



#### Foreword



#### **Andreas Schleicher**

Director for Education and Skills, and Special Advisor on Education Policy to the Secretary-General

Andrean Salleicler

At the OECD we believe that educating people up to and beyond whatever technology demands is the foundation for better jobs and better lives. And giving more people better opportunities drives social participation and is the cornerstone for more inclusive and resilient economies. Education gets to the origins of inequity in our societies and can therefore help us avoid picking up expensive consequences of inequality.

We encourage countries to compare their experiences and learn from each other, and we accompany them in the difficult process of policy implementation. Our global metrics help countries see what is possible in education and set meaningful aspirations in terms of measurable goals achieved by the world's education leaders. Our PISA surveys show how much school systems vary in their progress towards equipping all learners with the critical thinking, creative problem-solving and collaborative skills that are so crucial at a time when the kinds of things that are easy to teach and easy to test have also become easy to digitise and automate. Through TALIS, we seek to strengthen the teaching profession and devise ways to bring together the people, the spaces, the technology and time more innovatively to educate learners for their future, rather than our past. And our Survey of Adult Skills (PIAAC) shows how the skills of adults match what life and work expect from them.

Together, we can help every learner, every parent, every teacher and every policy maker see that only the sky is the limit to improving education – and that improving education is the key to a better and fairer society.



#### What the OECD does

The Organisation for Economic Co-operation and Development (OECD) is an international organisation that works to build better policies for better lives. Our goal is to shape policies that foster prosperity, equality, opportunity and well-being for all. We draw on 60 years of experience and insights

to better prepare the world of tomorrow.

Together with governments, policy makers and citizens, we work on establishing evidence-based international standards and finding solutions to a range of social, economic and environmental challenges. From

improving economic performance and creating jobs to fostering strong education and fighting international tax evasion, we provide a unique forum and knowledge hub for data and analysis, exchange of experiences, best-practice sharing, and advice on public policies and international standard-setting.

# Education and Skills at the OECD

The OECD **Directorate for Education and Skills** seeks to help individuals and nations to identify and develop the knowledge, skills and values that drive better jobs and better lives, generate prosperity and promote social inclusion. It assists OECD countries and partner economies in designing and managing their education and skills systems, and in implementing reforms, so that citizens can develop the knowledge, skills, attitudes, and values they need throughout their lives.



## Fairer, future-ready learning that is resilient and effective

Working with OECD member and partner countries, the OECD Directorate for Education and Skills carries out policy reviews and largescale cross-country surveys, gathering data on everything from public spending on education and teacher digital skills to the difference between how girls perform compared to boys in science, all in the service of better education policies. Our comparative data and analyses help education systems efficiently deliver fairer, future-ready learning to people of all ages and from all walks of life so they can become resilient, fulfilled and productive members of society and the world. This begins with learning in the earliest years and grows through a lifetime of reskilling and upskilling to attain better jobs. Effective learning is learning that is lifelong and life-wide. This means a wholeof-student approach, underpinned by cognitive development, social and emotional learning, well-being and resilience.

Whether because of background or circumstance, not all students enjoy the same holistic learning opportunities, or can equally benefit from them. Today, the educational potential of many people,

adults and children alike, is jeopardised by economic crisis, climate change and increasingly diverse and unequal societies. In a knowledgedriven economy, the macro-social cost of wasted talent is high with society paying the future price of social welfare, health, and protection systems, and compromised social and political participation. In identifying educational disadvantage, we help governments establish compensatory mechanisms for those at risk of falling behind. Digital technology looks to make equity in education even more reachable. Allied with what we humans uniquely bring to teaching and learning, digital innovation can radically transform education

In activating the values of inventiveness, diversity, equity, well-being and cognitive excellence in students' learning, we are helping governments lay the bedrock for cohesive societies that are resilient, outward-looking, fair and prosperous. Societies whose institutions are supported by their citizens' trust, grounded in knowledge, critical thinking and agency.







