

Education and skills

STRENGTHENING THE EDUCATION AND SKILLS SYSTEM OF CHILE

- ▶ In the context of rapid economic and demographic change, boosting everyone's skills will be critical for productivity, innovation and inclusive growth in Chile.
- ▶ Chile has made significant progress to improve education quality in the past decades but significant challenges remain. The proficiency of 15-year-olds in literacy, mathematics and science in Chile is among the lowest in the OECD and almost 62% of adults score at or below Level 1 in numeracy on the OECD Programme for the International Assessment of Adult Competencies (PIAAC), meaning they would struggle to do more than basic mathematical processes like counting and sorting.
- ▶ Chile has seen considerable increases in tertiary education participation, including among disadvantaged groups. However, the system has expanded with little strategic coordination.
- ▶ Concerted efforts are needed to improve the quality and relevance of the skills system – from early childhood all the way through school, vocational and tertiary education to adult learning.
- ▶ Skills mismatches are relatively high in Chile. Workers in Chile are more likely than workers in other PIAAC participating countries/economies to have lower proficiency in literacy than is required by their jobs and to work in a job that is not related to their area of study.

What's the issue?

Chile has been undertaking important efforts to improve the quality and equity of its education system. Many of these efforts are examined in OECD Education Policy Review of Chile (2017) and the School Resources Review of Chile (2017). While Chile has the best reading, science and mathematics performance in the region among countries participating in the OECD's Programme for International Student Assessment (PISA), proficiency is one of the lowest among OECD countries. Around 28% of students lack the skills required to read and understand simple texts, or to master basic mathematical and scientific concepts and procedures. Performance in reading has improved across cycles, but performance in science and mathematics has remained essentially unchanged. PISA results also show that only 1.2% and 1.4% of Chilean

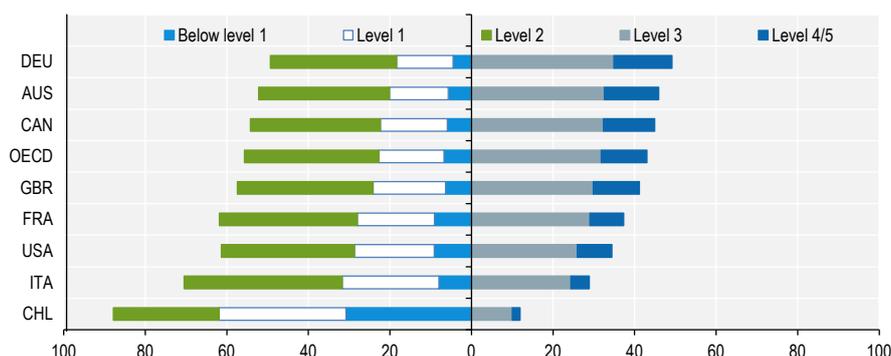
students were top performers in science and mathematics, respectively, in PISA 2015, compared with the OECD averages of 7.7% and 10.8%.

Chile has one of the highest shares of participation in tertiary education in the OECD. But PIAAC data show that only 1.6% of adults attain the highest levels of proficiency in literacy compared to 10.6% on average across participating OECD countries. Also only about one in about fifty adults in Chile attains the highest level in numeracy and in problem solving in technology-rich environments (see Figure).

The PIAAC survey shows that around 10% of Chilean workers are less proficient in literacy than their job requires

Large shares of adults in Chile have low numeracy skills

Percentage of 16-65 year-olds scoring at each proficiency level in numeracy



Source: Survey of Adult Skills (PIAAC) (2012, 2015), Table A2.4.

(underskilled), the largest proportion among participating countries/economies. Moreover, half of all workers are employed in a field different from that in which they specialised in their education (field-of-study mismatch), compared with the OECD average of 40%. Field-of-study mismatch tends to be associated with working at a level that is below one's qualification. Finally, some 15.9% of workers in Chile are more proficient in literacy than required by their job (overskilled), well above OECD average of 10.8%.

Addressing these issues will require a whole of government effort to boost the country's capacity for developing relevant skills, activating available skills and using skills effectively. For example, returns to higher education have a large dispersion and a significant share of students face negative returns. Also graduate, postgraduate and vocational training are poorly connected to the needs of the private sector. In Chile, only 3% of tertiary students graduate from information and communication technology fields, and only 1% from natural sciences, mathematics and statistics. The latter is the lowest share of all OECD countries.

Why is this important for Chile?

Productivity and innovation will be an increasingly important source of economic growth. In the context of volatile prices of natural resources, digitalisation, globalisation and demographic change in Chile, the skills needed to succeed in both the workplace and in society are rapidly changing. A skilled workforce will be important to ensuring Chile can innovate and adopt new technologies.

Chile's skills gap is limiting the country's opportunities to innovate in its strategic areas, such as earth science, natural resources and digital technologies. It is also hampering the country's capacity to connect to global production systems, which will be increasingly dominated by digitalisation and new technologies. For example, estimates from the public-private Council for Competitiveness in Mining in Chile forecast a gap of 16 000 technical profiles by 2024. Addressing this and other skills mismatch, in addition to strengthening the quality and equity of Chile's initial education system, will be an important driver of productivity and inclusive growth in the future.

In recent years, Chile has conducted significant reforms in a number of important areas, including initiatives aimed at boosting the quality and inclusiveness of general education, professional-technical and higher education. In the coming years, Chile needs to ensure that these reforms are implemented successfully, which will require significant refinements to minimise the transitions costs and to help ensure that resources are used efficiently. In the meantime, Chile can concentrate its efforts on improving the quality and coverage of early childhood education and care and enhancing its training system, which needs to be more prominent and better connected to the technical and vocational education system.

What should policy makers do?

- ▶ Conduct an analysis and strategic assessment of Chile's skills system as a first step in building a future-oriented, coherent and effective national skills strategy, including a review of current policy settings in the fields of education, training, employment, regional economic development, innovation and tax.
- ▶ Strengthen stakeholder engagement to ensure they have the capacity to provide effective advice to governments on policy development and implementation.
- ▶ Encourage stakeholders to develop and implement complementary investments of their own.



Further reading

Gonzalez-Velosa, C., G. Rucci, M. Sarzosa and S. Urzúa (2015). *Returns to Higher Education in Chile and Colombia*. IDB Working Paper Series No. IDB-WP-587.

OECD (2017), *Education in Chile, Reviews of National Policies for Education*, OECD Publishing, Paris. <http://dx.doi.org/10.1787/9789264284425-en>

OECD (2016), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, PISA, OECD Publishing. <http://dx.doi.org/10.1787/9789264266490-en>

OECD (2016), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, PISA, OECD Publishing. <http://dx.doi.org/10.1787/9789264266490-en>

OECD (2016), *Skills Matter: Further Results from the Survey of Adult Skills*, OECD Publishing. <http://dx.doi.org/10.1787/9789264258051-en>