

# 1 Overview

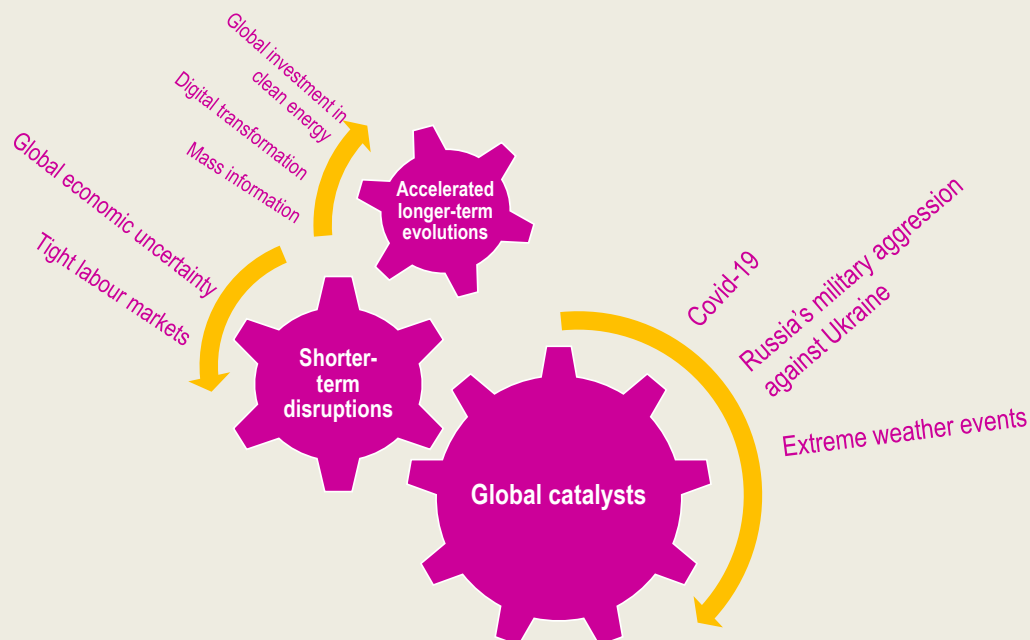
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In 2022, the world faces considerable disruption and uncertainty brought about by three catalysing forces: Russia's invasion of Ukraine (with its dramatic impact on energy and food prices), the continuation of the COVID-19 pandemic and extreme weather events. These forces will reverberate into 2023, introducing short-term disruptions and intensifying longer-term evolutions. They have important implications for today's education policy makers, tasked with navigating them while continuing to drive towards greater quality, equity, responsiveness and resilience. Policy efforts that work to **transform learning pathways for lifelong learners** will be at the heart of the policy response. In analysing related policy actions and identifying possible ways forward, this report represents a first effort to explore priority areas of the OECD's *Framework of Responsiveness and Resilience in Education Policy* and a step towards a more fundamental transformation of the pathway structures that form the backbone of our education systems.

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# In Brief

## Infographic 1.1. Catalysts, short-term disruptions and accelerated longer-term trends for 2023



In 2022, three catalysts delivered considerable disruption and uncertainty to the global stage.

1. **Russia's military aggression against Ukraine** displaced millions, with dramatic global effects that include rocketing energy and food prices;
2. **COVID-19** continues to impact the global economy and people's physical and mental well-being;
3. **More frequent and intense extreme weather events** in some parts of the world have pushed people and ecosystems to the limit of their resilience.

These three forces will reverberate into 2023 delivering short-term disruptions:

- **Global economic uncertainty** may restrict public finances, inhibit the private sector's willingness to invest, and erode people's disposable income, endangering funding for education and training on all fronts. In the face of competing demands, in 2023, governments will need to *protect public expenditure on education and preserve individuals' capacity to invest* in their futures.
- **Tight labour markets** may increase employment and mobility but can also discourage youth from staying in education, and ensuing skills shortages may inhibit progress towards the digital and green transformations. Moreover, for those with low education attainment, employment is still well below pre-pandemic levels. In 2023, education and training systems must *rethink the learning offer* for those looking to re-enter the labour market.

The reverberations are also accelerating or exacerbating longer-term evolutions:

- **Global investment in clean energy is increasing** despite shorter-term reliance on carbon, in part due to a growing sense of urgency as people experience more frequent climate shocks and calls for energy diversification in the wake of Russia's invasion of Ukraine. Young people in particular are motivated to transform societies for a greener, more sustainable future. However, in 2023, education systems have more to do to *equip all young people with the agency to turn this into reality*.
- **Digital solutions in the pandemic accelerated the digital transformation.** However, people still lack the skills required to confidently navigate a digital society and capitalise on the promise of digital innovation. As demand for digital skills grows, in 2023, education and training systems must *develop a sufficient level of foundational and complex digital skills*.
- **Mass information leaves individuals and societies vulnerable to disruptive forces.** Digital developments have revolutionised the way people access information and handle knowledge. But too many young people cannot distinguish fact from opinion and are not taught to do so. Moving into 2023, education systems need to *equip all students with the literacy and critical thinking skills required to effectively navigate today's information society*.

Policy responses to this challenging context need to be considered alongside efforts to realise education's long-established goals of quality and equity, and the more recently recognised aims of responsiveness and resilience. In 2023, this calls for action to **transform learning pathways**, ensuring all learners are equipped with the skills required for 21st century living and have access to attractive learning opportunities that meet their needs across a lifetime. Doing so will not only help foster the resilience of education systems for any disruptions to come in 2023 but will empower learners for greener, more sustainable, technologically savvy and democratically engaged futures.

To help guide policy makers in these efforts, this report represents a first effort to explore priority areas of the OECD's *Framework of Responsiveness and Resilience in Education Policy*, presenting insights from promising policy efforts, predominantly since 2020, to transform learning pathways through **enhancing labour market relevance, easing transitions and nurturing learners' aspirations**.

## Introduction

In 2022, the world faces considerable disruption and uncertainty brought about by three catalysing forces. First, Russia's large-scale, illegal and unprovoked war against Ukraine is causing innocent lives to be lost, displacing millions of people regionally and inflicting a shock on commodity, trade and financial markets that has dramatically pushed up energy and food prices globally. Second, COVID-19 continues to disturb global trade and supply chains, while intermittent waves of viral infections are interrupting countries' recovery efforts and eroding individual well-being. Third, more frequent and intense extreme weather events, including heatwaves, flooding and wildfires, are increasingly pushing people and ecosystems beyond their ability to adapt (IPCC, 2022<sup>[1]</sup>).

The impact of these three forces will reverberate into 2023 and beyond, introducing shorter-term disruptions and accelerating or exacerbating longer-term evolutions. These reverberations, which affect people of all ages, educational stages and backgrounds, have important implications for education systems. They call for urgent action from education actors to transform learning pathways in a way that effectively empowers people in the emerging global context. Doing so will not only help foster the resilience of education systems for any disruptions to come in 2023, but will also help prepare learners and societies for greener, more sustainable, technologically savvy and democratically engaged futures.

This chapter provides an overview of the emerging context in 2023 and outlines key implications for education systems. Building on the work of the OECD on responsiveness and resilience in education policy, it then presents the reader with three areas of policy effort that policy makers can prioritise to transform learning pathways. These relate to enhancing the relevance of the education and training offer, easing transitions and supporting learners' aspirations. The subsequent chapters further analyse each of these policy areas.

