



# Can academic performance help disadvantaged students achieve upward educational mobility?

PISA

PISA in Focus #99



## Can academic performance help disadvantaged students achieve upward educational mobility?

- Some 41% of adults attained a higher level of education than their parents did, on average across countries that participated in the Survey of Adult Skills (PIAAC). However, upward educational mobility was less prevalent among younger than older cohorts.
- Adults whose parents completed tertiary education were about 11 times more likely to complete tertiary education than adults whose parents did not complete lower secondary education, on average across countries that participated in the Survey of Adult Skills (PIAAC).
- Socio-economically disadvantaged 15-year-old students who scored in the top quarter in reading in PISA 2000 were between 18 and 34 percentage points more likely to complete university by age 25 than advantaged students who scored in the bottom quarter in reading, based on longitudinal data for five OECD countries.

During the past century, access to education increased in countries all over the world. Up until the early decades of the 20th century, people attended school for only a few years. Towards the end of the century, adults in high-income countries completed 12 years of schooling, on average. Today in OECD countries, a larger share of the population than ever before completes tertiary education. For many, especially socio-economically disadvantaged students whose parents had attained only low levels of education, this expanded access to education has led to upward educational mobility – attaining a higher level of education than their parents did.

But just as economic growth does not necessarily reduce income inequality, so the expansion of access to education does not automatically result in greater equity in educational attainment. For that to happen, disadvantaged students need to benefit as much as or more than advantaged students. A recent PISA report, [Equity in Education](#), explores how upward educational mobility has changed over recent decades. It finds that, despite the expansion of access, socio-economic disparities in the completion of tertiary education remain large. However, the report also shows that when students with low-educated parents perform at high levels by age 15, as measured by PISA, their chances of completing tertiary education improve considerably.

## Upward educational mobility has slowed in recent decades

About 41% of adults aged 26 to 65 attained a higher level of education than their parents did, on average across the countries that participated in the Survey of Adult Skills, a product of the OECD Programme for the International Assessment of Adult Competencies (PIAAC). Upward educational mobility was most prevalent (observed among 55% of adults in the age group or more) in Finland, Korea, the Russian Federation and Singapore. It was the least prevalent (29% of adults or less) in Austria, the Czech Republic, Germany and Turkey.

The share of upwardly mobile adults is larger than the share of downwardly mobile adults in all countries that participated in the Survey of Adult Skill (PIAAC), even in those where upward educational mobility is comparatively rare and where downward mobility is comparatively common. On average, only 11% of adults attained a lower level of education than their parents did. This reflects the considerable expansion in access to education across generations that has occurred during the past few decades.

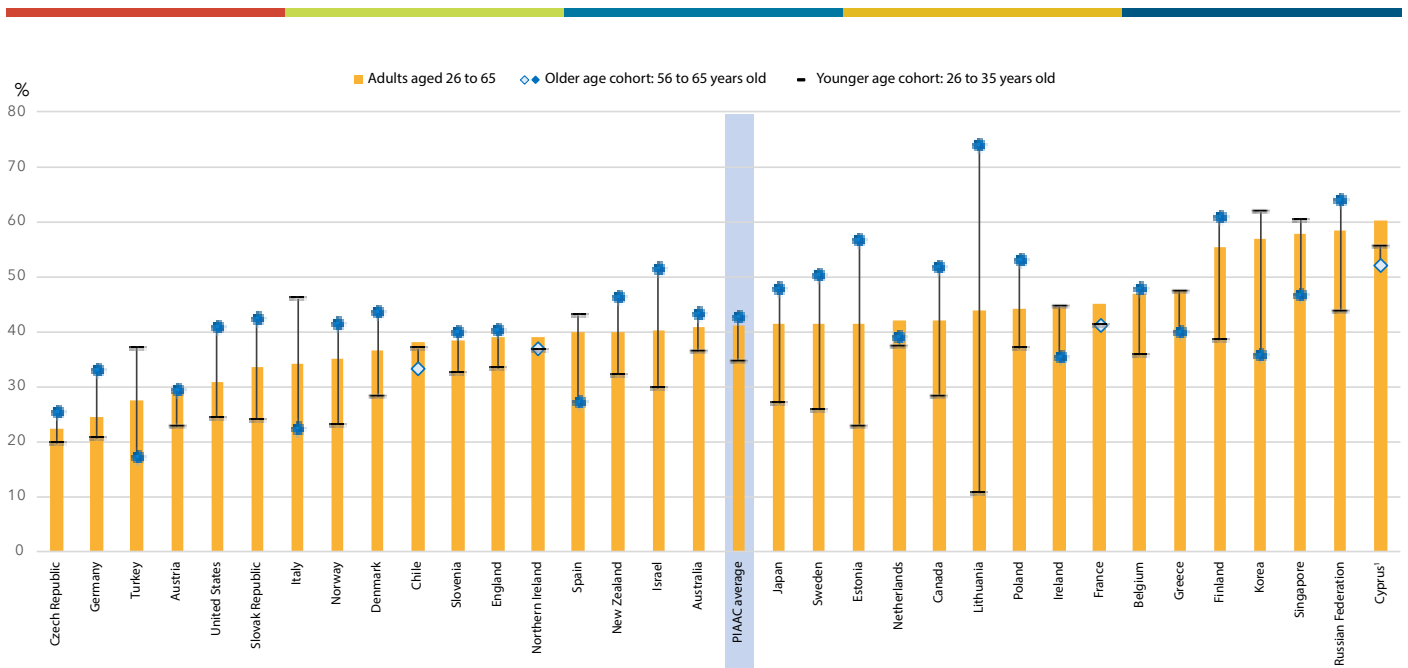
However, the rate of educational expansion is decelerating. In 21 countries, the percentage of upwardly mobile adults is higher in the cohort of older respondents to the survey (those aged 56 to 65) than among younger respondents (those aged 26 to 35). In Canada, Estonia, Finland, Lithuania and Sweden, the difference between the share of older adults who were upwardly mobile and the share of younger adults who were is at least 23 percentage points. On average across the participating countries, upward mobility declined by 8 percentage points between the two age cohorts.

