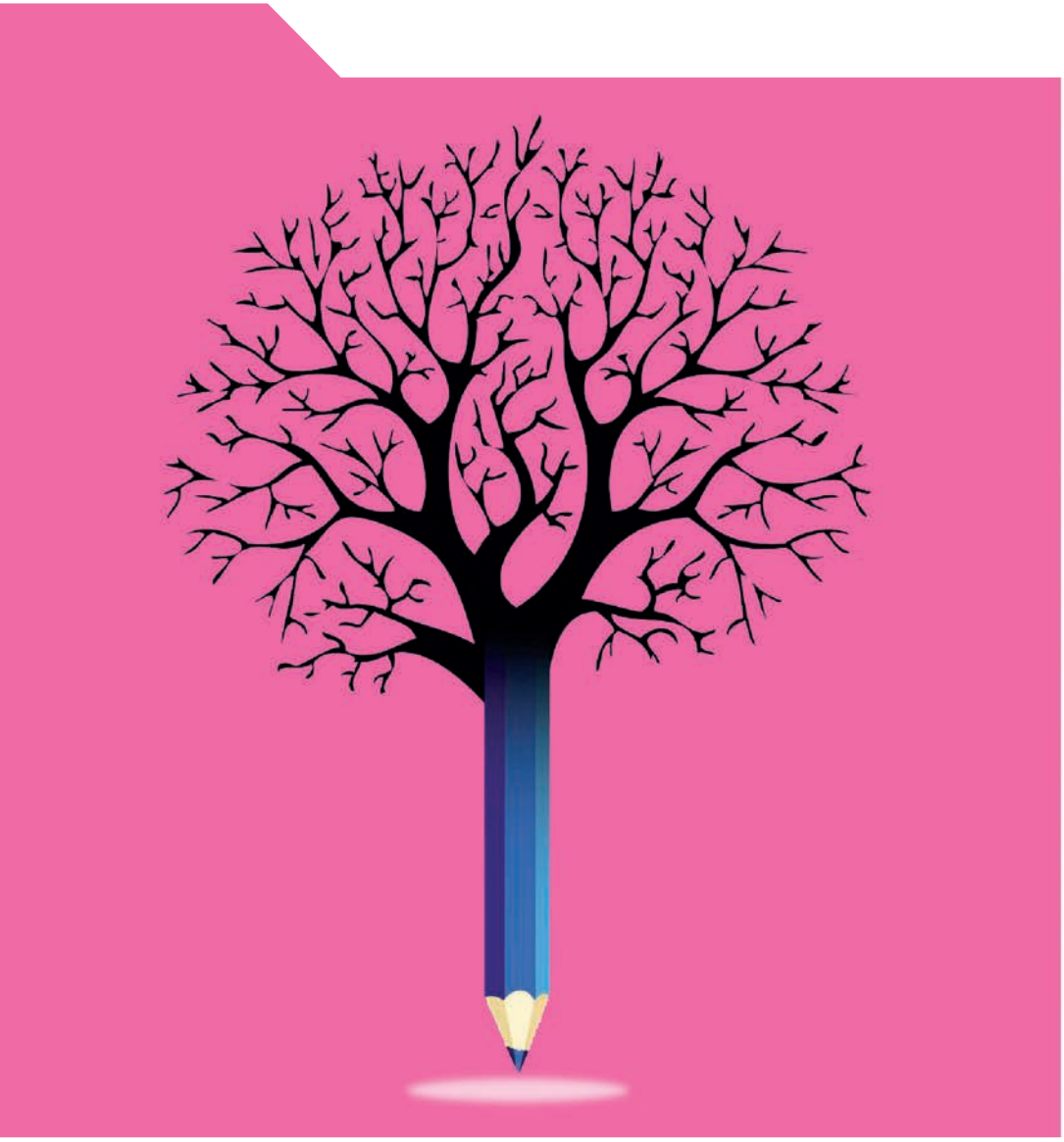
Education Policy Outlook 2022

TRANSFORMING PATHWAYS FOR LIFELONG LEARNERS



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Education Policy Outlook 2022

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BETTER POLICIES FOR BETTER LIVES

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Foreword

In 2022, global disruptions and longer-term transformations revealed or intensified many new pathways for people and societies. Global disruptions made it again all too clear that “business as usual” is not a luxury that education systems can afford. While some countries have managed to reduce the disruptions caused by the COVID-19 pandemic, other disruptions have emerged, such as those caused by Russia’s large-scale aggression against Ukraine. This illegal war has, first and foremost, meant the loss of too many innocent lives and the greatest refugee surge to OECD countries and economies since World War II. It has also translated into people around the world seeing their everyday food and energy prices rocketing, with the most disadvantaged being once again the most fragile.

But all this has been happening at the same time as other deep transformations occupy greater space in our lives. Technology keeps evolving, with mass media giving a voice and eyes—and possibly wings—to people in ways that we would not have imagined 30 years ago. New jobs also emerge, while others disappear, and all this also happens as learners enter education and before they leave for the labour market. Changing jobs or reconverting into a whole different profession may soon become the new normal for everybody, while older people also stay in the labour force for a longer time, either by choice or by need. In the same way, with digitalisation permeating all aspects of life, both the young and the old interact differently with others as members of society and citizens. All these disruptions and transformations bring challenges and opportunities, with new pathways that people may follow as lifelong learners, as countries strive for fairer, greener and more resilient societies.

Are education systems succeeding in empowering people to embark upon, and navigate, these pathways? Education is becoming less about what you learn, and more about what you do with what you know. This means that education systems must provide learners with the opportunities to acquire the knowledge and skills that they require as they progress through these pathways. To achieve this, we need learner-centred systems that evolve around their contexts, needs, interests and passions, and not the other way around. The bigger issue is how to give people greater ownership over what they learn, how they learn, where they learn and when they learn over their lifecycle. Only by doing this will countries achieve resilient learners, but also resilient societies and economies. Much remains to be done for education systems to get to that point.

By looking into recent policy efforts underway since the beginning of the pandemic and up to 2022 in over 40 education systems, the *Education Policy Outlook 2022: Transforming Pathways for Lifelong Learners* investigates ways in which countries have been working to help people to learn, unlearn and relearn dynamically, as they experience work and learning throughout their lives. This report analyses policy efforts to enhance the relevance of the education offer that education systems can provide to respond to learners’ needs, as well as easing transitions throughout learners’ personal pathways throughout life, and nurturing learners’ aspirations. There is still a way to go, but the only way is to help learners become the crafters of their own pathways.

Andreas Schleicher

Director for Education and Skills OECD

Special Advisor on Education Policy to the Secretary-General

Acknowledgements

The *Education Policy Outlook,* the OECD's analytical observatory of education policy, is a collaborative effort between OECD countries and economies, the OECD Secretariat, and invited organisations, as well as all actors working within participating education systems, to help students achieve their potential.

This report was prepared by members of the Education Policy Outlook Team (Diana Toledo Figueroa [Project Leader], Jonathan James [external consultant], Christa Rawkins and Christopher Olivares). It was prepared under the responsibility of Paulo Santiago, Head of the Policy Advice and Implementation Division, and Andreas Schleicher, Director for Education and Skills and Special Advisor on Education Policy to the OECD Secretary-General. Stephen Flynn provided editorial and communications support, with valued input from Cassandra Davis, Rachel Linden, Sophie Limoges, and Alison Burke. Anthony Mann and Hannah Kitchen also provided comments, and Mustafa Saygin also contributed, during the finalisation of this report. Ameline Besin provided administrative support for the co-ordination of the launch event.

The preparation of this report was possible thanks to the work undertaken by the Education Policy Outlook (EPO) in its three strands of work—comparative and thematic analysis, country-based work (mainly through the preparation of country policy profiles) and policy dialogue. These act as building blocks to develop, strengthen, and mobilise international knowledge of education policy. The OECD Secretariat is thankful to its EPO National Coordinators and key actors' representative bodies at the OECD—including the Trade Union Advisory Committee (TUAC) and Business at OECD (BIAC)—for their valuable input during the activities of the Education Policy Outlook, which have informed the preparation of this publication.

This report draws on the Framework for Responsiveness and Resilience in Education Policy, developed by the Education Policy Outlook. In November 2021, the OECD launched this framework through its *Education Policy Outlook: Shaping Responsive and Resilient Education in a Changing World*. This framework benefits from an international knowledge base developed both before and during the pandemic through comparative reports, country-based analysis, and policy dialogue in over 40 education systems. From March 2020, in the context of the global pandemic, the Education Policy Outlook started integrating the topic of resilience into its ongoing research on how education systems can become more dynamic and responsive. It combined desk-based research and policy dialogue to develop the report *Lessons for Education from COVID-19: A Policy Maker's Handbook for More Resilient Systems*, which was published in December 2020. The Handbook provided a valuable springboard towards the development of this framework.

Building on this *Framework*, the current report looks at emerging global megatrends and shorter-term disruptions to highlight policy processes of significance to policy makers in 2023. Focusing on implications for education and training pathways across the life course, the report therefore investigates how education systems can enhance the relevance of their education systems, how they can ease transitions throughout learners' pathways, and how they can nurture learners' aspirations.

This report was launched at the *Education Policy Reform Dialogues 2022: Transforming Pathways for Lifelong Learners*, co-hosted with the Department of Education of Ireland in the city of Dublin on 21-22 November 2022. The Education Policy Reform Dialogues, organised annually since 2018, are the leading OECD forum on education policy. Outcomes of the discussions inform the future work of the OECD on education and skills, including the Education Policy Outlook.

