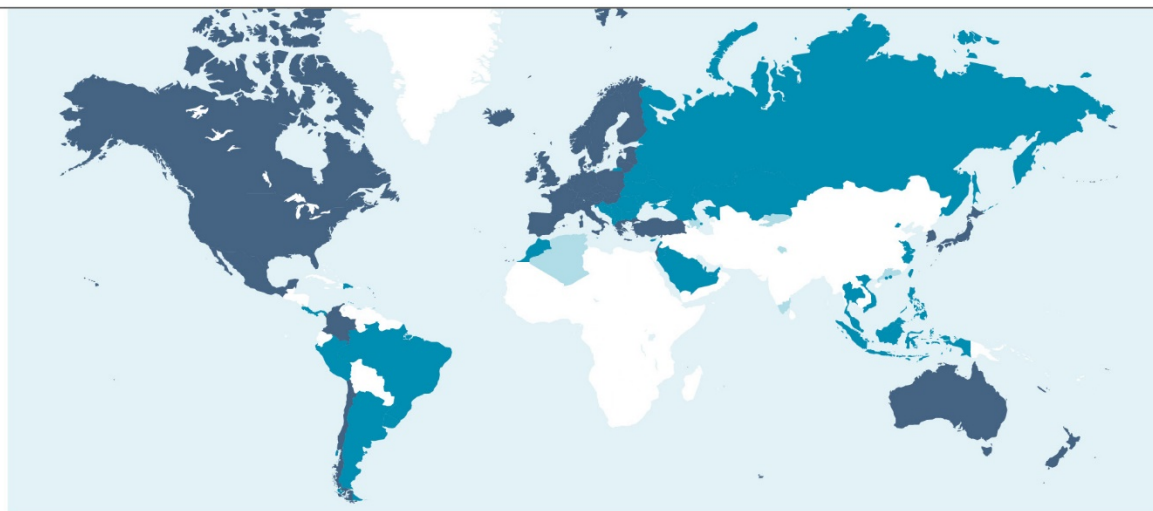
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Map of PISA countries and economies



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
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/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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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
edu.pisa@oecd.org

Country note author:

Rose Bolognini
Directorate for Education and Skills
Rose.Bolognini@oecd.org