## Recent shocks and accelerated trends shape global challenges in 2023

In 2022, Russia's large-scale aggression against Ukraine and its knock-on effects on energy markets, the COVID-19 pandemic and extreme weather events have caused unforeseen shocks and accelerated longer-term trends with significant consequences for global societies and education systems. Moving into 2023, these shocks and trends are at the forefront of education policy makers' minds as they consider how to strengthen the responsiveness of education systems and foster more resilient societies.

### ***Global economic uncertainty puts pressure on public and private funds for education***

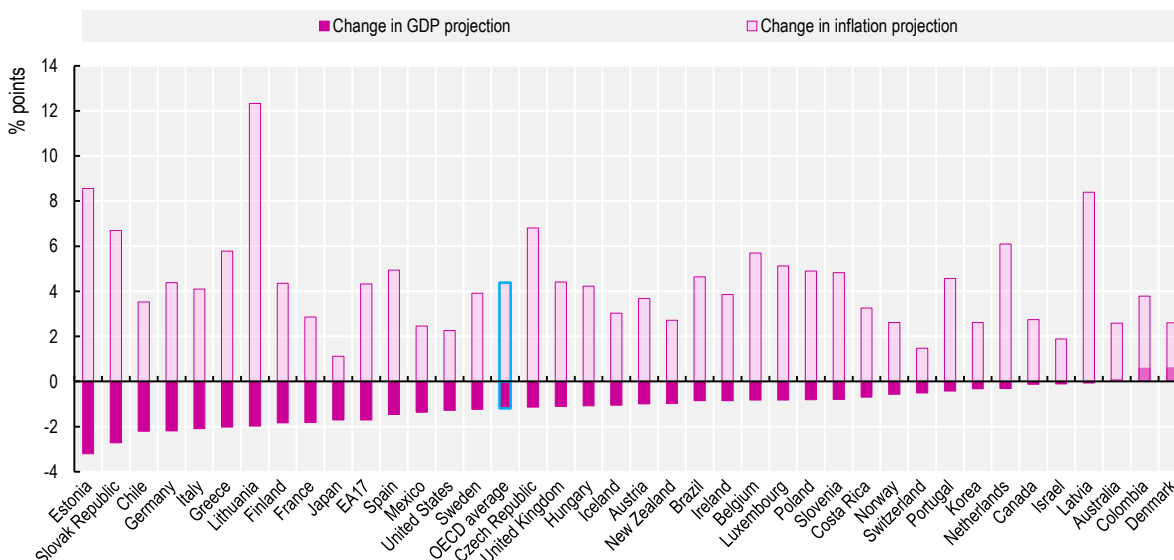
As 2023 approaches, disruption and uncertainty in the global economy are putting considerable pressure on both national and personal finances. While 12 months ago the global economic outlook was optimistic, in the wake of the invasion of Ukraine, economic recovery has lost momentum and nearly all OECD countries had their projected growth in gross domestic product (GDP) downgraded in June 2022 (see Figure 1.1) (OECD, 2022<sup>[2]</sup>). At the same time, revised projections predicted a considerable increase in inflation across the globe and, by September, high inflation had become deeply entrenched across most OECD economies (OECD, 2022<sup>[3]</sup>).

The war in Ukraine has contributed to a rise in energy prices, which had already been increasing as economies reopened after the initial stages of the pandemic. Food prices also experienced a steep increase resulting from the war in Ukraine and extreme weather events in 2022. These higher prices have aggravated inflationary pressures resulting from governments' high level of expenditure to help populations cope with the pandemic, with the cost of living already rising rapidly around the world (OECD, 2022<sup>[3]</sup>). Adding further uncertainty to the economic outlook, Europe's growing dependence on non-Russian energy supplies and commitment to substantially reducing energy consumption leaves both the European and

global financial markets vulnerable to an unusually cold European winter (OECD, 2022<sup>[3]</sup>). While economic instability itself inhibits both public and private investment, low or negative economic growth and high inflation can contribute to contractions in public finances as well as inhibiting private sector profits and capacity to invest, and eroding households' real disposable income.


### Figure 1.1. Global events in early 2022 triggered a more negative outlook for the global economy

Revisions to projected GDP growth and core inflation projections from December 2021 to June 2022



Note: Countries are shown in ascending order of change in GDP projections. Inflation for Türkiye is projected to be 72.0%, compared to 23.9% projected in the December 2021 Economic Outlook.

Source: Adapted from OECD (2022<sup>[2]</sup>), *OECD Economic Outlook*, Volume 2022 Issue 1, Economic Outlook 111 database, <https://doi.org/10.1787/62d0ca31-en>.

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This increased pressure on public, private and personal finances for 2023 endangers funding for education and training on all fronts. In 2019, public and household funds together accounted for over 85% of total expenditure on primary to tertiary education in all OECD education systems, and over 95% on average (see Figure 1.2). In countries such as Finland, Norway and Sweden, where public expenditure alone accounts for at least 95% of education funding, governments will need to protect public expenditure on education in the face of competing demands from other priority sectors such as defense, health and energy. For example, the share of GDP dedicated to economy-wide expenditures on energy is likely to have risen significantly in many countries in 2022, with estimations that it more than doubled in many countries, especially in Europe (OECD, 2022<sup>[3]</sup>).

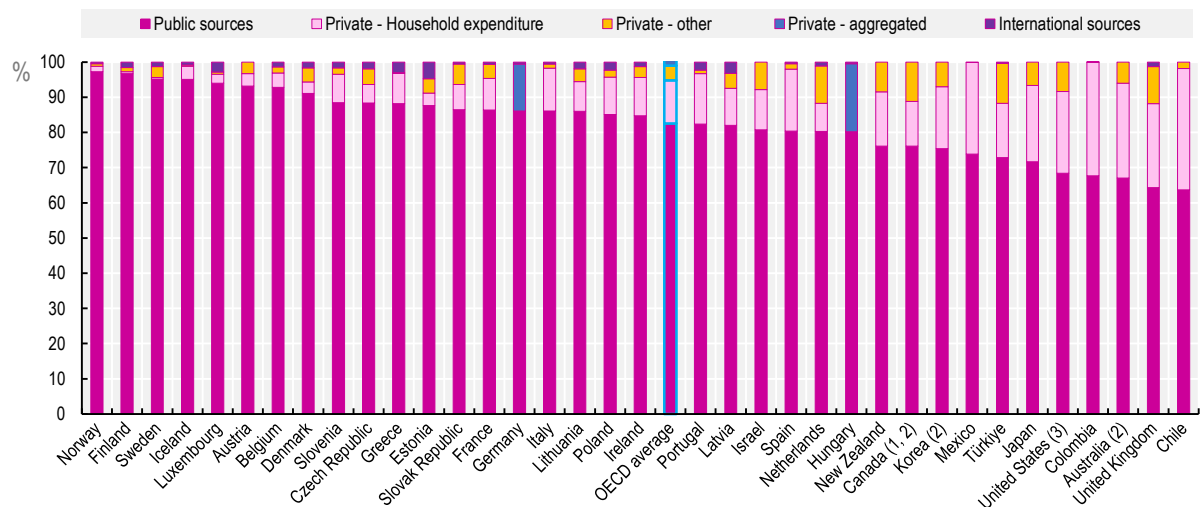
Conversely, countries that are more reliant on private sources of funding, including household expenditure, such as Australia, Chile and the United Kingdom, must ensure individuals continue to have the capacity to invest in their future. This is particularly true for non-compulsory education levels—early childhood education and care, tertiary education, and post-secondary non-tertiary training—where private sources of funding are generally more important. Similarly, priority equity groups will need extra attention as inflation and high energy and food prices disproportionately affect lower-income households (OECD, 2022<sup>[2]</sup>).