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Abbreviations and acronyms

ATAR	Australian Tertiary Admissions Rank
CET	Continuing Education and Training
CPD	Continuing Professional Development
CPU	*Certification par unité* (Unit-based qualification, French Community of Belgium)
DfE	Department for Education (United Kingdom)
ECEC	Early Childhood Education and Care
EDG	*Izglītības attīstības pamatnostādnēm* (Education Development Guidelines, Latvia)
ESL	Early School Leaving
EU	European Union
FINEEC	*Kansallinen koulutuksen arviointikeskus* (Finnish Education Evaluation Centre, Finland)
HEIs	Higher education institutions
HEPPP	Higher Education Participation and Partnerships Programme (Australia)
ICT	Information and communication technology
ILO	International Labour Organisation
JMD	*Jugend Migrations Dienste* (Youth Migration Services, Germany)
JST	Japan Science and Technology Agency
LAC	Latin American and Caribbean
LMI	Labour market information
LMIC	Labour Market Information Council (Canada)
MC2	Towards a Multi-campus Micro-credentials System project (Ireland)
MEXT	Monbu-kagaku-shō (Ministry of Education, Culture, Sports, Science and Technology, Japan)
NAE	*Statens Skolverk* (National Agency for Education, Sweden)
NEET	Not in Employment, Education, or Training
OSB	*Organize Sanayi Bölgesi* (Organised Industrial Zones, Turkey)
PIC	*Plan d'investissement dans les compétences* (Skills Investment Plan, France)
PEQ	*Parcours d'Enseignement Qualifiant* (Qualifying Education Pathway, French Community of Belgium)
PES	Public Employment Service
PISA	Programme for International Student Assessment
RMC	*Regionaal Meld- en Coördinatiepunt* (Regional Registration and Co-ordination Centre, Netherlands)
SAT	Sistema de Alerta Temprana (Early Warning System, Chile)
SECAM	Service de la scolarisation des enfants étrangers (Department for the Education of Foreign Children, Luxembourg)
SEN	Special Educational Needs
SIMPADE	*Sistema de Información para el Monitoreo, Prevención y Análisis de la Deserción Escolar* (Information System for the Monitoring, Prevention and Analysis of School Leaving, Colombia)
SFYS	School Focused Youth Service (Australia)
SPU	*Štátny pedagogický ústav* (National Institute of Education, Slovak Republic)
SSLP	Supports for Student Learning Program (Canada)
STEM	Science, Technology, Engineering, and Mathematics
TALIS	Teaching and Learning International Survey
TTL	Try, Test, and Learn Fund (Australia)
UAS	Universities of Applied Sciences
UNICEF	United Nations Children's Fund
VET	Vocational Education and Training

Executive summary

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 or intensifying short-term disruptions and accelerating longer-term evolutions. **Short-term disruptions** that have implications for education and training include *global economic uncertainty* and *tight labour markets*. At the same time, **accelerated longer-term evolutions** include an *increasing global investment in clean energy*, *digital transformation,* and *mass information*. These forces challenge education policy makers to transform existing pathways in their countries and economies so that people can become effective lifelong learners capable of navigating change.

Building on the OECD's *Framework of Responsiveness and Resilience in Education Policy,* as well as analysis of international policies and practices from over 40 education systems undertaken mainly since 2020, this report presents three areas of policy effort to advance transformation in 2023.

Enhancing the relevance of learning pathways

In 2023, countries and economies across the OECD and beyond need to help populations recover from recent shocks while ensuring individuals and societies adapt to longer-term trends that change the way people live and work. Recent policy efforts undertaken to enhance the relevance of the education offer look into: **anticipation** (generating and sharing information on the current and expected future demand for labour and skills), **adaptability** (connecting the education and training offer with identified skills needs in response to both urgent and important challenges) and **assessment of impact** (monitoring and evaluating adaptation efforts, and providing feedback on whether education policies or programmes are developing the desired skills).

Evidence from these recent processes offers some **key messages** and **policy pointers for action**:

1. **Education systems need to strengthen their skills anticipation capacity, starting by shorter-term forecasts**
   - **Strengthen** anticipatory capacity across various levels of the system to increase resilience.
   - **Adopt** the perspectives of specific groups as inequalities risk deepening.
2. **Proactive and reactive adaptations of education and training opportunities should ultimately seek to empower learners to navigate broader change**
   - **Develop** measurable strategies to help governments balance competing needs.
   - **Explore** ways to gain flexibility to attract untapped resources to finance adaptation.
3. **Assessing the impact of policy efforts to enhance learning pathways needs to become more systematised for greater future resilience**
   - **Enhance** monitoring capacity for local actors to support the scaling up of innovations.
   - **Build** ecosystem approaches to monitoring and evaluation to provide more insightful evidence.

Easing transitions along learners' personal pathways

The disruptions experienced since 2020 will continue to affect learners' abilities to proceed through their learning pathways in 2023. Traditional progression pathways are also evolving. Policy efforts to support learners' transitions throughout their pathways investigate: **strengthening connections in learners' pathways**

(organising learners' pathways coherently to facilitate transitions from one education level, programme or institution to another), **preventing learners from leaving early** (taking measures to reduce school drop-out and increase attainment of at least upper secondary education), and **supporting refugees to re-enter learning pathways and employment**.

Evidence from these recent processes offers some **key messages** and **policy pointers for action**:

1. **Stronger connections in learners' personal pathways throughout life can make them more resilient**
   - **Embed** broader supports to help address longer-term disruptions to transitions.
   - **Create** the conditions for effective collaboration to increase the longevity of emerging good practices.
2. **Countries need to continue supporting learners at greater risk of leaving early**
   - **Monitor** the impact of COVID-19 on ESL (Early School Leaving) through ongoing investigation to identify hidden or delayed developments.
   - **Improve** the quality and accessibility of data, which is as important as people's ability to use it.
   - **Prioritise** changing pedagogies, going beyond structural or procedural change.
3. **Supporting refugees to re-enter learning or employment pathways is time-sensitive**
   - **Consider** the impact of system-level policies on refugees to support mid-term integration.
   - **Promote** broader collaborations to foster more sustainable support for refugees.

Nurturing learners' aspirations

In the same way, the current context, which anticipates important labour market transitions to continue, adds momentum to the long-recognised need for policy to guide and support career aspirations for learners and workers, young and old. Policy efforts to nurture learners' aspirations investigate: **outreach** (efforts to engage with target populations to inform their aspirations or guide them back to education or training), **perspectives** (the strategic use of realistic and relevant information on education, training, and employment opportunities to modify the perceptions of a target population), and **agency** (developing learners' capacity to identify and capitalise on opportunities provided by the education system and labour market, and to create their own opportunities to bring aspirations to fruition).

Evidence from these recent processes offers some **key messages** and **policy pointers for action**:

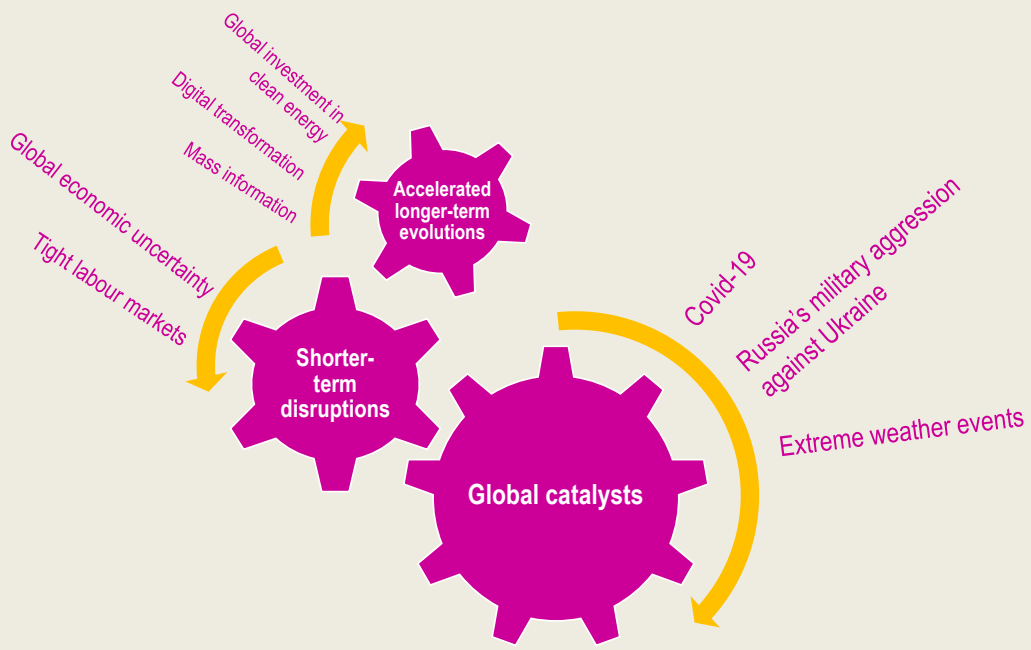
1. **Outreach strategies can help engage target learners in education, training or work opportunities**
   - **Combine** datasets and monitoring eligibility to help identify target groups more effectively.
   - **Design** special incentives to help engage those hardest to reach.
   - **Curate** information for different actors and their needs to enhance impact.
2. **Learners' perspectives need to be enriched and expanded from an earlier age**
   - **Shift** younger learners' perspectives by shifting those of the adults in their lives.
   - **Upskill** teachers/guidance professionals to positively shape young people's aspirations.
   - **Engage** employers in career education by creating the right conditions.
   - **Reiterate** action to shape perspectives across the life cycle as learners' needs and contexts evolve.
3. **Learners need agency and co-agency to identify and capitalise on opportunities**
   - **Consider** that some younger learners may need additional support to develop professional behaviours.
   - **Give** additional time to some individuals who may need it more to develop agency.
   - **Provide** practical tools to motivate and empower individuals with longer unemployment periods to support their resilience.

1 Overview

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.

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[1]).

