

# Executive summary

Disparities in who possesses the skills essential to succeed in the 21st century reflect, among other things, people's backgrounds. In this edition of the *OECD Skills Outlook*, skills to succeed in the 21st century include information-processing skills – literacy, numeracy and adaptive problem solving – as well as social and emotional skills. Disparities in these skills reduce opportunities for economic growth by wasting and misallocating talent.

In responding to these skills disparities, policymakers must work in a socio-economic environment that is evolving faster than ever before, which presents additional challenges. This *OECD Skills Outlook* identifies where and how an individual's background matters in terms of the skills they possess, and what countries can do to ensure that all people, regardless of their background, have the skills they need to thrive.

**A person's skills and how they use them still largely depend on factors beyond their control.** In most countries, who becomes proficient and whose skills are recognised and rewarded still depends to a large degree on factors beyond people's control, such as socio-economic background, gender, immigrant background and where a person grew up. These differences are not isolated; they stack and compound over time, shaping life chances and slowing growth and the capacity of countries to turn the challenges of the 21st century into opportunities for growth and well-being. The result is untapped talent, labour-market inefficiencies and large if not increasing social divides. However, countries differ widely showing that targeted investments in lifelong learning opportunities can reduce the size of skills gaps.

**Socio-economic background is the strongest driver of skills disparities.** Core 21st-century skills remain unevenly distributed across populations in OECD countries, with socio-economic background being the strongest and most pervasive driver of skills disparities. For example, adults with at least one tertiary-educated parent score higher in core 21st-century skills than those without tertiary-educated parents. Among low achievers, the advantage linked to parental education is even larger. These "sticky floors" reflect compensatory advantage: better resourced families can mobilise money, time and networks so that even when their children struggle to develop strong core 21st-century skills due to low baseline ability, they are nonetheless pushed towards their full potential.

Context mediates how large skills gaps become: in countries where income inequality is higher, socio-economic disparities in skills tend to be wider. Urban–rural differences favour city upbringings but reduce once parental background is considered, underscoring how place and family resources intertwine.

**Disparities between men and women vary across skills.** On average, women outperform men in literacy, but men outperform women in numeracy and adaptive problem solving. Crucially, differences in numeracy skills proficiency between men and women are largest among the most highly skilled men and women, reflecting a "glass ceiling" for high-achieving women in numeracy intensive domains. The gap is also larger among adults with tertiary-educated parents than among adults with non-tertiary educated parents.

**Skills disparities start early.** For example, boys have higher achievement than girls in financial literacy and mathematics, whereas girls have higher achievement than boys in collaborative problem solving, creative thinking and reading. Similarly, 15-year-old students with tertiary-educated parents have higher

achievement than their peers without tertiary-educated parents in mathematics, and this difference is even more pronounced among high-achieving students. Decisive action is necessary to ensure that today's inefficiencies are disrupted and do not persist across generations.

**Education systems and workplaces perpetuate social advantage.** Even though most education systems and workplace cultures are procedurally meritocratic, how individuals are selected into different educational programmes and workplaces means that in practice they tend to perpetuate social advantage. This social advantage begins early and is only partially offset during compulsory schooling, after which differential selection into further education and training tends to amplify socio-economic disparities in labour market opportunities and rewards. Across successive cohorts, socio-economic gaps in core skills narrow in adolescence but widen again after formal schooling.

**Selection into and through tertiary education is a major engine of divergence in skills development.** The choices and opportunities people from different backgrounds have in terms of whether, what and for how long to study is a significant cause of skills disparities. However, not all disparities are alike: disparities related to socio-economic background lie primarily in how long people study for, whereas differences between men and women also lie in *what* men and women study. For example, women are more likely than men to complete tertiary education overall but are markedly less likely to enter mathematics-intensive fields.

**Opportunities for adult learning are unequally distributed and often reproduce initial disadvantage.** Individuals with different educational attainment are employed in different types of jobs that offer different types of adult learning. On average, participation in non-formal learning is about 43% among adults; however, this breaks down to 61% among tertiary-educated adults and 19% among those with below upper secondary education. Adults from disadvantaged backgrounds are over-represented in courses on operating machinery, equipment and security protocols, whereas those from advantaged backgrounds are more likely to participate in upskilling and reskilling courses such as project management, foreign languages and numeracy.

**Barriers to participation in adult training differ based on a person's background.** Family obligations weigh more on younger workers and women; adults in rural areas cite scarce or inconvenient provision; and women are more likely to report unexpected events preventing participation, signaling how stretched they often are for time and support.

**Educational attainment is a strong mitigator of socio-economic wage disparities.** Access to opportunities to develop skills that pay is a key driver of socio-economic disparities in labour market outcomes; however, once individuals' own education and skills are considered, most employment and wage gaps by socio-economic origin shrink considerably. For example, on average, over three-quarters of socio-economic wage disparities can be explained by differences in learning trajectories and core skills, with adults from tertiary-educated families earning 11% more per hour than peers with similar socio-demographic characteristics but whose parents are not tertiary educated; however, the difference is less than 1% when further controlling for educational attainment, participation in non-formal learning and skills.