## **Future-ready classrooms**

## Radically transforming learning through digital technology

- Empower people and learning systems to embrace digital technologies by supporting countries with digitalisation in education and the use of smart data for learning and teaching. This can improve access to learning for people of all ages; transform teaching and learning practices; expand individualised and adaptive instruction; complement work-based learning in vocational education and training; reduce instructional costs; facilitate the provision of alternative credentials; support the professional learning of educators; and improve decision-making in education
- Reframe the education narrative to build better complementarity between human and technological capabilities; foster a culture of lifelong and life-wide learning; and strengthen equity in educational opportunity as a foundation for more inclusive societies
- Lead a global effort to benchmark Al and human capabilities to better align curriculum and instructional design with more equitable learning opportunities and the future of work
- Integrate insights from neuroscience, brain research and cognitive psychology into policy and teaching practice



## **Fairer Learning**

## Levelling the playing field starts before school

- » Build an international evidence base on early learning and child well-being to help countries develop quality early childhood education and care
- Collect data and analyse the unequal distribution of social outcomes and benefits of education to support investment in inequality-reducing early childhood education and care
- >> Equip all students with foundation skills and competences that will help their entry into the labour market
- Implement digitally-enabled individualised and adaptive instruction to reach people of all ages and backgrounds; especially, students who have fallen behind due to the pandemic
- Promote a growth mindset, which especially benefits disadvantaged students
- Narrow the digital gap by supporting digital infrastructure developments and resources for students and schools
- Promote policy of classrooms mixing students of diverse socio-economic backgrounds
- Facilitate and take stock of opportunities made possible by alternative credentials outside institutional frameworks so that higher education can better accommodate the needs of non-traditional learners







## **Building Resilience**

Fusing cognitive development with well-being in lifelong, life-wide learning

- » Build an international evidence base on early learning and child well-being to help countries develop quality early childhood education and care
- Promote a growth mindset to strengthen learners' sense of collective belonging
- Integrate global competence learning into education to empower students for a complex, interconnected world
- Establish diverse educational pathways and quality career guidance to support student transitions across levels of education and into the labour market
- Understand how education can bring about collective behavioural change enabling people to strike a different balance between current needs and the future well-being of the planet
- Remedy the loss of important social developmental experiences for learners due to COVID-19-necessitated school closures



### **Economics of education**

Effective, efficient education for more fulfilled and productive lives

- » Respond to rapid changes in skill demand in the labour market
- Focus on reskilling and upskilling of those whose working lives have been affected by the impact of COVID-19
- Mainstream flexible, modularised, cost-effective ways of learning, using adaptive and personalised digital education tools to complement work-based learning in VET
- Revise the analytical framework on economic returns to education in light of the shifting relationship between credentials and economic outcomes
- » Build the nexus between tax revenue and educational outcomes to help countries find better ways to share the costs and benefits of education between individuals, enterprises and societies
- Encourage uptake of digital tools, particularly artificial intelligence, to improve administrative decision-making and boost productivity in education



## **Our surveys**

The best way for education systems to improve is to learn what works from each other. The OECD Directorate for Education and Skills deploys largescale surveys and reviews, designing common methodological and analytical frameworks for utmost comparability of empirical evidence from different education systems. The OECD collects data about nearly all aspects of countries' education systems from key policies, teacher practises, adult proficiency, and early childhood learning and well-being to how 15-year-olds perform in mathematics and what their attitudes are about global issues like climate change. We continuously pioneer innovative new research instruments, analysing data using Al-powered supervised statistical learning, for instance, and balancing the findings against those in the existing literature in the field. The comparison of country results tells us with increasingly fine-grained precision what produces effective and equitable learning, and well-being. Sharing these findings and insights builds a collective knowledge bank, which countries draw on to improve their citizens'

education and move closer to the education target of the 2030 United Nations Sustainable Development Goals.

The OECD Directorate for Education and Skills is constantly strengthening and innovating its surveys to advance methodologies, streamline country participation and reflect emerging education priorities in a better and timelier way. It is also multiplying the ways in which countries can dialogue and learn from each other in formulating policy.

All this is more urgent than ever as countries grapple with the COVID-19 pandemic, its after effects, and, in a greater context, the volatility climate change brings with it. The OECD was the first international organisation to launch a rapid assessment of education policy responses to COVID-19. It has been helping schools manage disruptions and is working with UNESCO, UNICEF and the World Bank to deliver recurrent comparative data on the pandemic to help guide education policies for recovery.



#### The International Early Learning and Child Well-Being Study

The International Early Learning and Child Well-Being Study (IELS) is the world's first assessment of early learning and child well-being. Pioneering a holistic view that encompasses cognitive, social and emotional development, this cross-country survey integrates the perspectives of 5-year-old children, teachers, parents and the system in the analysis. It provides comparative information that helps countries design inclusive learning policies that start our youngest citizens on the path to becoming productive and fulfilled members of society.