The impact of COVID-19 on public funding for education and training complicates the picture further. Public spending on education generally increased during the pandemic years: in 2020, about two-thirds of OECD countries increased their education budgets in response to the pandemic and in 2021 at least three-quarters of countries with available data increased the financial resources directed to primary,

secondary and tertiary educational institutions compared to 2020 levels (OECD, 2022<sup>[4]</sup>). These additional funds went on measures such as extra supports for teachers and staff and investments in digital technologies. Education policy makers will need to not only protect education funding but make a convincing case for greater investment for 2023 and beyond.

### Figure 1.2. Twin pressures on public and household expenditure may threaten education funding


Relative share of public, private and international expenditure on primary to tertiary educational institutions, by final source of funds (2019)



Note: Countries are shown in descending order of share of expenditure on primary to tertiary educational institutions coming from public sources of funding. Private expenditure figures include tuition fee loans and scholarships (subsidies attributable to payments to educational institutions received from public sources). Loan repayments from private individuals are not taken into account, and so the private contribution to education costs may be under-represented. Public expenditure figures presented here exclude undistributed programmes.

1. Primary education includes pre-primary programmes.
2. International sources of education are included in private sources.
3. Figures are for net student loans rather than gross, thereby underestimating public transfers.

Source: Adapted from OECD (2022<sup>[4]</sup>), *Education at a Glance 2022: OECD indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/3197152b-en>.

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### Despite tight labour markets, some still struggle to find a job

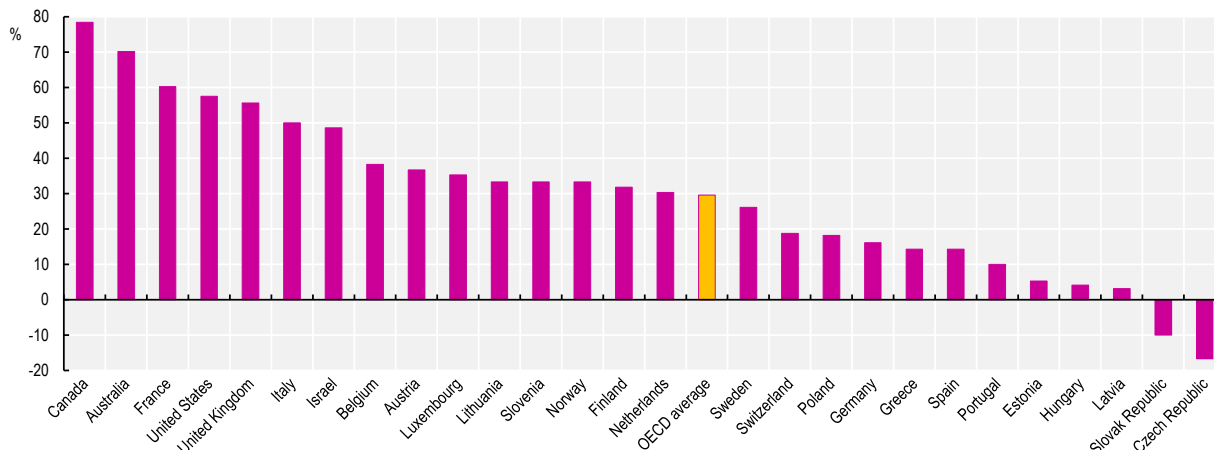
The labour market recovery from the impact of COVID-19 lockdowns has generally been strong and has resisted further potential shocks from the war in Ukraine. As 2022 ends, most OECD economies are experiencing labour shortages and sharp increases in job vacancies (see Figure 1.3) (OECD, 2022<sup>[2]</sup>). This is particularly true of countries such as Australia, Canada and France where, in the first quarter of 2022, vacancies were at least 60% higher than before the outbreak of the COVID-19 pandemic. Although these tight labour markets can be positive for some individuals, raising employment and mobility levels as well as bargaining power, at societal level, labour shortages are now pervasive across sectors and countries. This constrains production and potentially inhibits progress towards more strategic transformations such as the green and digital transitions (OECD, 2022<sup>[5]</sup>).

At the same time, workers do not benefit equally from the potential advantages of today's tight labour markets. Vulnerable labour market groups, such as young people, low-educated workers and migrants, already disproportionately impacted by labour disruptions during the COVID-19 pandemic, are over-represented in the low-pay industries that do not show clear signs of post-pandemic recovery (OECD, 2022<sup>[5]</sup>). In particular, employment is still down on pre-pandemic levels for those with low educational attainment. On average across the OECD, unemployment rates for 25-34 year-olds without at least upper

secondary attainment increased by 17 percentage points between 2019 and 2021, compared to a 10-percentage-point increase for those with tertiary attainment (see Figure 1.4).

**Figure 1.3. Many OECD countries are experiencing sharp increases in job vacancies**

Change in job vacancy rates 2019 Q4 to 2022 Q1



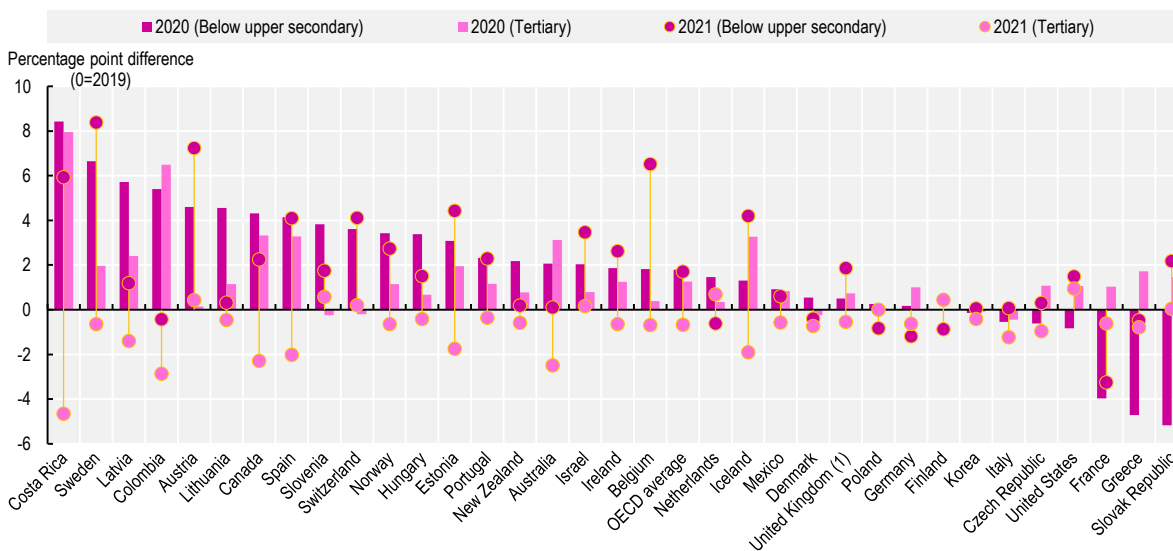
Note: Countries are shown in descending order of growth in job vacancy rates. Job vacancy rates (i.e. vacancies as a share of employment) are on a quarterly basis and seasonally adjusted, with the exception of Canada.