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

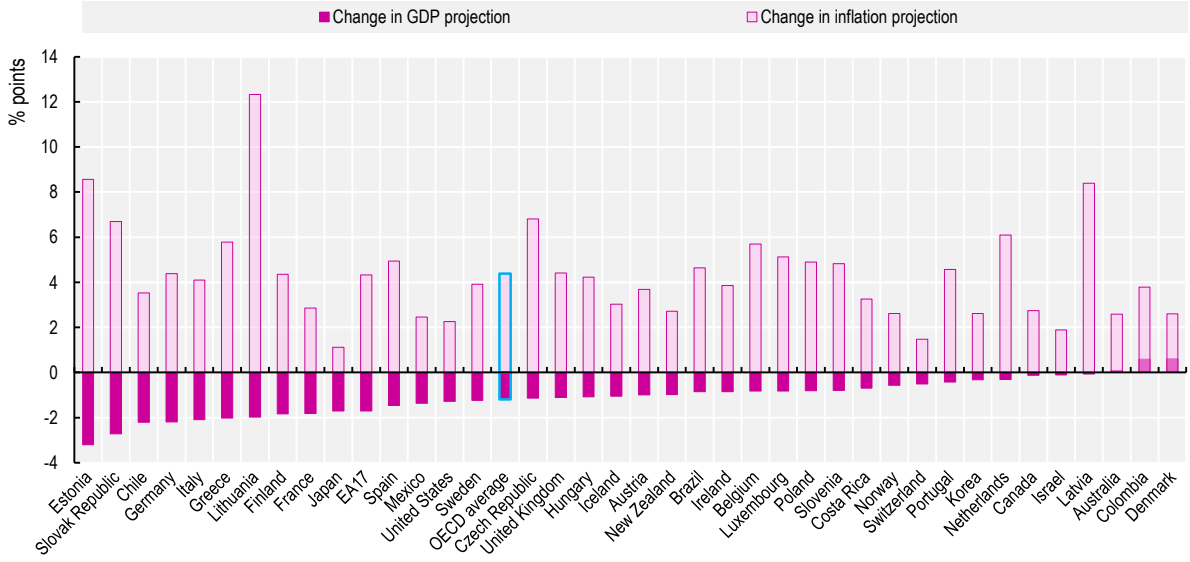
As 2023 approaches, disruption and uncertainty in the global economy are putting considerable pressure on both national and personal finances. While 12 months ago the global economic outlook was optimistic, in the wake of the invasion of Ukraine, economic recovery has lost momentum and nearly all OECD countries had their projected growth in gross domestic product (GDP) downgraded in June 2022 (see Figure 1.1) (OECD, 2022[2]). 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[3]).

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[3]). 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[3]). 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[2]), *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[3]).

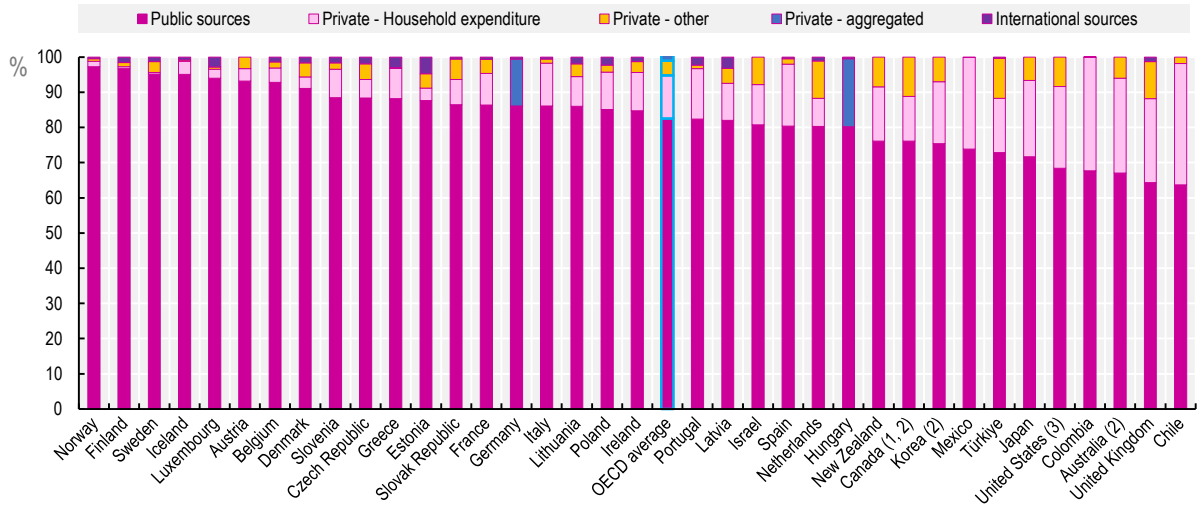
Conversely, countries that are more reliant on private sources of funding, including household expenditure, such as Australia, Chile and the United Kingdom, must ensure individuals continue to have the capacity to invest in their future. This is particularly true for non-compulsory education levels—early 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[2]).

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[4]). 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[4]), *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

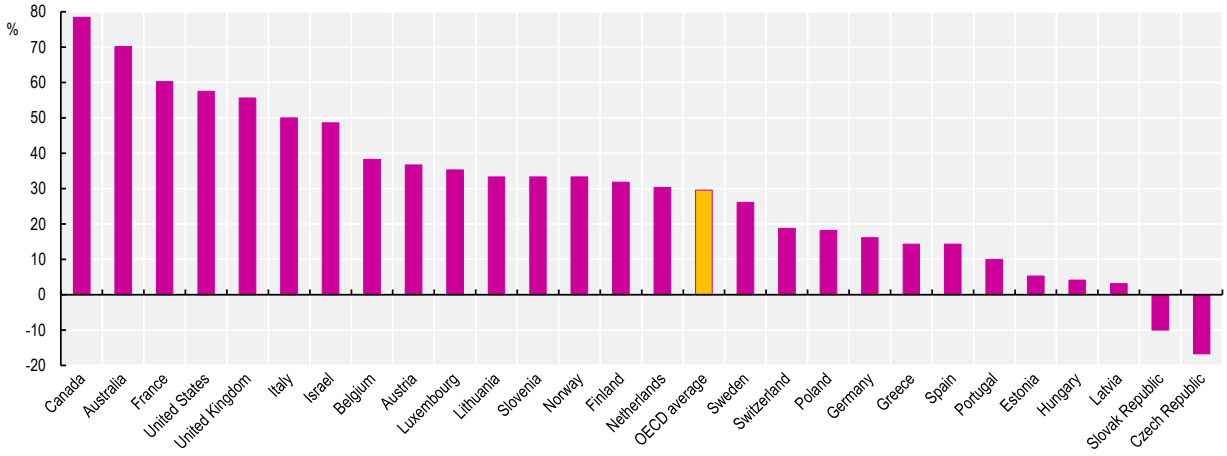
The labour market recovery from the impact of COVID-19 lockdowns has generally been strong and has resisted further potential shocks from the war in Ukraine. As 2022 ends, most OECD economies are experiencing labour shortages and sharp increases in job vacancies (see Figure 1.3) (OECD, 2022[2]). This 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[5]).

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[5]). 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[2]), *OECD Economic Outlook*, Volume 2022, Issue 1, https://doi.org/10.1787/62d0ca31-en.

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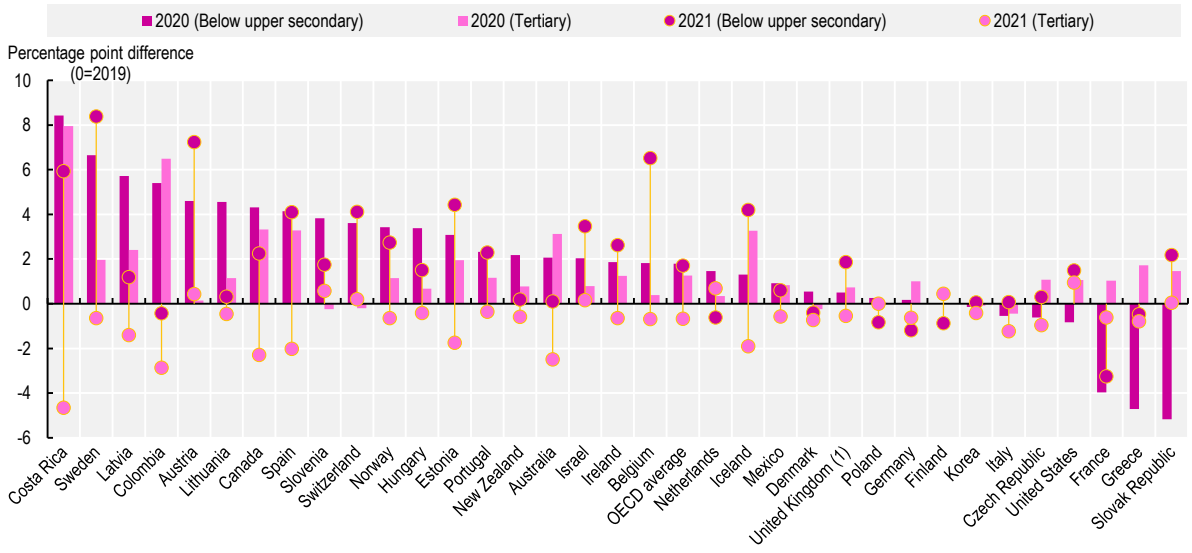
Figure 1.4. Unemployment remains higher for those with low educational attainment

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[4]), *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

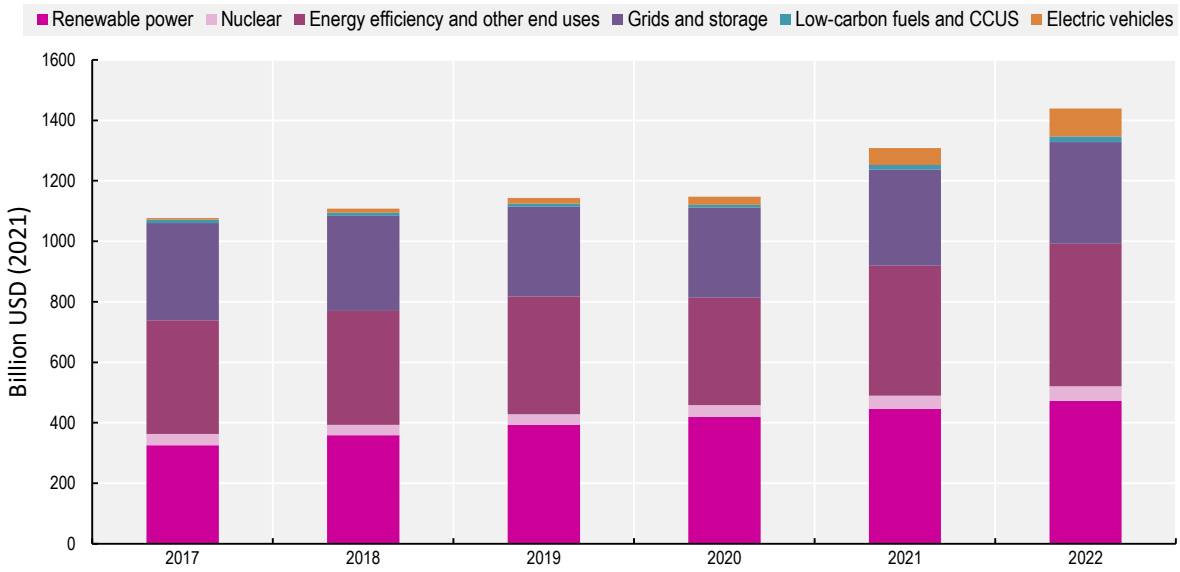
In 2021 and 2022, the OECD has seen abnormally intense heatwaves and wildfires across many countries in Europe, flooding and heatwaves in Australia, a continuation of Chile's mega-drought, a record-breaking cold wave in parts of Canada and the United States, and flooding and mudslides in Japan. Beyond 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[6]). 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[6]) (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[7]).

