



## Low-Performing Students: Why They Fall Behind and How To Help Them Succeed

## **Country note United States**

Low performance at school can have severe consequences for individuals and economies. Students who are low performers at age 15 are more likely to drop out of school and less likely to attain better-paying and more-rewarding jobs. When a large share of the population lacks basic skills, a country's long-term economic growth is compromised.

- In 2012, 26% of students in the United States were low performers in mathematics (OECD average: 23%), 17% were low performers in reading (OECD average: 18%), 18% were low performers in science (OECD average: 18%), and 12% were low performers in all three of these subjects (OECD average: 12%).\*
- Around 1,050,000 15-year-old students in the United States were low performers in mathematics, and more than 500,000 students were low performers in all three subjects (math, reading and science).
- About 37% of 15-year-old students in the United States attend schools where 30% or more of the students
  are low performers in mathematics, about 12% attend schools where half or more of the students are low
  performers in mathematics, and about 1% attend schools where 80% or more of the students are low
  performers.
- In the United States, the share of low performers in science decreased by about 6 percentage points between PISA 2006 and 2012. The share of low performers in mathematics and in reading has not changed since PISA 2003.

PISA defines "low performers" as those 15-year-old students who score below Level 2 on the PISA mathematics, reading and science assessments. Level 2 is considered the baseline level of proficiency that is required to participate fully in modern society. Students who score at Level 1 can answer questions involving clear directions and requiring a single source of information and simple connections, but they cannot engage in more complex reasoning and problem-solving tasks.

Poor performance is not the result of any single risk factor, but rather of a combination and accumulation of various barriers and disadvantages that affect students throughout their lives. On average across OECD countries, the probability of low performance in mathematics is higher for students who are socio-economically disadvantaged, girls, had an immigrant background, speak a different language at home from the language of instruction, live in single-parent families, attend schools in rural areas, have not attended pre-primary school (or had attended for a year or less), had repeated a grade and also for students enrolled in vocational programs or schools. In the United States, the likelihood of low performance in mathematics is higher for students who are socio-economically disadvantaged and had repeated a grade.

- A socio-economically disadvantaged student is almost 6 times more likely to be a low performer than an
  advantaged student, after accounting for demographic and education background factors. Some 41% of
  disadvantaged students in the United States were low performers in mathematics in 2012, while only 9% of
  advantaged students were.
- Students who had repeated a grade in the United States were almost 4 times as likely to be low performers in mathematics (53% of them were low performers) as students who had never repeated a grade (20% of them were low performers).

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<sup>\*</sup> According to a recent OECD estimate, if, by 2030, all 15-year-old students in the United States attained at least the baseline level of performance in PISA, the United States's GDP in 2095 would be 13% higher. OECD (2015), *Universal Basic Skills:* What Countries Stand to Gain, OECD Publishing, Paris. <a href="http://dx.doi.org/10.1787/9789264234833-en">http://dx.doi.org/10.1787/9789264234833-en</a>





In the United States, as on average across OECD countries, low-performing students skip days of school more often, spend less time doing homework, and are less perseverant than better-performing students.

- In 2012, 28% of low performers in mathematics in the United States skipped school at least once (OECD average: 23%). Among students performing at or above baseline proficiency Level 2, 19% skipped at least a day of school (OECD average: 12%).
- In 2012, low performers in the United States spent an average of 3.7 hours per week doing homework (OECD average among low performers: 3.5 hours per week) while students scoring at or above baseline proficiency Level 2 spent about 6.9 hours per week doing homework (OECD average among better-performing students: 5.3 hours).

Students in the United States are less likely to be low performers in schools where teachers are more supportive and have higher morale, and also where there are fewer teacher shortages and more creative extracurricular activities available for students.

- Students in the United States attending schools where mathematics teachers have lower morale are, on average, 21% more likely to be low performers than students who attend schools where teachers have higher morale, after accounting for students' and schools' socio-economic status (OECD average: 7% more likely).
- In the United States, students attending schools where there are fewer creative extracurricular activities available for students were, on average, 54% more likely to be low performers in mathematics than students in schools where more of these activities were available, after accounting for students' and schools' socio-economic status (OECD average: 9% more likely).

Countries as economically and culturally diverse as Brazil, Germany, Italy, Mexico, Poland, Portugal, the Russian Federation, Tunisia and Turkey reduced their share of low performers in mathematics between 2003 and 2012. What do these countries have in common? Not very much: their respective shares of low performers in 2003 differed widely, as did their economic performance during the period. But therein lies the lesson: **all countries can improve their students' performance**, given the right policies and the will to implement them.

For the United States, a country with a larger proportion of low performers in mathematics than the OECD average, tackling low performance is a challenge of major importance. Given the extent to which the profile of low performers varies across countries, tackling low performance requires a multi-pronged approach, tailored to national and local circumstances. **An agenda to reduce the incidence of low performance can include several actions**:

- Dismantle the multiple barriers to learning
- Create demanding and supportive learning environments at school.
- Provide remedial support as early as possible.
- Encourage the involvement of parents and local communities.
- Inspire students to make the most of available education opportunities.
- Identify low performers and design a tailored policy strategy.
- Provide targeted support to disadvantaged schools and/or families.
- Offer special programs for immigrant, minority-language and rural students.
- Tackle gender stereotypes and assist single-parent families.
- Reduce inequalities in access to early education and limit the use of student sorting.

Policy makers, teachers, parents and students themselves all have an important role to play.

## To learn more, see...

OECD (2016), Low Performing Students: Why They Fall Behind and How To Help Them Succeed, PISA, OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/9789264250246-en">http://dx.doi.org/10.1787/9789264250246-en</a>