

# PROGRAMME FOR INTERNATIONAL STUDENT ASSESSMENT (PISA)

# EQUITY IN EDUCATION: BREAKING DOWN BARRIERS TO SOCIAL MOBILITY

## **CANADA**

- Equity in education means that schools and education systems provide equal learning opportunities to all students. Equity does not mean that all students obtain equal education outcomes, but rather that differences in students' outcomes, such as academic performance, social and emotional well-being, and post-secondary educational attainment, do not depend on their socio-economic background.
- Social mobility refers to a change in the socio-economic status of individuals between their childhood (when this status is largely determined by their parents' background) and their adult life. Upward social mobility occurs when students born into socio-economically disadvantaged families end up, as adults, in positions of higher status than those of their parents (e.g. skilled occupations).
- This report identifies some **education policies and practices that promote educational equity and social mobility**. Given the increase in income inequality in recent years, improving equity in education is even more urgent today than in previous decades. Improving equity in education is essential for easing social mobility.

#### **Key findings**

- In Canada, about 9% of the variation in students' science performance in PISA 2015 was accounted for by differences in students' socio-economic status (OECD average: 13%; among OECD countries with above-average performance the relationship is weakest in Estonia and Norway [8%]). Between 2006 and 2015, equity in science performance remained stable in Canada (on average across OECD countries equity in science performance improved during this period; Figure 1.1).
- The mean science score in PISA 2015 among socio-economically disadvantaged students in Canada was 492 points, while among advantaged students it was 563 points. This gap of 71 points represents the equivalent of almost two-and-a-half years of schooling (OECD average gap: 88 points; the gap is only 69 points in Estonia; Table 3.1).
- Some 45% of disadvantaged students in Canada attend disadvantaged schools, i.e. schools where other students tend to be disadvantaged as well (OECD: 48%; in Finland, only 40% of disadvantaged students attend such schools). However, where disadvantaged students attend advantaged schools, they score 46 points higher, or the equivalent of one-and-a-half years of schooling, than those attending disadvantaged schools (OECD average: 78 points higher; among OECD countries with above-average performance no performance difference is observed between the two groups of students in Finland, Norway and Poland; Figure 1.1).
- Disparities in student performance related to socio-economic status take root at an early age and widen throughout students' lives. In Canada, the magnitude of the socio-economic gap in mathematics achievement at age 10 (as measured by the Trends in International Mathematics and Science Study [TIMSS]) is about 43% as large as the gap observed among 15 year-olds (as measured by PISA), and about 32% as large as the gap in numeracy proficiency among 25-29 year-olds (as measured by the Survey of Adult Skills [PIAAC]; Figure 1.1).
- In Canada, 13% of disadvantaged students are "nationally resilient", meaning that they score in the top quarter of science performance (OECD average: 11%; 14% in Estonia and Finland). Some 40% of disadvantaged students in Canada are "core-skills resilient", meaning that they score at PISA proficiency Level 3 or above in science, reading and mathematics (OECD average: 25%; 42% in Estonia, 41% in Japan, and 40% in Finland; Figure 1.1).
- Some 42% of adults (age 26 to 65) in Canada attained a higher level of education than their parents (PIAAC average: 41%; 57% in Korea and 55% in Finland; Figure 1.3). However, only 37% of adults with parents who did not complete upper secondary education completed tertiary education (PIAAC average: 21%), as opposed to 72% of adults with tertiary-educated parents (PIAAC average: 67%; Table 2.22). In other words, in Canada, adults with tertiary-educated parents were four times more likely to complete tertiary education than adults with low-educated parents (OECD average: 11 times more likely; only 3 times more likely in New Zealand and 4 times more likely in Estonia, Finland and Sweden; Figure 1.3).
- Longitudinal data in Canada show that 15-year-old students who scored in the top quarter in reading were 53 percentage points more likely to complete university than students who scored in the bottom quarter (Figure 1.4). Differences in student performance at age 15 explain about 37% of the difference in university completion rates between students with and those without tertiary-educated parents.

<sup>&</sup>lt;sup>1</sup> All figures in this note are calculated on the basis of exact numbers and are rounded only after calculation.

- In Canada, students who scored in the top quarter of reading performance at age 15 were 24 percentage points more likely than students in the bottom quarter of performance to be working in a skilled job (i.e. a job that requires tertiary education) by the age of 25 (Figure 1.5). Differences in skilled employment rates between students with and those without tertiary-educated parents are no longer significant after accounting for performance, suggesting that performance during secondary schooling is strongly correlated with early career outcomes.
- These findings suggest that reducing the gaps related to socio-economic status in what students learn during compulsory schooling could boost upward educational and social mobility.

## What the results imply for policy

- Policies and practices aimed at providing more equal education opportunities for all children
  can be implemented at the classroom, school and education-system levels. Countries need
  to consider creating and strengthening policies and programmes that support disadvantaged
  students. For example, countries can promote greater access to early childhood education
  and care, particularly among disadvantaged families, as these programmes both provide
  more equitable learning environments and help children acquire essential social and
  emotional skills.
- Countries can also set ambitious goals for and monitor the progress of disadvantaged students, target additional resources towards disadvantaged students and schools, and reduce the concentration of disadvantaged students in particular schools. They can also develop teachers' capacity to identify students' needs and manage diverse classrooms, promote better communication between parents and teachers, and encourage parents to be more involved in their child's education. Teachers and schools can foster students' well-being and create a positive learning environment for all students by emphasising the importance of persistence, investing effort and using appropriate learning strategies, and by encouraging students to support each other, such as through peer-mentoring programmes.

#### To learn more, see...

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

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