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[8]).

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_2 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[6]), *World Energy Investment 2022*, https://doi.org/10.1787/7a0d89ff-en.

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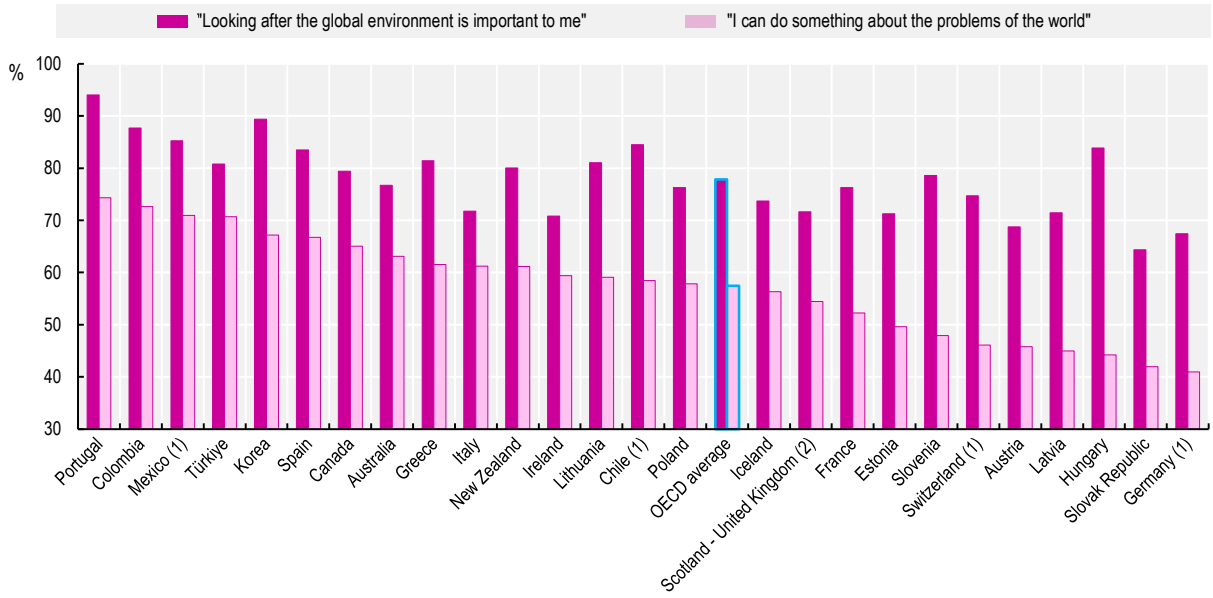
Similar findings emerge for even younger cohorts. In 2018, on average across the OECD, over three-quarters (78%) of 15-year-olds reported that looking after the global environment was important to them (see Figure 1.6). However, many fewer (57%) reported believing that they could do something about the 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[9]). 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[9]), *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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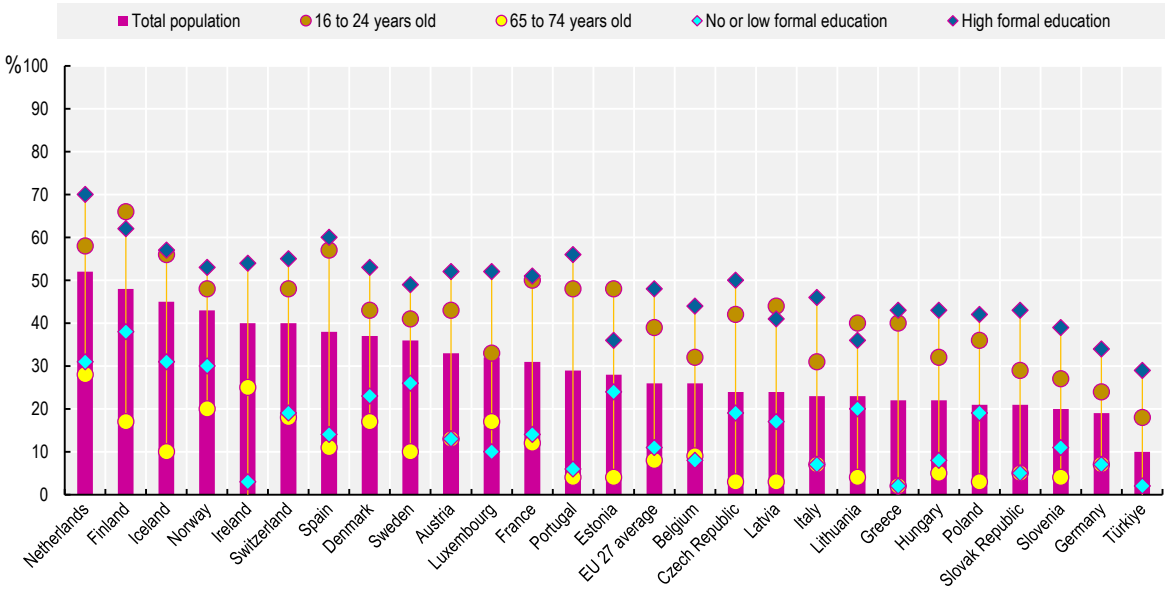
Digital transitions continue to accelerate, increasing a demand that is not being met

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[10]). 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[11]).

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 (accessed on 1 October 2022).

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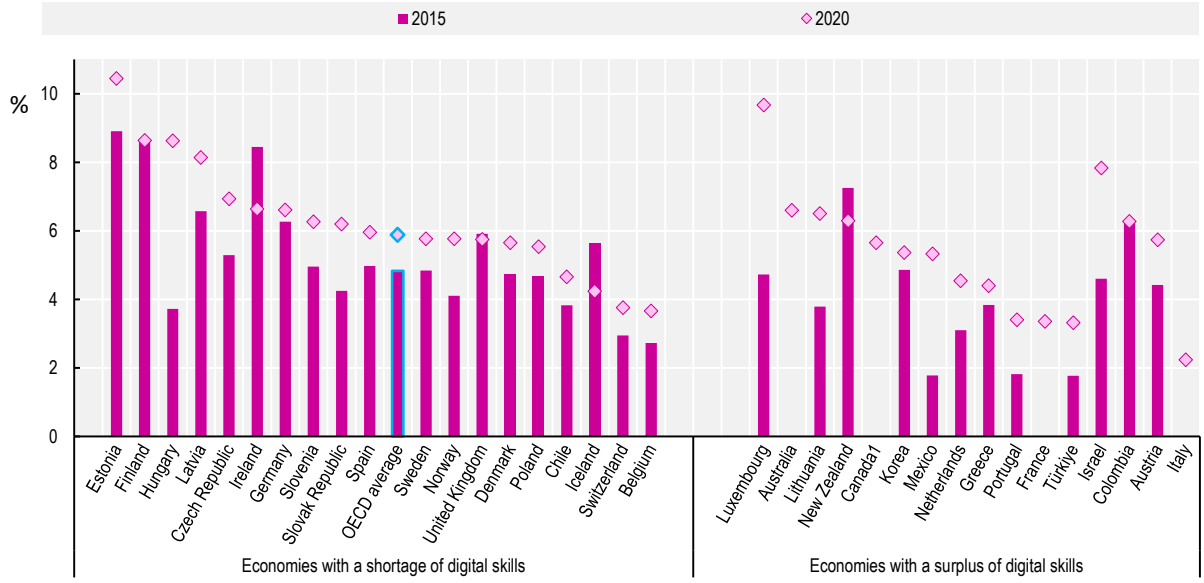
As demand for digital skills—particularly more complex ones—grows, education and training systems can ensure that all learners are exposed to quality opportunities to develop foundational digital skills and that those that have the necessary ambition and aptitude can pursue further studies in digital-related 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[12]).

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[4]), *Education at a Glance 2022: OECD indicators*, OECD Publishing, Paris, https://doi.org/10.1787/3197152b-en; OECD (2022[13]); 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[14]). 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.