In a majority of countries, upward educational mobility reached a peak in previous decades, among people born in the 1950s and 1960s, before declining sharply among those born in the 1970s and 1980s. If these average trends continue at the same pace, students who are completing their education today will be less likely to be upwardly mobile than the youngest adult respondents in the Survey of Adult Skills (PIAAC). This means that less than a third of the members of current and future generations would be expected to attain an education level higher than that of their parents.

Exceptions to this pattern are found in Greece, Ireland, Italy, Korea, Singapore, Spain and Turkey. In these countries, upward educational mobility is greater among the youngest cohort than among the oldest.

## Upward educational mobility across generations

Percentage of adults 26 years or older who reported higher educational attainment than their parents



**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.

*Countries and economies are ranked in ascending order of the percentage of respondents who attained a higher level of education than their parents.*

Statistically significant differences between the older age cohort and the younger age cohort are shown in a darker tone.

**Source:** OECD, PIAAC dataset, Table 2.18 in OECD (2018), *Equity in Education: Breaking Down Barriers to Social Mobility*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264073234-4>

## Inequity in educational attainment persists over time despite the expansion of access to education

During the past few decades, the children of parents with higher levels of education were more likely than the children of parents with lower levels of education to benefit from the expansion of tertiary education.

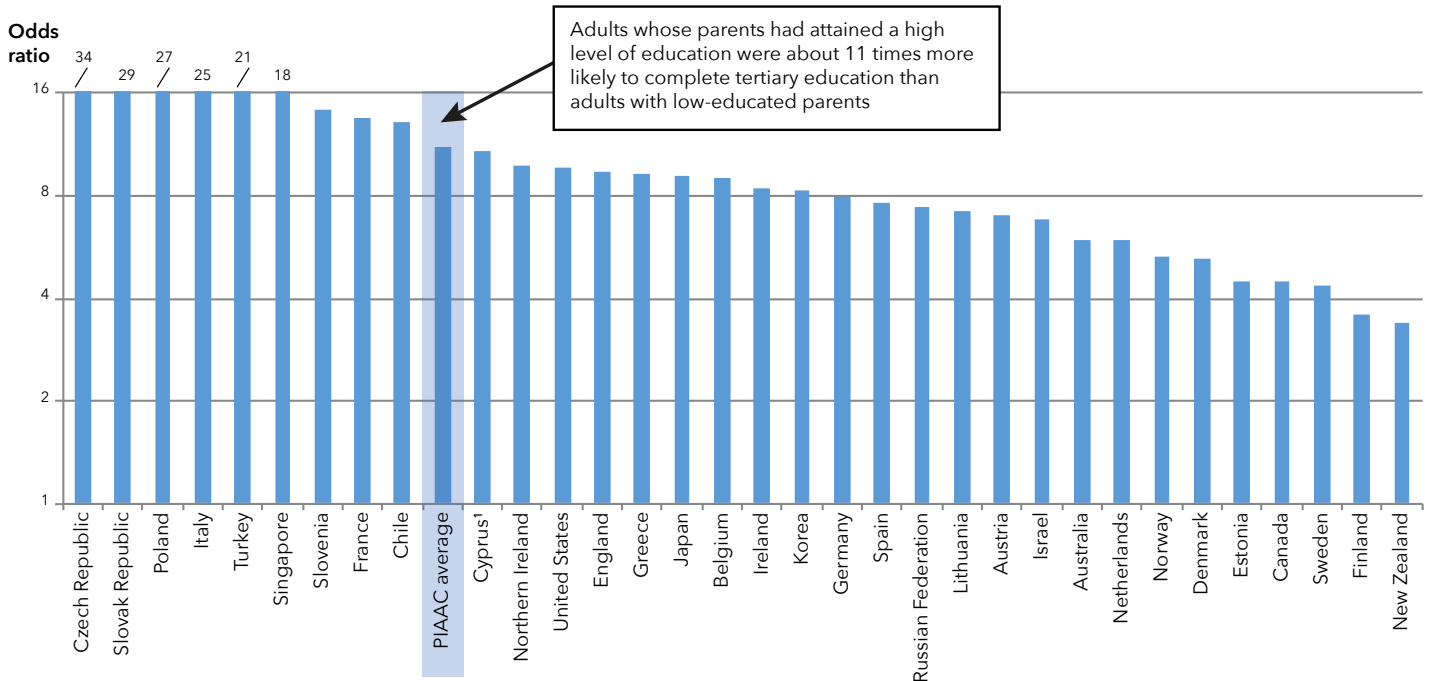
In all 33 countries that participated in the Survey of Adult Skills (PIAAC), adults with more-educated parents were considerably more likely to complete tertiary education than adults with less-educated parents. On average across the countries that participated in the survey, adults with at least one tertiary-educated parent were 11 times more likely to complete tertiary education than adults whose parents had not completed upper secondary school.