Source: Adapted from OECD (2022<sup>[2]</sup>), *OECD Economic Outlook*, Volume 2022, Issue 1, <https://doi.org/10.1787/62d0ca31-en>.

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**Figure 1.4. Unemployment remains higher for those with low educational attainment**

Unemployment rates of 25-34 year-olds in the labour force by educational attainment (2019-2021)



Note: Countries are shown in descending order of the percentage-point difference in unemployment rates of 25-34 year-olds with below upper secondary educational attainment between 2019 and 2021. (1) Data for upper secondary attainment include completion of a sufficient volume and standard of programmes that would be classified individually as completion of intermediate upper secondary programmes (9% of adults aged 25-64 are in this group).

Source: Adapted from OECD (2022<sup>[4]</sup>), *Education at a Glance 2022: OECD indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/3197152b-en>.

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Furthermore, while the unemployment rate for the tertiary-educated had already started to come down from its COVID-19 peak by 2021, the rate remained high for those with lower educational attainment. Certain countries have diverged from this trend: by 2021, Colombia, Latvia and Lithuania had all successfully decreased unemployment levels for both groups from the sharp increases experienced in 2020, although only Colombia had returned them to below pre-COVID levels. This calls for education and training systems to rethink options that can help those at most disadvantage to re-enter the labour market. A more granular learning offer should reflect both the needs of learners as well as economic and social evolutions. Finally, governments will also need to be mindful that inequities accumulate as rising energy and food prices hit disadvantaged households hardest. This is likely to reduce their capacity to invest resources in reskilling and upskilling and further distance them from the potential benefits of tight labour markets.

### ***Growing urgency for a green transition is provoking some policy change***

In 2021 and 2022, the OECD has seen abnormally intense heatwaves and wildfires across many countries in Europe, flooding and heatwaves in Australia, a continuation of Chile's mega-drought, a record-breaking cold wave in parts of Canada and the United States, and flooding and mudslides in Japan. Beyond the OECD too, extreme weather events have had a devastating effect on people across the world. The far-reaching nature of these climate shocks, and their often-unprecedented impact has refocused global attention on the urgency of the challenge to halt climate change and ensure a greener, more sustainable future. At the same time, the profound shock to global society delivered by the COVID-19 pandemic saw a mainstreaming of calls for "green" responses to the crisis and "green" recovery strategies. Working both with and against these forces, the energy crisis triggered by the Russian invasion of Ukraine has also emphasised calls for energy security and a move away from over-reliance on traditional means of energy supply, despite a shorter-term reliance on carbon supplies to cope with this crisis.

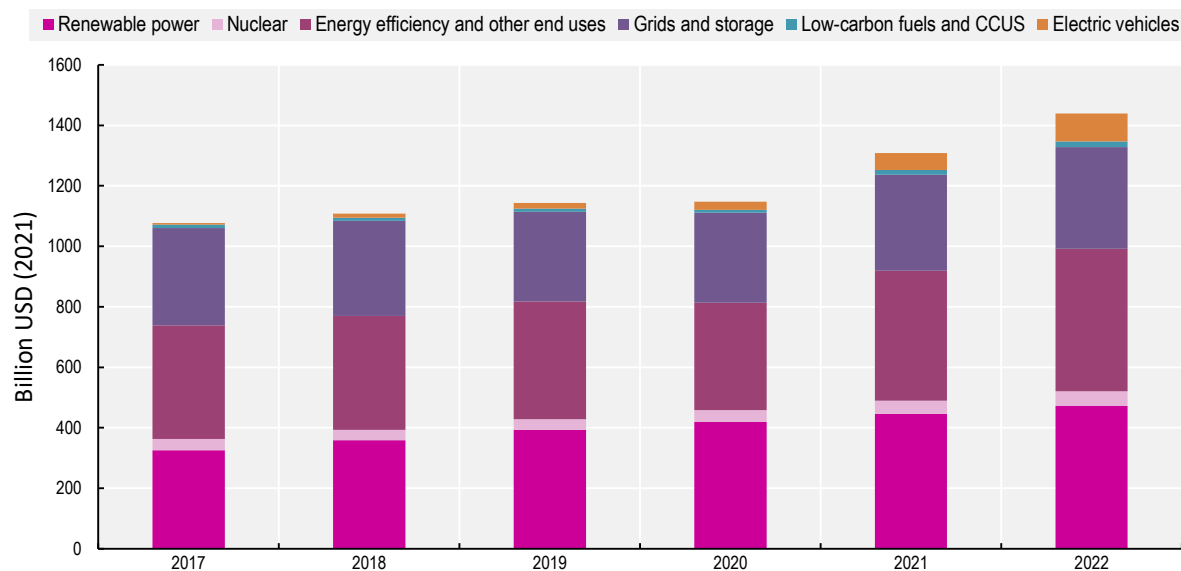
This increased attention on green solutions seems to be having an impact. Global investment in clean energy is finally increasing after a long period of stagnation. In the five years following the Paris Agreement in 2015, the average annual growth rate of overall investment in clean energy was just over 2% (IEA, 2022<sup>[6]</sup>). Since then, the average rate has risen to 12%, and between 2020 and 2022 alone, the total increase is expected to have been 25%. In 2022, clean energy investment is projected to account for almost three-quarters of the growth in overall energy investment (IEA, 2022<sup>[6]</sup>) (see Figure 1.5). With the world in the midst of a first global energy crisis, brought about by Russia's invasion of Ukraine and ensuing actions, stronger efforts towards a cleaner energy agenda need to continue (IEA, 2022<sup>[7]</sup>).

However, financial investment alone will not be enough, and education systems play an important role in ensuring that young people have the knowledge, skills, attitudes and values required to bring sustainable futures into the present. Today's youth are motivated to combat climate change. In 2021, across almost all countries participating in the OECD Survey on drivers of trust in public institutions, young adults (18-29 year-olds) were more likely to prioritise action on climate change than older people (aged 50 and over). At the same time, these young people have consistently lower levels of trust in government suggesting a lack of confidence in the levers of power to do anything about climate change and other global challenges deemed important to them (OECD, 2022<sup>[8]</sup>).



## Figure 1.5. After several years of stagnation, global investment in clean energy has accelerated

Annual clean energy investment by area of investment and year



Note: Energy efficiency and other end-use includes spending on energy efficiency, renewables for end-use and electrification in the buildings, transport and industry sectors. CCUS refers to Carbon Capture, Utilisation and Storage. Low-carbon fuels include modern liquid and gaseous bioenergy, low-carbon hydrogen, as well as hydrogen-based fuels that do not emit any CO<sub>2</sub> from fossil fuels directly when used and also emit very little when being produced. Data shown for 2022 are based on expected levels of investment.