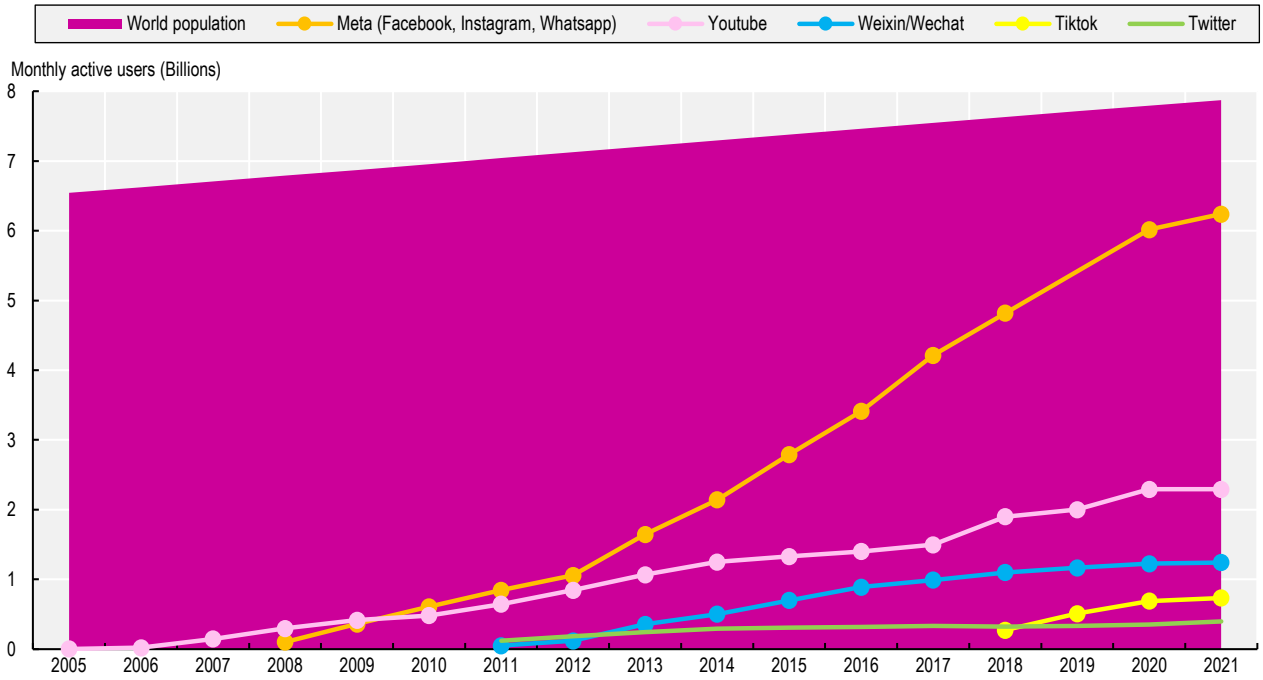
The explosion of social media has played a particularly significant role. Since the launch of YouTube in 2005, the number of monthly active user accounts on the top social media platforms has increased rapidly (see Figure 1.9). Facebook alone has grown from 100 million monthly active user accounts in 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[15]).

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[16]). 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[17]).

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

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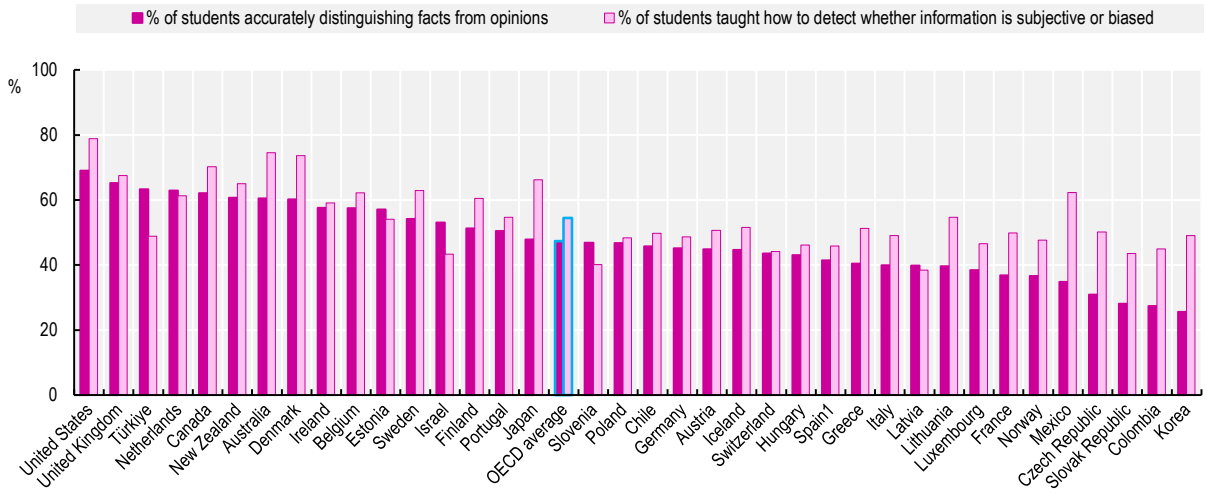
Moving into 2023, education systems will need to look more carefully into equipping all students with the foundational literacy and critical thinking skills required to effectively navigate the mass information, misinformation and disinformation with which they are bombarded daily. PISA 2018 data highlight 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[14]).

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[19]), *PISA 2018 Results (Volume I): What Students Know and Can Do*, PISA, https://doi.org/10.1787/5f07c754-en.

Source: Adapted from OECD (2021[14]), *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[20]). 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[4]). 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[19]). 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[4]). 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[4]). 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[21])

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[4]). 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[22]). 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[4]). 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.

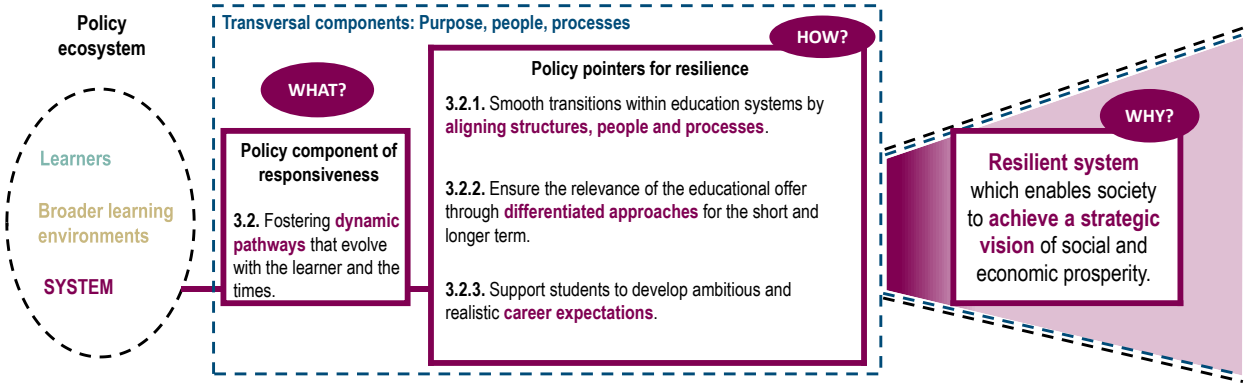
Although traditional progression routes through education have been evolving for some time, moving beyond the linear, stepped pathways of 20th century education systems to something more responsive to the needs of 21st century societies, policy efforts implemented during the pandemic have injected some 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[4]). 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[23]). 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[24]). 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[25]).

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[24]). 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[24]), *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[24]).

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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2 Enhancing the relevance of learning pathways through anticipation, adaptability and assessment of impact

Across the OECD and beyond, in 2023, governments face the double challenge of helping populations recover from recent shocks (e.g. the geopolitical implications of the war in Ukraine, the COVID-19 pandemic) while ensuring individuals and societies adapt to longer-term trends that change the way people live and work. This chapter proposes options for policy makers to develop strategies to enhance the relevance of learning pathways through: *anticipation* (generating and sharing information on the current and expected future demand for labour and skills), *adaptability* (connecting the education and training offer with identified skills needs in response to both urgent and important challenges), and *assessment of impact* (monitoring and evaluating adaptation efforts, and providing feedback on whether education policies or programmes are developing the desired skills). Lessons emerging from recent policy efforts are synthesised into key policy pointers for 2023.

In Brief

Enhancing the relevance of learning pathways through anticipation, adaptability and assessment of impact

Across the OECD and beyond, today's governments face the double challenge of helping populations recover from recent shocks (e.g. the geopolitical implications of the war in Ukraine, the COVID-19 pandemic) while empowering individuals and societies to adapt to evolving trends that keep changing the way we live and work (e.g. automation, digitalisation, climate). Education and training can play an important role in addressing this dual challenge, but only if the learning offer enables learners to learn, unlearn and relearn dynamically as the needs of economies and societies change. Enhancing learning pathways requires strengthening and mobilising knowledge of the education system and labour market to support individual and institutional readiness for change.

Infographic 2.1. Enhancing the relevance of learning pathways

	Key messages	Emerging policy pointers
Enhancing the relevance of learning pathways through anticipation, adaptability and assessment of impact	Education systems need to strengthen their skills **anticipation** capacity, starting by shorter-term forecasts	• **Strengthen** anticipatory capacity at various levels of the system to increase resilience • **Adopt** the perspectives of specific groups as inequalities risk deepening
	Proactive and reactive **adaptations** of education and training opportunities should ultimately seek to empower learners to navigate broader change	• **Develop** measurable strategies to help governments balance competing needs • **Explore** ways to gain flexibility to attract new resources in order to finance adaptation
	Assessing the impact of policy efforts to enhance learning pathways needs to become more systematised for greater future resilience	• **Enhance** monitoring capacity for local actors to support the scaling up of innovations • **Build** ecosystem approaches to monitoring and evaluation to provide more insightful evidence

Key messages emerging from this chapter

1. ***Education systems need to strengthen their skills anticipation capacity, starting by shorter-term forecasts***.

In PISA 2018, global health and international conflicts were two global issues on which a lower share of students in the OECD reported being informed, compared to other issues surveyed (with 65% and 66% respectively on average). Since 2020, these have been on top of international agendas, reminding us that the future will always surprise us.

Several OECD countries have been generating evidence on the current and future impact of the COVID-19 pandemic and other disruptions, as well as how these are accelerating or diverting pre-existing global trends. These exercises bring together a range of tools and actors to generate at least some first insights for the immediate and more distant future across different employment sectors and population groups.

While longer-term anticipation may be more difficult to establish for education systems, analysis from recent policy efforts undertaken mostly since 2020 point to some **emerging lessons** that can help governments strengthen their shorter-term anticipatory capacity for 2023:

- Strengthening anticipatory capacity at various levels of the system can help increase resilience.
- Adopting the perspectives of specific groups is necessary as inequalities risk deepening.