#### **OECD Survey on Social and Emotional Skills**

The OECD Survey on Social and Emotional Skills is the first international survey that identifies and assesses the conditions and practices that shape the social and emotional skills of 10- and 15-year-old students in a comparable way. Complementary to literacy and numeracy, socio-emotional competencies involve managing emotions and self-perception, and engaging with others. Research shows that both cognitive, and social and emotional skills improve people's life outcomes, benefitting society as a whole. The study draws on a well-known framework that assesses a broad and balanced set of 15 skills, selected based on their policy relevance, validity, reliability and comparability in diverse populations and settings.

#### **PISA**

The triennial Programme for International Student Assessment (PISA) studies the extent to which 15-year-old students nearing the end of compulsory education have acquired the key knowledge and skills that are essential for full participation in modern societies. PISA assessments cover core cognitive competencies in reading, science and mathematics, and focuses on different themes in each cycle. These range from financial literacy, global competence, digital literacy and student well-being to vocational skills and behavioural change around the climate agenda. PISA covers over 90 countries.

#### **Survey of Adult Skills**

The Survey of Adult Skills, a product of the OECD Programme for the International Assessment of Adult Competencies (PIAAC), measures adults' proficiency in literacy, numeracy and the ability to solve problems in technology-rich environments. These are the fundamental skills adults use in the workplace, at home and in their communities. Analysis of data gives participating countries a good indication of the strengths and weaknesses in their labour force. It also shows where their education and training systems have room for improvement in areas such as the development of alternative lifelong learning outside institutional frameworks

#### The OECD Teaching and Learning International Survey

The OECD Teaching and Learning International Survey (TALIS) gathers information about today's teachers that helps countries build a high-quality teaching force. It was the forerunner in collecting data on working conditions and learning environments at schools from teachers and school leaders, and will now include a first assessment of teacher pedagogical knowledge. TALIS Starting Strong, the first international survey of the Early Childhood Education and Care (ECEC) workforce, documents the backgrounds, education and training of staff and leaders across countries, as well as their pedagogical and professional practices.

#### Our tools

#### **Education at a Glance**

Education at a Glance is the authoritative source for information on the state of education around the world. It provides what is increasingly real-time data on the structure, finances and performance of education systems across OECD countries and a number of partner economies. The 2020 edition includes a focus on vocational education and training, notably, the labour market and social outcomes of vocational graduates.

#### The Education Policy Outlook

The Education Policy Outlook is an analytical observatory that monitors the evolution of policy priorities and developments from early childhood to adult education, mainly among OECD education systems. This provides a comparative understanding of how policies are evolving, and how they can be best implemented or improved over time. In view of supporting countries adjust policies and shift practices in the post-COVID-19 world, the Education Policy Outlook is developing and disseminating an actionable Framework for Resilience and Responsiveness in education policy.

#### **PISA Global Crisis Module**

The OECD Directorate for Education and Skills has made its crisis survey module available as a global public good. It develops ongoing real-time evidence on the resilience and responsiveness of school systems; the preparedness of students and schools for future disruptions of teaching and learning; and, in the context of the COVID-19 pandemic, student learning and well-being during school shutdowns. This survey delivers recurrent comparative data on education policy responses to COVID-19, particularly the implementation of contingency measures and alternative learning strategies. Comparative survey findings have helped education systems learn best practices in managing disruptions in schooling. It serves as a springboard to crafting policy responses that build on the agile innovations and new stakeholder collaborations brought forth by the pandemic.

#### **Global Teaching Insights**

The Directorate has made available and is continuously adding to a substantial online collection of videos showcasing different teaching practices in classrooms from around the world. These direct observational videos are an invaluable teacher resource for classroom management, social-emotional support and instructional practices.

#### **Education GPS**

An intuitively organised digital platform that integrates all of the directorate's work, providing easy access to all policy relevant analysis, by country or topic, and internationally comparable data on education policies, practices, opportunities and outcomes.

#### **PISA** for schools

The PISA-based Test for Schools is a voluntary assessment based on PISA. Like PISA, it measures 15-year-old students' abilities to think critically, solve problems and communicate effectively. The student questionnaire collects information on students' attitudes towards learning, their school's learning environment, their socio-economic background and their social and emotional skills. The project contributes to improving student learning and well-being by empowering teachers and school leaders through global connections and international benchmarking based on a common scale provided by PISA. The data collected in each school report provides a solid evidence base for schools seeking to improve teaching and learning for all students.