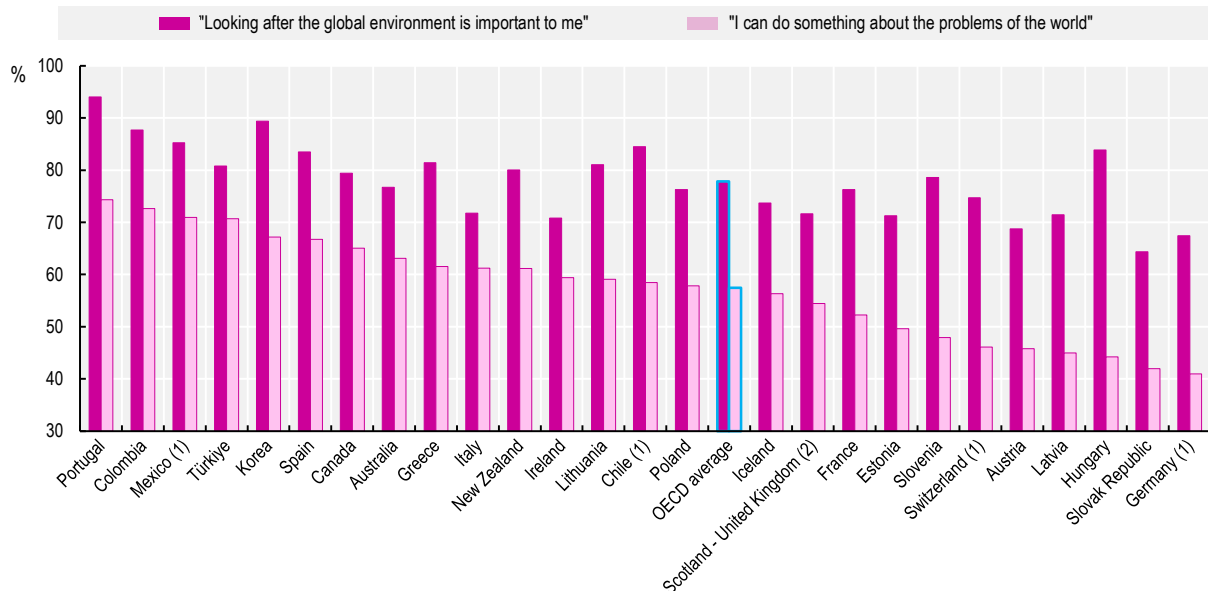
Source: IEA (2022<sup>[6]</sup>), *World Energy Investment 2022*, <https://doi.org/10.1787/7a0d89ff-en>.

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Similar findings emerge for even younger cohorts. In 2018, on average across the OECD, over three-quarters (78%) of 15-year-olds reported that looking after the global environment was important to them (see Figure 1.6). However, many fewer (57%) reported believing that they could do something about the problems of the world. Moreover, in all countries and economies participating in the Programme for International Student Assessment (PISA) 2018 global competence assessment, advantaged students reported greater agency regarding global issues than their disadvantaged peers (OECD, 2020<sup>[9]</sup>). Into 2023 and beyond, education systems have more to do to ensure that, along with the will and motivation, young people have the agency to help make their desire to see a fairer, greener society become reality, whatever their background.

## Figure 1.6. Many young people care about the global environment but fewer believe they can do something about it

Agency regarding global issues based on 15-year-olds' reports (PISA 2018)



Note: Countries are shown in descending order of students' belief that they can do something about the problems of the world. (1) Less than 75% but more than 50% of the population was covered by the sample, (2) Less than 50% of the population was covered by the sample.

Source: OECD (2020<sup>[9]</sup>), *PISA 2018 Results (Volume VI): Are Students Ready to Thrive in an Interconnected World?*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/d5f68679-en>.

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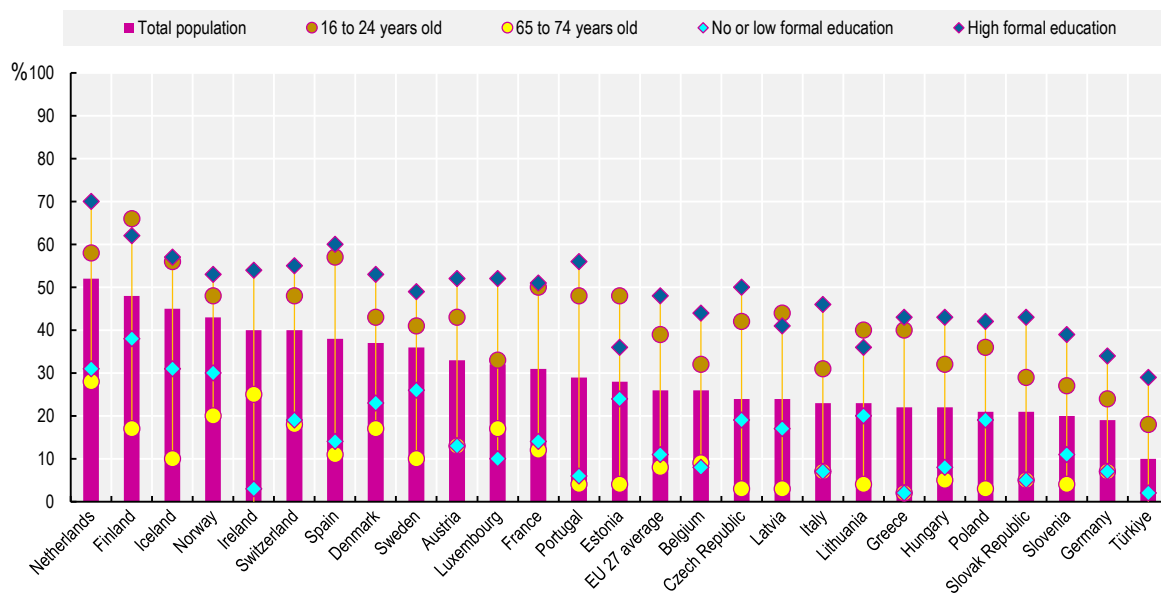
### **Digital transitions continue to accelerate, increasing a demand that is not being met**

Widespread national lockdowns during the COVID-19 pandemic pushed much of the world online. Children continued their education remotely, employees started working from home, many firms adopted new digital business models, and mobile applications and artificial intelligence became crucial to tracking and learning about the virus (OECD, 2020<sup>[10]</sup>). Despite the reopening of economies and social lives in 2022, some of this greater digital permeability has continued, or has at least allowed the acquisition of new skills, accelerating a digital transformation already underway for decades.

To navigate this new digital age confidently, people need to master the foundational digital skills that will ensure they are not locked out of new social, civic and professional spaces. Going beyond this, they will need to master a set of digital skills that goes deeper and wider than the basic skillset. Recent data indicate a digital skill deficit in both regards. On average across European Union Member States in 2021, little over one in two adults show basic or above-basic proficiency across five components of digital skills (information and data literacy, communication and collaboration, digital content creation, safety, problem solving). When it comes to above-basic proficiency, despite a general deficit across the total population, older people and those with lower levels of education are particularly at risk of not having sufficient digital skills (see Figure 1.7). Similarly, recent OECD data indicates that already prior to the pandemic, while several OECD countries were experiencing a shortage of general digital skills, certain more complex skills such as digital content creation were in demand almost universally across the OECD (OECD, 2022<sup>[11]</sup>).

## Figure 1.7. Many people do not have the digital skills to go beyond the basics

Share of individuals with above-basic levels of overall digital skills by age and educational attainment (2021)



Source: Adapted from Eurostat 2022, [https://ec.europa.eu/eurostat/databrowser/view/isoc\\_sk\\_dskl\\_i21/default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/isoc_sk_dskl_i21/default/table?lang=en) (accessed on 1 October 2022).