2. ***Proactive and reactive adaptations of education and training opportunities should ultimately seek to empower learners to navigate broader change.***

Informed by anticipatory approaches, several countries have adapted the overarching goals for their education and training system to establish new and revised high-level needs. Alternatively, countries have modified the content and structure of programmes at specific education levels to work towards meeting new needs. Curriculum adaptations also remain an important area of policy work as countries transform their education offer to meet longer-term needs and shorter-term challenges. In addition, several countries have adapted ongoing reforms to improve the labour market relevance and quality of existing vocational education and training (VET) and adult learning provision, with an emphasis on strengthening co-operation with employers and industry. As a response to unemployment and labour market mismatch, micro-credentials have been growing, and will be particularly important in increasing the share of older learners. However, as the future remains a moving target, these adaptations at systemic level will only be as good as the extent to which they ultimately enable learners and institutions to re-engineer their own learning pathways as they face change in the years to come.

With this objective in mind, analysis from recent policy efforts undertaken mostly since 2020 point to some **emerging lessons** that can help governments to strengthen their adaptation capacity for existing and emerging skills needs for 2023:

- Developing measurable strategies can help governments balance competing needs.
- Financing adaptation calls for exploring ways to gain flexibility to attract new resources.

3. ***Assessing the impact of policy efforts to enhance learning pathways needs to become more systematised.***

In PISA 2018, according to school principals' reports, just over 75% of students on average across the OECD were in schools for which achievement data was tracked over time by an administrative authority.

As education systems return to some sense of stability after two years of significant disruptions, evaluative practices also need to re-establish themselves, or take root. This will help policy makers better understand how education and training pathways can be transformed to be more relevant for individuals' and societies' post-pandemic needs. Beyond the evaluation of specific policies, some countries and economies are promoting evaluative ecosystems to understand better how different initiatives interconnect for impact. In the same way, the unseen benefit of contexts of change and disruption is that they can provide fertile soil for innovations. Governments have also been employing some evaluative techniques to help innovative and effective practices scale up to other contexts.

Analysis from recent policy efforts undertaken mostly since 2020 point to some **emerging lessons** that can help governments to strengthen their evaluative capacity for 2023:

- Enhancing monitoring capacity for local actors can support the scaling up of innovations.
- Building holistic approaches to monitoring and evaluation can provide more insightful evidence.

Introduction

Across the OECD and beyond, today's governments face the double challenge of helping populations recover from recent shocks (e.g. the geopolitical implications of the war in Ukraine, the COVID-19 pandemic) while ensuring individuals and societies adapt to longer-term trends that change the way people live and work (e.g. automation, digitalisation, demographic change, mass information and climate) (OECD, 2022[1]; OECD, 2020[2]) (see Chapter 1). Education and training can play an important role in addressing this dual challenge, but only if it empowers the learner to actively evolve in line with the current and future needs of economies and societies.

Education policy makers recognise the importance of this challenge: improving transitions to the labour market and addressing skills mismatch have been prominent reported policy priorities of many education systems since 2008 (OECD, 2018[3]). The COVID-19 pandemic and associated job losses had added urgency to these priorities during the first stages of the pandemic, refocusing attention on the need to provide workers with quality opportunities to upskill and reskill throughout their careers, and to develop skills in high-demand sectors. In 2022, ensuing labour shortages across most OECD countries, paired with persistent unemployment for certain groups, indicate weaknesses in the matching efficiency of education systems and labour markets (OECD, 2022[4]). Furthermore, in 2023, as the world heads towards a global energy and food crisis, our economies—and the skills that support them—will need to transform as well.

At the same time, the disproportionate economic and social consequences of recent disruptions on young people have increased concerns for their long-term material conditions and well-being, as well as their desire and capacity to shape civic processes (OECD, 2022[5]). Education programmes for younger learners must therefore not only equip them with the knowledge and skills they will need to thrive and adapt to changing labour markets, but also those required to participate in democratic and social life.

Enhancing learning pathways in these ways requires strengthening and mobilising knowledge of the education system and labour market. The recent disruptions experienced worldwide have highlighted governments' dependence on data, research and other types of evidence to guide action in the context of a crisis, yet little data exists about the quality of tertiary programmes and their relevance to the labour market, for example (OECD, 2022[6]). Moreover, the extent to which different actors are currently involved in facilitating the use of evidence in further research, policy making and practice varies greatly. While over half or more OECD education systems report involving universities/education faculties, Ministries of Education, or Teacher Education Institutions, other key actors, such as teacher unions, brokerage agencies, think tanks, media and businesses, were much less present (OECD, 2022[7]).

With this in mind, and with a view to strengthening the responsiveness and resilience of education systems in the emerging context of 2023, this chapter highlights three ways in which policy makers can mobilise knowledge, people and innovative processes to enhance the relevance of education pathways. These are:

- **Anticipation:** this relates to the capacity of education systems to generate and share information on current and expected future demand for labour and skills.
- **Adaptation:** this involves connecting the education and training offer with identified skills needs in response to both urgent and important challenges.
- **Assessing impact:** this entails monitoring and evaluating adaptation efforts, and providing feedback on whether education policies or programmes are developing the desired skills.

The rest of this chapter analyses selected emerging policy trends from OECD education systems across these three areas (see Table 2.1 at the end for the list of policies and practices included in this chapter). The chapter also presents some lessons of interest to guide education systems' efforts in 2023, concluding with a summary of key policy pointers.

Education systems need to strengthen their skills anticipation capacity, starting with shorter-term forecasts

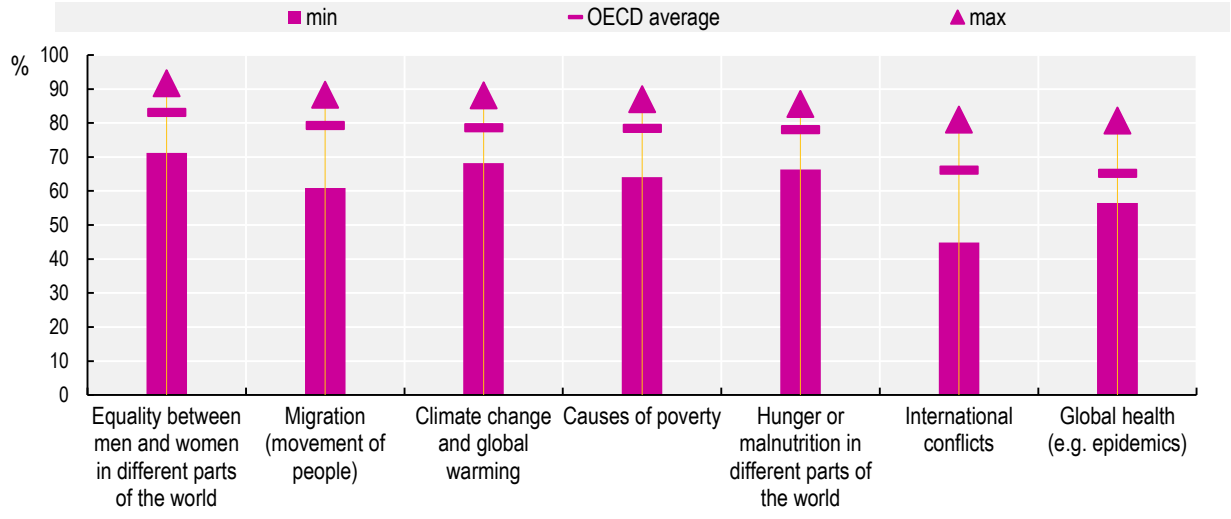
As skills demands evolve, with such changes accelerated or diverted by crisis and recovery periods, responsive and resilient education systems employ multiple tools and approaches to help skills supply keep up (OECD, 2021[8]). Anticipation—the capacity of education systems to generate and share information on current and expected future demand for labour and skills over a certain time span—is a way in which education systems are working to achieve this.

Strengthening anticipation capacity can help education systems to better navigate the high degree of uncertainty surrounding changes to future labour markets and skills demands. Global megatrends such as digitalisation, climate and demographic change have caused labour markets to undergo structural transformations in recent decades. The shocks that countries and economies across the OECD have been experiencing recently—the energy and food crisis, mass migration, the COVID-19 pandemic, natural disasters, labour shortages—have only served to accelerate or complexify these longer-term evolutions. But today's education systems are struggling to keep up. Across the OECD, only 6% of new entrants to tertiary education in 2020 were enrolled in information communications technology (ICT)-related programmes, and 14% in health and welfare, despite these being high-demand sectors. Furthermore, both shares had increased by less than one percentage point in the last five years (OECD, 2022[6]).

At the same time, the impact of these trends and shocks extends beyond labour markets, changing even basic societal structures and norms by which people live. Anticipation therefore also requires identifying and promoting the skills and knowledge people will need for individual and collective well-being (OECD, 2020[9]). In this regard there is progress to make. Student reports prior to the pandemic indicated that, on average across the OECD, around four-fifths of students felt informed about migration and gender equality in different parts of the world (see Figure 2.1). However, only around two-thirds felt the same for international conflicts and global health (with 65% and 66% respectively on average), issues which have been at the heart of the shocks and disruptions felt by OECD societies since. Anticipating the future is never a perfect exercise; nevertheless, this data indicates just how glaring blind spots can be and the importance of efforts to avoid them.

Figure 2.1. Students need to be informed about a broader span of global issues

Global issues about which 15-year-olds reported being informed (PISA 2018)



Source: OECD (2020[10]), *PISA 2018 Results (Volume VI): Are Students Ready to Thrive in an Interconnected World?*, PISA, OECD Publishing, Paris, Table VI.B2.2.1, https://doi.org/10.1787/d5f68679-en.

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Anticipation approaches include mechanisms for generating labour-market information (LMI), strategic foresight to imagine a range of possible future developments and their potential implications, backcasting to identify necessary curricula changes to achieve a shared vision of student outcomes, and assessing the current level of skills in the population to identify areas for future development. Policy makers can also incorporate mechanisms for skills anticipation and assessment into policy design to help policies continue to meet evolving needs (OECD, 2020[11]; OECD, 2020[9]). Given that the effects of trends and shocks vary significantly across local economies and population groups within a country, the most instructive anticipation exercises provide granular data on regional and local markets as well as skill levels among vulnerable, marginalised or minority groups (OECD, 2022[12]). This can pose a challenge to education systems, which countries and economies are trying to meet through a combination of tools and actors.