# Assisting countries with policy development and implementation

The Directorate for Education and Skills helps countries answer important questions facing education policy makers and practitioners alike: how to identify and develop the right skills and turn them into better iobs and better lives; how best to allocate resources in education to support social and economic development; and how to offer everyone the chance to make the most of their abilities at every age and stage of life. OECD and partner countries look to the directorate's expertise to review their education and skills systems, and assist them in developing and implementing policies to improve them. We conduct reviews ranging from those on individual national education policy to comparative educational policy and thematic peer-analysis. We review and support the development of higher education systems with analysis on resource use and labour market relevance. All of these provide in-depth analyses and advice that draw on OECD data resources, national policy documents and research, and field-based interviewing by OECD review teams. Comparative thematics, covering areas such as ECEC in a digital world, diversity, equity and inclusion in education, teacher policy and transitions in upper secondary education, are based on a common

conceptual framework and methodology developed with advice from a group of national experts.

Through tailored implementation support the directorate offers countries assistance in implementing policy, from curriculum reform to helping schools become effective learning organisations. It also brings countries and stakeholders together in a variety of fora to exchange ideas, an important step in the policymaking process.

The directorate is mobilising all these facets of its policy review, design and implementation expertise to help governments manage the COVID-19 crisis and plan for its aftermath. During the pandemic-induced school closures, the directorate tracked contingency measures and alternative learning strategies, and developed a survey on how the pandemic was affecting the early childhood sector. It presented this constantly evolving data at policy and peer-learning sessions to help countries align their crisis policy and strengthen stakeholder collaboration and systemic resilience. The directorate also released a handbook on COVID-19 policy responses and fast-tracked research and development funding for rapid research evidence on emerging needs during the pandemic and the recovery.

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## **Pivoting to tomorrow**

What knowledge, skills, attitudes and values will students need in a swiftly evolving world? The OECD Directorate for Education and Skills develops long-term "leading-edge" thinking that looks beyond the current state of education to what it can become. These multiple-scenario analyses nourish our ground-breaking Education 2030 work on curriculum. They inform international debate and inspire policy processes to shape the future of education.

The one certainty about the future of education is that it will be a digital one though we cannot know to what degree. In staying ahead of the EdTech curve, the directorate advises countries on the fast-changing potential of digital tools like robotics, blockchain and artificial intelligence, and how they can be integrated and used to equitably boost teaching, learning and administrative performance. The digitalisation of education is just one of the many strategic foresight areas the OECD's **Centre for Educational Research and Innovation** (CERI) focuses on. Its exploration of best practices flagged by international comparisons helps countries move towards the frontiers of education

## Our partners

The OECD develops analysis and best practices together with its **38** *member countries* and with over **50** *partner countries and economies*. Several key partners have comprehensive relations with the OECD. The directorate has also gone beyond partner countries and economies by extending participation in the PISA triennial assessment of 15-year-olds to include lower- and middle-income countries. The OECD also operates with and alongside

many other agencies and organisations in the education space such as the European Commission, UNESCO, the World Bank, UNICEF, leading NGOs, social entrepreneurs and the private sector. Our education policy tools, instruments, evidence and dialogue platforms help achieve and measure progress towards the United Nations Sustainable Development Goal for inclusive, equitable and quality education by 2030.





## How we are governed

The work of the Directorate for Education and Skills is overseen by four bodies, each with its own mandate, membership, and programme of work and budget, to help deliver work under the overall governance of the OECD Council: the Education Policy Committee, which also provides strategic oversight of our work; the Centre for Educational Research and Innovation Governing Board (CERI); the Programme for International Student Assessment Governing Board (PISA); and the Programme for Teaching and Learning International Survey Governing Board (TALIS). The Board of Participating Countries for the Programme for the International Assessment of Adult Competencies (PIAAC) is overseen by both the Education Policy Committee and the Affairs Employment. Labour and Social Committee

OECD Directorate for Education and Skills

Programme for International Student Assessment (PISA)

Centre for Educational Research and Innovation (CERI)

Education GPS (interactive data visualisation website)

Education 2030

Education at a Glance: OECD Indicators

Survey of Adult Skills (PIAAC)

Teaching and Learning International Survey (TALIS)

Global Teaching Insights

Lessons for education from COVID-19

https://www.oecd.org/education/

www.pisa.oecd.org

www.oecd.org/edu/ceri

http://gpseducation.oecd.org

www.oecd.org/education/2030

www.oecd.org/education/education-at-a-glance

www.oecd.org/skills/piaac

www.oecd.org/education/talis

www.oecd.org/education/school/global-teaching-insights.htm

www.oecd.org/education/lessons-for-education-from-covid-19

-0a530888-en.htm