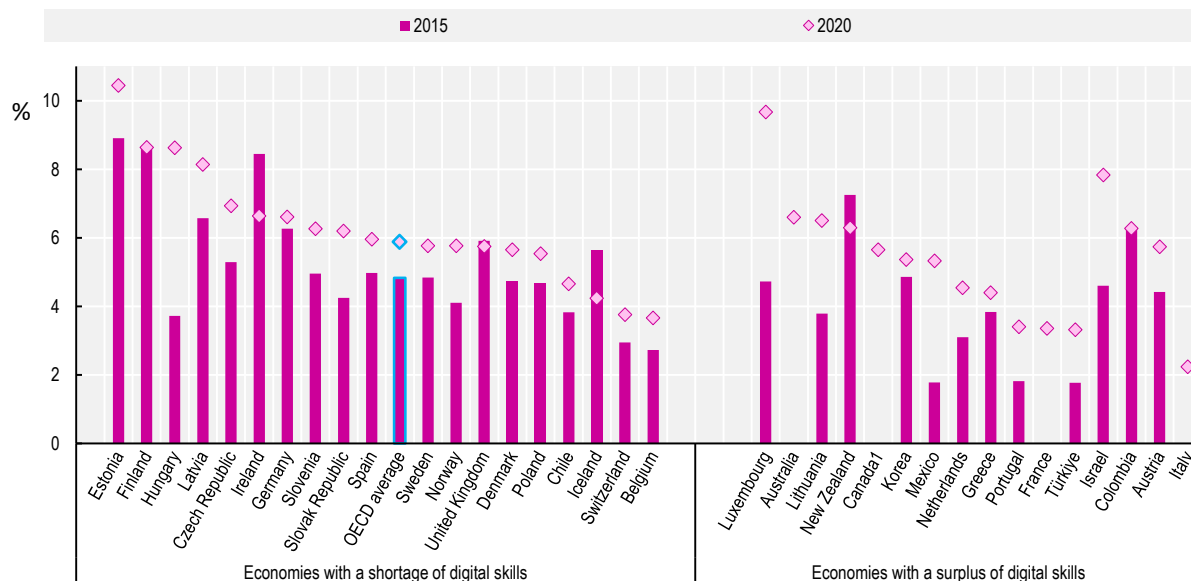
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As demand for digital skills—particularly more complex ones—grows, education and training systems can ensure that all learners are exposed to quality opportunities to develop foundational digital skills and that those that have the necessary ambition and aptitude can pursue further studies in digital-related fields. However, there are important inequities in schools' capacity to develop learners' foundational digital skills. In TALIS 2018, on average across the OECD, principals in socio-economically disadvantaged schools more commonly reported that quality instruction is impeded by shortages in digital infrastructure and tools than their peers in advantaged schools. The same was true for those in public schools compared to those in private, and schools in rural areas compared to those located in cities (OECD, 2022<sup>[12]</sup>).

Regarding more sophisticated digital skills, between 2015 and 2020, many countries successfully increased the share of students entering tertiary programmes in the field of Information and Communications Technology (ICT), including several of those countries experiencing labour market shortages in digital skills (see Figure 1.8). For example, Hungary has more than doubled the share of new entrants to tertiary education electing to study ICT-related programmes. However, other countries such as Iceland and Ireland have seen a decrease in the share of tertiary entrants to ICT programmes over the same period, despite experiencing wider digital skills shortages. Although labour market dynamics are much more complex than these data alone can show, education systems will need to continue to be responsive to labour market needs to ensure that societies and people benefit equally from digital transformations.

**Figure 1.8. Most countries have increased the share of tertiary students in ICT programmes**

Share of new entrants in the field of information and communication technologies (2015 and 2020)



Note: Countries are grouped based on whether they are experiencing a shortage or surplus of digital skills according to the Skills for Jobs 2022 database and based on data from 2019 or the most recent available year prior to 2020. Within each group, countries are shown in descending order of the share of tertiary new entrants in the field of ICT. (1) Reference year is 2019.

Source: Adapted from OECD (2022<sup>[4]</sup>), *Education at a Glance 2022: OECD indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/3197152b-en>; OECD (2022<sup>[13]</sup>); OECD Skills for Jobs Database (accessed on 1 October 2022): <https://www.oecdskillsforjobsdatabase.org/#FR/>.

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### **People of all ages need the skills to sort the good information from the bad**

Digital developments have revolutionised the way people access information and the amount of it readily available to them. Traditional, usually more curated, information sources have been replaced with mass information sources from which it is harder to discern accuracy, reliability and objectivity (OECD, 2021<sup>[14]</sup>). While in theory this could have a democratising effect, in reality it has provoked a descent into a post-truth era where the perceived value of facts and expertise has plummeted.

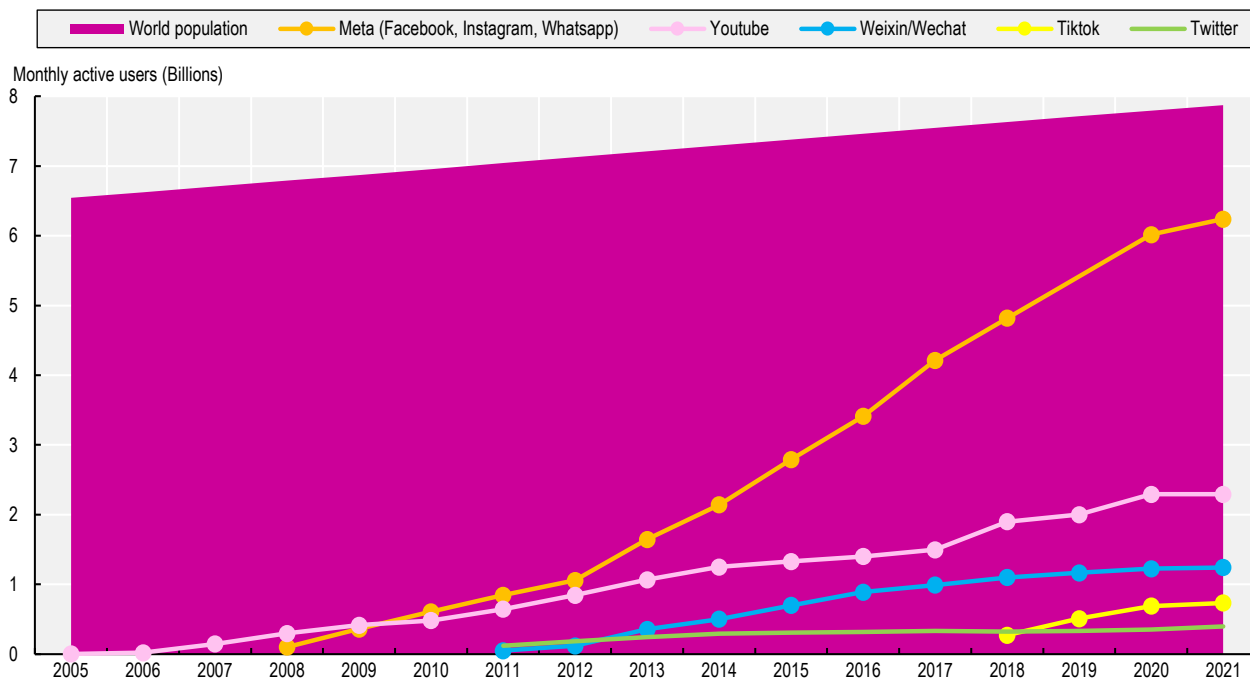
The explosion of social media has played a particularly significant role. Since the launch of YouTube in 2005, the number of monthly active user accounts on the top social media platforms has increased rapidly (see Figure 1.9). Facebook alone has grown from 100 million monthly active user accounts in 2008 to over 2.8 billion in 2021, by which time Meta, the technology company that owns Facebook, Instagram and WhatsApp, hosted more than 6.2 billion active user accounts. If each account were owned by a different person, this would be the equivalent of 80% of the total global population. While social media and other digital innovations expand opportunities for citizens to express their voices and interact, they also increase their exposure and vulnerability to misinformation and disinformation, opening doors to deception and abuse and blurring the line between reality and performance, fact and opinion, truth and lies (OECD, 2022<sup>[15]</sup>).