Relative disparities in attaining tertiary education are most pronounced in the Czech Republic, Italy, Poland, Singapore, the Slovak Republic and Turkey. In these countries, adults with tertiary-educated parents were between 18 and 34 times more likely to complete tertiary education than adults whose parents had not completed upper secondary school. Disparities are smaller, but still statistically significant, in Canada, Estonia, Finland, New Zealand and Sweden, where the odds of completing tertiary education were between three and five times greater among adults with highly educated parents than among adults with low-educated parents.



## Likelihood of attaining tertiary education, by parents' education

Increased likelihood of completing tertiary education among adults 26 years or older whose parents had attained a high level of education, relative to adults with low-educated parents



### 1. See note 1 under Figure 1. Upward educational mobility across generations.

**Note:** All odds ratios are statistically significant.

Countries and economies are ranked in descending order of the increased likelihood of completing tertiary education among adults whose parents are highly educated (at least one parent had completed tertiary education), relative to adults with low-educated parents (neither parent completed upper secondary education).

**Source:** OECD, PIAAC dataset, Table 2.24 in OECD (2018), *Equity in Education: Breaking Down Barriers to Social Mobility*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264073234-en>

These findings show that inequalities in the attainment of tertiary education related to socio-economic status persist despite the expansion of access to education. Even among younger cohorts, advantaged students are more likely to complete higher levels of education than disadvantaged students. These trends make it unlikely that equity in the attainment of tertiary education will improve much in the future, unless education policy and practice change.