Selected recent policy efforts

Since 2020, several OECD countries have been generating evidence on the current and future impact of the COVID-19 pandemic and other disruptions, as well as how these are accelerating or diverting pre-existing global trends. These exercises bring together a range of tools and actors to generate insights for the immediate and more distant future across different employment sectors and population groups, based on the information that is available today.

Bringing together a range of tools for short- and long-term insights is helping governments overcome the limitations of data availability or sectoral bias

When it comes to anticipating the future, policy makers can only rely on evidence and analysis of current and past developments. To overcome the limitations of data availability or sectoral bias, policy makers mobilise multiple sources of evidence and adopt interdisciplinary approaches (Störmer et al., 2020[13]). Some education systems have been generating scenarios of future short-term and longer-term change. While the latter is a harder exercise, as the future is a moving target (e.g. education systems need to define what to teach in primary education where students are more than a decade away from labour-markets), some overarching trends emerge for further reflection and monitoring.

Estonia's labour-market forecasting system (OSKA) draws on labour-market data, survey data, and interviews with experts from different sectors. Analysis by OSKA examined the impact of the COVID-19 pandemic on the demand for labour and skills in the short (1-2 years) and long term (10 years), identifying priorities for upskilling and reskilling. This work was conducted in collaboration with the Foresight Centre of the Estonian Parliament and drew on quantitative labour force data from Eurostat and Statistics Estonia, economic scenarios developed in a forecasting exercise, qualitative focus group discussions, and findings from a study into the need for sector-specific ICT skills and skills for sustainability (OSKA, 2020[14]).

Regarding the short-term impact of the pandemic, the analysis highlights a fall in job demand in sectors with high shares of young workers (e.g. service industries, catering, and tourism) and high demand in others (e.g. ICT, agriculture, education, and health and social), as well as an increase in the need for on-the-job training in response to changing work practices. Over the long term, the research identified a need for upskilling in response to digitalisation and automation and anticipated a decline in employment among older workers. The government has used the findings to identify priority sectors for free adult learning, including health, tourism, manufacturing, and ICT (Ministry of Education and Research of Estonia, 2021[15]).

To generate long-term insights, in 2022, the **United Kingdom**'s Department for Education (DfE) commissioned research that developed five potential scenarios for the labour market over the next 15-20 years, reflecting on the possible impact of key trends (e.g. migration, public finances, working practices). An optimistic scenario sees a digital, green and more inclusive society with high demand for skills in management, engineering, communications and computer science. A pessimistic scenario imagines greater inequalities, including digital and educational, with demand for technical skills in construction and

short, tailored courses in higher education. Key policy implications for education and skills systems highlight the importance of promoting science, technology, engineering and mathematics (STEM) subjects and investing in digital skills. Ensuring clearer and more flexible vocational education and training (VET) pathways to support lifelong learning, as well as portable training with corresponding micro-credentials, and incentivising employers and workers to invest in training were also key (Dunkerley et al., 2022[16]).

To conduct this work, the DfE drew on a wide-ranging review of 130 sources of evidence as well as expert interviews and input from various stakeholders (Dunkerley et al., 2022[16]). Complementing this, the Working Futures projections (2017-27) offer long-term macro-economic projections of the demand for skills by occupation and qualification level to inform policy development. They draw on existing data and historical trends, as well as economic indicators from sources such as the Labour Force Survey. They use econometric modelling, alongside qualitative methods, to produce an employment baseline by sector, occupation and local area, and models of how these baselines are likely to evolve (Wilson et al., 2020[17]).

To co-ordinate and improve data and research in this area, the DfE established a dedicated Unit for Future Skills (2022), whose broader remit is to improve the quality of jobs and skills data and to work across government to make this information more accessible to policy makers, stakeholders and the public. Key priorities for 2022 include developing a local skills dashboard with labour-market information available for different geographical areas, developing methodologies for forecasting skills demand, and developing a national skills taxonomy (Government of the United Kingdom, n.d.[18]). The Unit for Future Skills builds on the outputs of the Skills and Productivity Board, an expert committee, which reported on skills matching and links between skills and productivity in 2022 (Government of the United Kingdom, n.d.[19]).

Collaborating with various actors is also helping to enrich forecasts

Besides the use of multiple analytical tools, involving multiple actors also matters. Collaboration and co-ordination between actors in different sectors and across different areas and levels of government ensures a diversity of knowledge that can enrich anticipation (Störmer et al., 2020[13]). At the same time, broader engagement helps systems set out a more inclusive vision for the future of work and skills.

Canada's Labour-Market Information Council (LMIC) has worked with partners such as Statistics Canada, Employment and Social Development Canada, sector councils and actors at the federal, provincial and territorial levels to produce data dashboards, reports and analysis on the impact of the COVID-19 pandemic on specific population groups, job types, and sectors (Labour Market Information Council, n.d.[20]). The LMIC continues to track the recovery of different groups of Canadians, publishing thematic reports on its website (Labour Market Information Council, 2022[21]).

Also in the context of the pandemic, Canada's Future Skills Council identified improving access for all Canadians to relevant, reliable and timely labour market information and tools as a key priority. The Council's structure as a 'network of networks' aims to help local needs from disparate regions to be reflected in national dialogue on the future skills agenda (Global Deal, 2021[22]). Several of its recommendations relate to actions targeting the development of skills among specific population groups, as well as improving the dissemination of insights generated by bodies and helping different audiences make sense of them. These recommendations are based on evidence collected at different levels of government, analysis of foresight models, and national and international research on learning and skills (Goverment of Canada, 2022[23]).

Regarding the short term, evidence collected by the LMIC provides insight into the disproportionate and unprecedented impact of the pandemic on female workers compared to previous recessions (Labour Market Information Council, 2021[24]). Evidence from 2022 shows a strong overall recovery for women's employment, although figures point to a need to ensure that younger women (15-24 year-olds) have opportunities to gain work experience and develop the skills they need for their later career development (Labour Market Information Council, 2022[21]).

In **Estonia** and the **United Kingdom**, the anticipation efforts outlined above also drew on multiple actors. In Estonia, OSKA's research into the impact of the pandemic drew on qualitative focus group discussions with representatives from employers' organisations, professional associations, and relevant government ministries (OSKA, 2020[14]). Similarly, in the United Kingdom, the DfE conducted a scenario workshop involving representatives from key employment sectors, government departments, and research and international organisations (Dunkerley et al., 2022[16]).

Some policy lessons emerge on anticipation of skills' needs for 2023

Recent data and analysis from these and other policy experiences since 2020 to anticipate skills needs and improve the relevance of education and training opportunities offer some lessons to help guide education systems' efforts in 2023.

1. **Strengthening anticipatory capacity at various levels of the system can help increase resilience.**

While identifying national skills needs and supply is crucial in progressing towards a societal vision of the future, understanding nuances at different administrative, sectoral and educational levels can foster greater coherence and equity.

- ***OECD data*** *indicate the importance of developing anticipatory capacity at regional and local levels to anticipate and better address imbalances. For example, among countries with available data, the share of 25-64 year-olds with tertiary degrees frequently varies by a factor of two across regions within the same country while the share of 18-24 year-old NEETs varies by up to 20 percentage points between different regions within several OECD education systems* (OECD, 2022[6])*. Better understanding the possible evolution of skill levels as they differ sub-nationally can help local and regional education systems anticipate need in their specific context.*
- The OECD has recommended that **Latvia** conduct a resilience systems' analysis to identify the parts of the education system that have been most affected by COVID-19 and which are most vulnerable to future shocks. In the same way, the OECD suggested exploring different possible future scenarios affecting skills—including associated risks—to strengthen the system's capacity for strategic planning (OECD, 2020[25]).
- Evidence from **Finland** recommends that more VET and higher education providers should include short- and medium-term foresight in their quality assurance arrangements to better respond to sudden structural changes in the labour market. Complementing this, the evidence also underlines the importance of national-level foresight objectives in creating the conditions for foresight at the institutional level. These national targets include improving the timeliness and availability of foresight data, notably by developing unified channels and reducing fragmentation (Frisk et al., 2022[26]; Finnish Education Evaluation Centre, n.d.[27]).

2. **Adopting the perspectives of specific groups is necessary as inequalities risk deepening.**

Labour-market forecasts point to a need to strengthen efforts to enhance employment and training strategies for groups such as women, young people, older workers, and the lowest-skilled in 2023.

- ***OECD data*** *illustrate this further. As of early 2021, an OECD 25-29 year-old without upper secondary education was four times as likely to be not in employment, education or training (NEET) as one with tertiary education* (OECD, 2022[6])*. In 2020, only one-fifth of new entrants to tertiary ICT programmes were women, despite this being among the highest-demand and highest-earning sectors* (OECD, 2022[6])*. Adopting the perspective of specific groups within wider anticipation efforts may help foresee and understand the inequitable impacts of change and disruption.*

- Evidence from **France** suggests that adult learners with low qualification levels will need more support, as they were disproportionately affected by disruptions to learning in the early stages of the pandemic (Bucher et al., 2021[28]).
- In **Canada**, evidence shows that governments need to ensure that labour markets continue to provide opportunities for younger learners to access quality work experiences to support entry into the labour market (Goverment of Canada, 2022[23]).

Proactive and reactive adaptations of education and training opportunities should ultimately seek to empower learners to navigate broader change

Building on insights from anticipation exercises, adaptation (i.e. connecting the education and training offer with identified skills needs) efforts involve proactively reforming the content, structure, resourcing or target audience of different pathways within the education and training system today, in line with expected change. At the same time, skills anticipation is not without uncertainty that a given expected change will happen or not, particularly for longer time spans. Also, unexpected crises and shocks require adaptations that are reactive, responding to emerging realities and changing situations in real time, to support learners and systems to navigate disruption.