These risks have continued to crystallise since 2020. During the early months of the COVID-19 pandemic, the World Health Organisation identified the emergence of an “infodemic” in which an overabundance of information and the rapid spread of misleading or fabricated news, images, and videos complicated the pandemic response (WHO, 2020<sup>[16]</sup>). In 2022, Russia’s propaganda model to accompany the unprovoked

invasion of Ukraine has been characterised, as in previous years, by a high volume of rapid, continuous and repetitive messaging, promoting partial truths or total fictions across multiple channels (Matthews et al., 2021<sup>[17]</sup>).

### Figure 1.9. A large and rapidly growing share of the world's population are active on social media

Monthly active user accounts on social media platforms compared to world population, 2005-2021



Note: Monthly active user accounts may not equate to unique individuals.

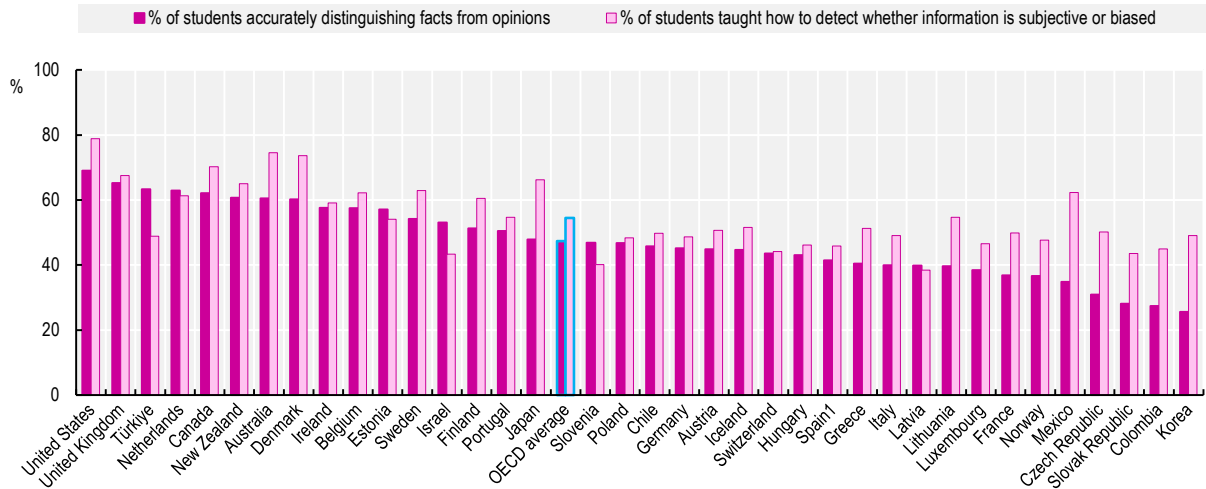
Source: Adapted from OECD (2022<sup>[15]</sup>) *Trends Shaping Education 2022*, OECD Publishing, Paris, <https://doi.org/10.1787/6ae8771a-en>; OECD (2022<sup>[18]</sup>), Population (indicator), <https://doi.org/10.1787/d434f82b-en> (accessed on 28 September 2022).

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Moving into 2023, education systems will need to look more carefully into equipping all students with the foundational literacy and critical thinking skills required to effectively navigate the mass information, misinformation and disinformation with which they are bombarded daily. PISA 2018 data highlight that there is much to do. On average across the OECD, less than half (47%) of 15-year-olds were able to accurately distinguish fact from opinion in the PISA reading assessment and while in some countries over 60% of students could, in others the share was less than one-third (see Figure 1.10). Moreover, on average, only 54% of students taking the assessment reported having been taught how to detect whether information is subjective or biased. This is important as further analyses indicate that students' access to education on how to detect biased information in school is a stronger driver of students' capacity to distinguish fact from opinion than overall reading performance (OECD, 2021<sup>[14]</sup>).

## Figure 1.10. Many students are not able to distinguish facts from opinions, nor are they always taught how to do it

Performance in reading item of distinguishing facts from opinions and access to training in school on how to detect biased information (PISA 2018)



Note: Countries are shown in descending order of the share of students able to accurately distinguish facts from opinions. The share of students able to accurately distinguish facts from opinion is based on student performance in question 3 of the PISA reading test. The share of students taught how to detect whether information is subjective or biased is based on students' self reports. (1) For the comparability of Spain's data see OECD (2019<sup>[19]</sup>), *PISA 2018 Results (Volume I): What Students Know and Can Do*, PISA, <https://doi.org/10.1787/5f07c754-en>.

Source: Adapted from OECD (2021<sup>[14]</sup>), *21st-Century Readers: Developing Literacy Skills in a Digital World*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/a83d84cb-en>.

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## Making the case for transforming pathways for lifelong learners in 2023

In 2023, education systems will be at the heart of efforts to overcome the challenges posed by a complex global context. At the same time, the educational implications of this context—funding pressures, persistent employment and skills challenges for the low-educated, and a skills and agency deficit in the face of societal transformations—need to be considered as policy efforts continue towards education's long-established goals of quality and equity, and the more recently recognised aims of responsiveness and resilience. Efforts to transform pathways for lifelong learners help drive education towards realising all four.

### **Transforming pathways to make greater progress towards quality and equity goals**

There is still a way to go to ensure quality lifelong and life-wide learning for all. The latest OECD report on progress towards the United Nation's Sustainable Development Goals indicates that at the current pace, no OECD country is expected to meet all the targets relating to Goal 4 on quality education by 2030 (OECD, 2022<sup>[20]</sup>). On average across the OECD, the vast majority (83%) of children between the ages of 3 and 5 are now enrolled in early childhood education. Nevertheless, despite the benefits of high-quality early childhood education and care (ECEC) in the first years of life, only one in four (27%) children under three participated in formal early childhood education in 2020 (OECD, 2022<sup>[4]</sup>). Furthermore, many 15-year-olds have not mastered basic skills in core subjects: in 2018, 36% of students across the OECD did not have minimum proficiency in at least one of either reading, mathematics or science (OECD, 2019<sup>[19]</sup>). While

there has been considerable growth in tertiary attainment rates over the last decade, the reduction in the share of those not attaining at least an upper secondary qualification has been smaller, and 14% of 25-34 year-olds across the OECD had still not reached this level of education in 2021 (OECD, 2022<sup>[4]</sup>). Among adults, only 14% reported participating in formal and/or non-formal education and training in the four weeks prior to being surveyed in 2021 (OECD, 2022<sup>[4]</sup>). Finally, although educational participation and attainment are generally higher than in previous decades, young people are not consistently more successful in transitioning to the labour market than in the past, and those not in employment, education or training (NEET) rates remain substantial (Mann, Denis and Percy, 2020<sup>[21]</sup>)

Other challenges relate to equity. Participation in ECEC is particularly low among disadvantaged groups, risking the widening of development gaps between children from different demographic groups even before the start of compulsory education (OECD, 2022<sup>[4]</sup>). Indeed, at age 15, students from the lowest quartile of the PISA index of economic, social and cultural status were five times more likely than those in the top quartile to be low performers in reading (OECD, 2019<sup>[22]</sup>). Among older learners, by 2021, close to one in two (47%) young adults across the OECD held a tertiary qualification. However, low completion rates—only 68% of bachelor's students had graduated three years after the expected duration of their programme—suggest that as tertiary cohorts become more diverse in terms of age, socio-economic and educational backgrounds, tertiary education itself is not diverse enough to meet their varied needs (OECD, 2022<sup>[4]</sup>). Among adults, disparity in acquired skills, including digital skills, mean that opportunities for labour market inclusion and participation in the digital society are also shared unequally. These lead to broader disadvantage effects in areas as far-reaching as personal health and civic participation.