## High performance among disadvantaged students makes a difference

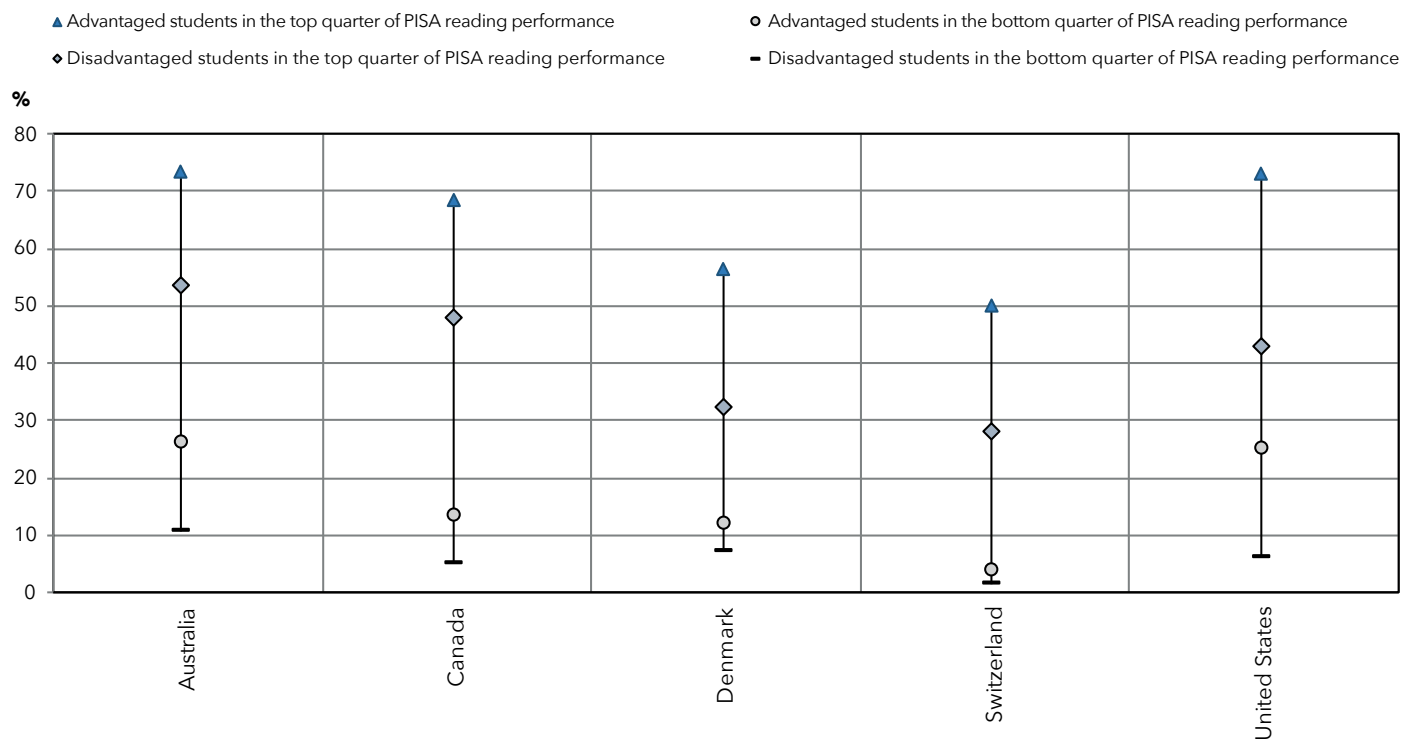
Longitudinal data for students in five OECD countries (Australia, Canada, Denmark, Switzerland and the United States) show that student performance in PISA is strongly correlated with education outcomes in early adulthood. Furthermore, at least in these countries, strong foundation skills trump socio-economic advantage: disadvantaged students who perform well in PISA are more likely to complete university than low-performing students of either advantaged or disadvantaged backgrounds.

Among students whose parents did not complete tertiary education (i.e. disadvantaged students) but who scored in the top quarter in reading in PISA 2000 at age 15, the share of those who completed university by age 25 was between 28% (in Switzerland) and 54% (in Australia). By contrast, only 2% to 11% of disadvantaged students who scored in the bottom quarter in PISA 2000 completed university, compared to between 4% and 26% of students with at least one tertiary-educated parent (i.e. advantaged students) who performed similarly.

Both socio-economic status and student performance have some influence on educational attainment. The share of disadvantaged students who performed at the highest levels of proficiency in PISA 2015 was smaller than that of advantaged students, and the share of disadvantaged students who scored at the lowest levels of proficiency was larger. If more disadvantaged students were high achievers, and fewer were low achievers, the disparity in higher educational attainment between advantaged and disadvantaged students would narrow.

## University completion by age 25, by parents' education and reading performance in PISA 2000

Percentage of 25-year-old respondents who completed university



**Notes:** Advantaged students are those with at least one tertiary-educated parent; disadvantaged students are those without a tertiary-educated parent. Countries are shown in alphabetical order.

**Source:** OECD, PISA 2000 and PISA 2003 Databases, Table 5.4 in OECD (2018), *Equity in Education: Breaking Down Barriers to Social Mobility*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264073234-en>

### The bottom line

Upward educational mobility has been slowing over recent decades, and the probability of completing tertiary education remains highly unequal between advantaged and disadvantaged students. Policies to improve equity in higher education need to target social disparities in compulsory schooling. Disadvantaged adolescents who perform well academically are more likely to succeed in higher education later on. Education policies and practices aimed at reducing socio-economic disparities in what students learn and in the learning opportunities offered to them during compulsory schooling can also foster upward educational mobility and equity in educational attainment.



## For more information

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**See:** OECD (2018), *Equity in Education: Breaking Down Barriers to Social Mobility*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264073234-en>.

**Coming next month:** Have students' feelings of belonging at school waned over time?

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