**Upward educational mobility has increased but does not fully translate to upward occupational mobility.** Parental circumstances greatly determine the opportunities their children have to reach their potential. However, over the course of the 20th century and first quarter of the 21st century, many working-age people experienced upward educational mobility relative to their parents, and expectations among today's youth remain high. At the same time, for many, upward education mobility does not translate into upward occupational mobility: only 12% of adults have a lower level of education than their parents yet as many as 36% work in an occupation with a lower social status than that of their parents' occupations.

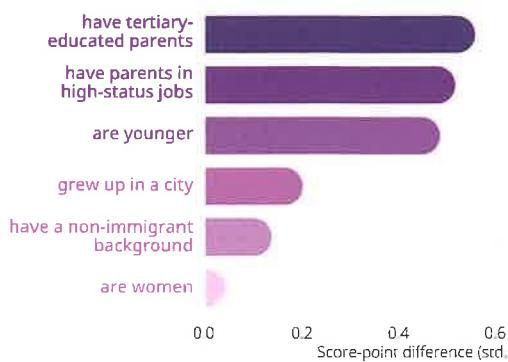
**Employment differences between men and women are still significant.** Whereas differential access to skills development is a key driver of socio-economic disparities in the labour market, this is not the case for disparities between men and women. Men's employment rates exceed women's by about 7 percentage

points even when comparing men and women with similar qualifications and skills. Among men and women who work for pay, the hourly wage gap is about 14% when comparing men and women with similar socio-demographic characteristics, and this gap is even larger (16%) when comparing men and women with similar educational trajectories and skills. Occupational segregation is entrenched – only 29% of workers are in jobs where their sex is a minority: 15% of men work in strongly women-majority occupations and 13% of women in strongly men-majority occupations – and men-majority occupations tend to command higher wages even at similar skills requirements.

## Infographic 1. Key facts and figures

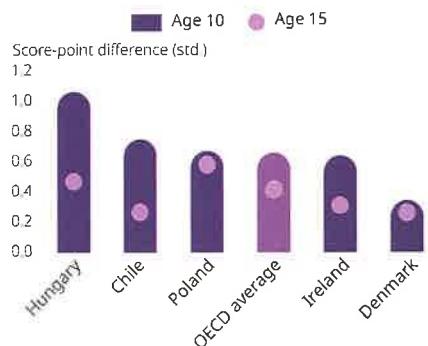
### Socio-economic differences have a big impact on literacy skills

Adults are more likely to have higher literacy if they...



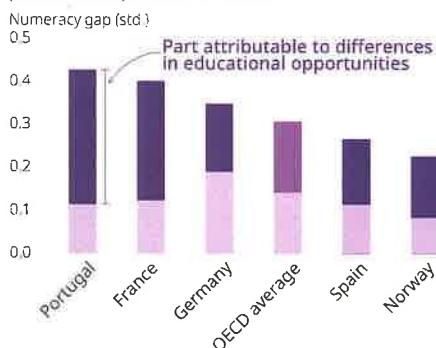
### Schooling helps close socio-economic gaps in adolescence

Difference in maths between students with and without tertiary-educated parents, at ages 10 and 15

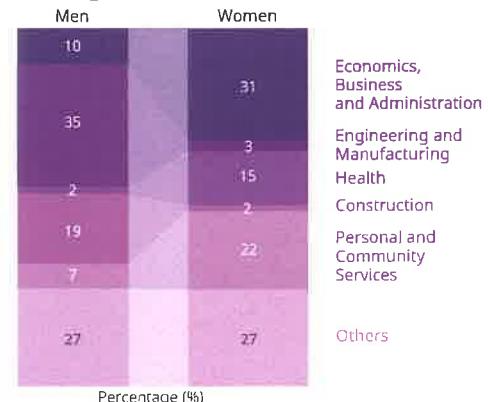


### Parental background boosts skills mainly through access to educational opportunities

Numeracy gaps between adults with manager or professional parents vs. others

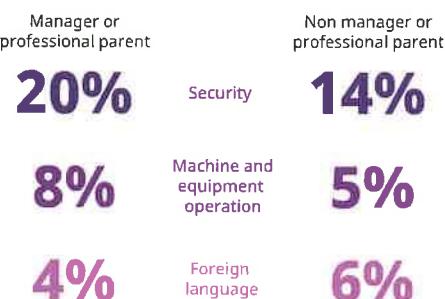


### Men and women specialise in different fields in vocational education and training



### Parental background influences what kind of training adults attend

Percentage of adults attending different types of training, by parental occupation



### Education and skills explain most of wage gap between adults from different parental backgrounds

% difference in wages between adults of advantaged and disadvantaged backgrounds