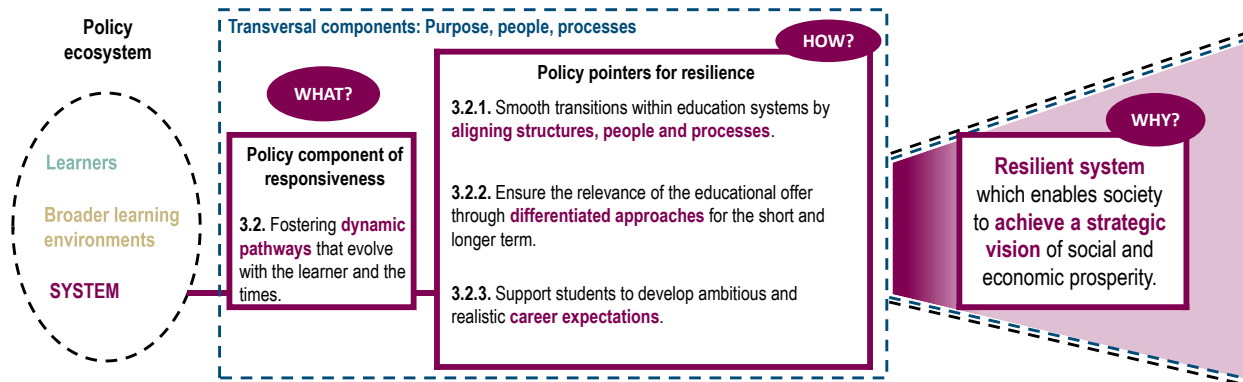
Although traditional progression routes through education have been evolving for some time, moving beyond the linear, stepped pathways of 20th century education systems to something more responsive to the needs of 21st century societies, policy efforts implemented during the pandemic have injected some greater dynamism into traditional education and training pathways. In 2021 and 2022 for example, among the 25 OECD countries with available data, 14 introduced structural changes to instruction time and the school year, 11 introduced accelerated programmes, 9 adjusted curricula, six introduced individualised learning programmes, and three tailored recovery efforts to students' proficiency as opposed to their age (OECD, 2022<sup>[4]</sup>). Moving into 2023, education systems will need to reflect on these tactical efforts to adapt education and training pathways for the COVID-19 recovery and develop a more strategic approach to transforming learning pathways, ensuring that they equip all learners with the foundational skills required for 21st century living, remain attractive, accessible and able to meet learners' needs across a lifetime, and provide individuals and societies with the tools for navigating and driving change. Developing learning pathways that are responsive to new social scenarios and aligning them with a shared social purpose will help societies provide better lifelong learning opportunities for all, enhancing quality and equity outcomes.

### ***Transforming pathways to develop responsiveness and resilience in education policy***

Previous analyses by the Education Policy Outlook have highlighted that education systems emerge from the disruption of the last years knowing more than they did before. As well as seeing that learning pathways can be more dynamic, crisis experiences have revealed that learning is relational and social, not transactional, that people and processes matter more than places and devices, and that education systems are not too heavy to move (OECD, 2020<sup>[23]</sup>). Education systems have also awakened to the need to strengthen responsiveness and resilience in order to bring together the urgent and the important, not in opposition, but as a synergistic endeavour. People are at the heart of such efforts, but these people must be driven by a shared purpose that connects their present to their future, and empowered by processes that enable them to achieve this purpose (OECD, 2021<sup>[24]</sup>). Prior to the crisis, analysis undertaken for the Education Policy Outlook by the Trade Union Advisory Committee to the OECD illustrated that too often, key people, such as teacher representatives, are missed out of these policy processes (OECD, 2019<sup>[25]</sup>).

In this context, the Education Policy Outlook undertook analysis of COVID-19 responses over the first 18 months of the crisis to inform the development of a *Framework of Responsiveness and Resilience in Education Policy* (OECD, 2021<sup>[24]</sup>). This work benefitted from comparative analysis of policies and practices implemented both during and before the pandemic in over 40 education systems. Through this work, fostering dynamic pathways that evolve with the learner and the times emerged as a key policy component of responsive education policy making (see Figure 1.11).

**Figure 1.11. Transforming learning pathways according to the Framework for Responsiveness and Resilience in Education Policy**



Source: Adapted from OECD (2021<sup>[24]</sup>), *Education Policy Outlook 2021: Shaping Responsive and Resilient Education in a Changing World*, OECD Publishing, Paris, <https://doi.org/10.1787/75e40a16-en>.

Building on international evidence and policy analysis, the *Framework* reveals that resilient education systems develop a broad, flexible and coherent educational offer that enables learners to find a pathway suited to their needs and interests, even as these change. At the same time, the educational offer should ensure that learners are equipped with the skills and competences they will need to contribute fully to society and the labour market. To that end, as skills demands evolve, with evolutions accelerated or diverted by crises and recovery periods, the system of education pathways must be nimble enough to anticipate and adapt to such change (OECD, 2021<sup>[24]</sup>).

## About this report

This report continues the Education Policy Outlook's work on resilience and responsiveness since 2020 and provides insights relevant to education actors in 2023 based on priority areas of the *Framework of Responsiveness and Resilience in Education Policy* further. The report presents insights from international comparative analysis of relevant and promising policy efforts adopted by participating countries in recent years, predominantly since 2020, to make their learning pathways more responsive and resilient. By exploring the strengths and challenges of associated policy processes, this report analyses how education policy makers can develop more flexible and responsive pathways for learners against, and in response to, the emerging global context. The report is intended as a resource for all people working in education policy, whether they be policy makers themselves or those working in education and training institutions, and their representative bodies.



In accordance with the *Framework*, the report explores policy actions to transform pathways for lifelong learners across three areas of responsiveness and resilience:

- Ensuring the relevance of the educational offer through differentiated approaches for the short and longer term.
- Smoothing transitions within education systems by aligning structures, people and processes.
- Supporting students to develop ambitious and realistic career expectations.

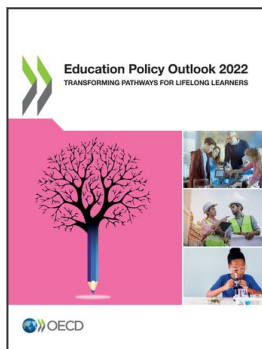
Building on these, the report provides analysis of international evidence and practices that can support education policy makers in 2023, looking into examples of promising developments and lessons learnt so far, and proposes pointers to help current and future efforts work better.

The report aims to support policy makers to transform learning pathways as they move into 2023. However, doing this so they truly inspire and facilitate lifelong learning requires more than expanding opportunities or enhancing guidance. It calls on policy makers to fundamentally rethink how learners interact with their changing world and the capacity of education systems to respond to their needs. The policy insights offered in this report can not only help education systems to address some of the challenges they face today, but can also act as the first step on a longer pathway towards deeper transformation.

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