Failing to adapt in these ways can be costly, both to individuals—who may lose time and money dropping out of learning pathways, working under precarious contracts or underutilising their skills—and to society as a whole, for whom the collective returns to education and potential impact on economic growth and productivity are reduced. This is why adaptations efforts need to look beyond immediate changes in contexts and labour markets; they should seek ultimately to empower learners and institutions to navigate these and other changes by re-engineering their own learning pathways. As such, specific skills that learners need for adaptation should also include aspects such as creative and critical thinking, or metacognitive skills, capacity for self-assessment of their learning progress, growth mindset, as well as capacity for agency and co-agency (see Chapter 4).

At the more structural level, previous OECD research suggests that education systems most commonly use information from skills assessment and anticipation exercises to inform the design of pathways in upper secondary, tertiary, or adult education (OECD, 2016[29]). Such adaptation efforts include developing new qualifications and courses in high-demand/low-supply skill areas and updating or removing outdated offers (OECD, 2019[30]). Alongside this, efforts to enhance the quality of priority pathways, both new and long-standing, and to increase accessibility or incentivise enrolment, are also important. This can include increasing work-based learning, strengthening quality assurance, introducing training breaks, extensions and short-duration study options, and establishing more flexible skills assessment or qualification processes (OECD, 2021[8]).

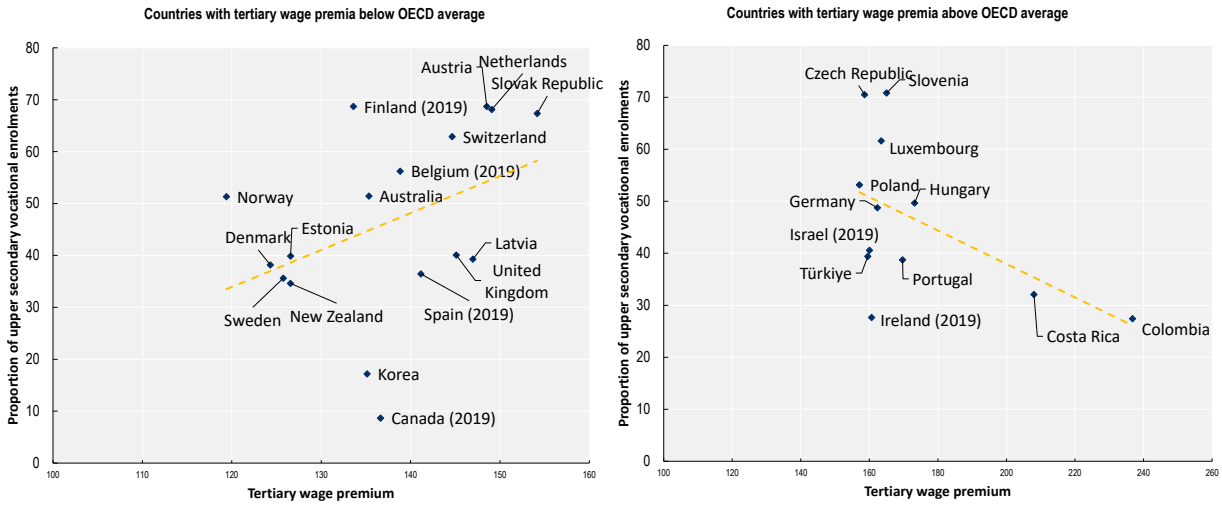
Recent policy trends in the VET sector provide an illustration of adaptation efforts. OECD research has consistently shown high-quality VET to be conducive to effective youth transitions. The COVID-19 pandemic further highlighted VET's role in preparing the workforce that makes up the backbone of our economies, and in aiding recovery from the crisis by equipping students with the skills the labour-market needs and providing adults with relevant upskilling and reskilling opportunities (OECD, 2021[31]). Even prior to the pandemic, however, VET pathways had a growing importance in education systems across the OECD, partly driven by economic challenges following the financial crisis of 2008. Common policy priorities as reported by OECD education systems between 2008-17 included raising the attractiveness of VET, creating or strengthening apprenticeship systems, and encouraging employer engagement.

At the same time, evidence indicates a need for education systems to strengthen the quality of the specific and transversal skills that VET can provide, with learners voting with their feet based on expected longer-term rewards. In countries and economies where people with tertiary education benefit from a

comparatively high wage premia, that is, tertiary wage premia above the OECD average of 154.44, enrolments in vocational upper secondary education tended to decrease as premia increased in 2020. This was not the case for countries and economies with below-average tertiary wage premia during the same year: in this group, vocational upper secondary enrolments appear to increase as tertiary wage premia increase (Figure 2.2). Increasing quality and relevance in education delivery across education pathways—through a better integration of the world of learning and the world of work—can help enhance their attractiveness to both learners and employers and can be considered as effective options for future careers.

Figure 2.2. In some countries, learners can vote with their feet based on expected longer-term rewards

Wage premia in tertiary education and enrolment in upper secondary VET (2020)



Sources: OECD (2021[32]), *Education at a Glance 2021: OECD Indicators*, OECD Publishing, Paris, https://doi.org/10.1787/b35a14e5-en; OECD (2022[6]), *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris, https://doi.org/10.1787/3197152b-en.
1. Data for both series are always from the same year. Data are from the latest year for which data are available for both series. Data from 2019 are indicated in parenthesis next to the country name.
2. Note that the ranges for wage premia always start at 100; however, range max for left graph is 160, while range max for right graph is 260.
3. The OECD average tertiary wage premium was 150.34 in 2019 and increased to 154.44 in 2020. Slovak Republic was above the average in 2019 (153.72) but below the average in 2020 (154.16), so it is grouped with the "below" group in these figures.

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Selected recent policy efforts

Informed by anticipatory approaches, several countries have adapted the overarching goals for their education and training system to establish new and revised high-level needs. Alternatively, and often informed by these overarching frameworks, countries have modified the content and structure of programmes at specific education levels to work towards meeting new needs.

Countries and economies continue to adapt comprehensive lifelong learning strategies and other overarching frameworks

Previous analysis undertaken by the Education Policy Outlook indicated that defining national education goals and strategies was among the three most commonly identified policy priorities across OECD education systems from 2008-19 (OECD, 2019[33]). Either despite the pandemic or in response to it,

countries have continued to adapt comprehensive lifelong learning strategies and other overarching frameworks in recent years setting out a vision for the future of education, economies and societies.

In 2021, the **Flemish Community of Belgium** approved an action plan on lifelong learning that aims to provide a coherent and mobilising framework for all partners involved in lifelong learning, in the context of ongoing transformations highlighted by the COVID-19 pandemic, including technological developments, demographic change, and climate change. Developed through a collaborative process that began in 2020, the resulting action plan sets out a compass with 10 ambitions for policy orientation and seven flagships, each consisting of a set of concrete actions. Actions address four target groups (the learning individual; the learning organisation; the learning offering; and the learning society), five action streams (develop know-how; raising awareness and mobilising; focus on competencies; support and guidance; and stimulate partnerships). The plan also identifies the barriers that may prevent individuals or organisations from engaging in lifelong learning. Based on the overarching ambition of the European Union to achieve participation rate of 60% for formal and non-formal learning for adults by 2030, the Lifelong Learning Partnership will develop a dashboard with various indicators to monitor progress (Government of Flanders, 2021[34]).

Japan's Third Basic Plan for the Promotion of Education (2018-22) articulates different education policies aimed at helping individuals prepare for 2030. It sets out a goal to maximise lifelong possibilities and opportunities for learners and workers of all ages. Based on this overarching aim, the plan identifies targets in five areas with corresponding actions that cover different levels of the education system and indicators to measure progress.

Building on the previous Strategy 2020, the **Czech Republic**'s Strategy 2030+ responds to trends affecting the labour market such as digitalisation and automation, but also aims to develop the competencies required to combat climate change. An expert working group began work on a draft strategy in 2018, with a series of public consultations and round tables involving various education stakeholders from 2020 (Ministry of Education, Youth and Sport of the Czech Republic, 2020[35]). In 2022, the Czech Republic began preparing the Strategy 2030+ implementation plan for the period 2023-27, with a particular focus on implementing a revised framework curriculum for primary and lower secondary education (see below).

Latvia's Education Development Guidelines (EDGs) for 2021-27 set out four inter-related education policy goals: 1) an excellence-oriented cohort of teachers and academic staff; 2) a high-quality education offer based on high-value and high-demand skills; 3) equity and inclusion; 4) effective resource management (Government of Latvia, 2021[36]). The EDGs commit to key actions such as curricula reforms to embed STEM, social and emotional learning, and transversal skills such as digital literacy and civic participation, and to better connect VET curricula with labour-market standards (Government of Latvia, 2021[36]).

The EDGs were developed through a whole-of-government and whole-of-society approach bringing together different ministries and levels of government, and a wide range of labour-market partners and other stakeholders. Phase one involved developing a shared understanding of Latvia's skills, challenges and opportunities based on evidence from different sources (including a foresight workshop organised by the OECD). In phase two, stakeholders identified key actions to address the identified priorities, as well as indicators to monitor progress. Although this process began before the COVID-19 pandemic, it took account of its impact on the demand for labour and skills alongside longer-term trends such as digitalisation, skills imbalances, migration, and Latvia's ageing population.

Adaptations of overarching national frameworks or strategies can also be shaped or encouraged by action at regional and international level. The **European Union**'s (EU) Recovery and Resilience Facility provides member states with EUR 723.8 billion of funding in grants and loans to mitigate the economic impact of the COVID-19 pandemic and implement reforms that address key EU priorities. This includes the target to achieve climate neutrality by 2050 and to move towards a digital transition that creates jobs and spurs growth. Reforms should also address specific challenges identified in country-specific recommendations under the European Semester framework of economic and social policy co-ordination (European

Commission, n.d.[37]). The twin focus on the digital and green transitions is reflected in member states' Recovery and Resilience Plans: in 22 recovery plans available, around 40% of government spending had been allocated to climate measures (compared to an agreed target of 37%) and over 26% was allocated to digital transitions (well above the 20% target) (European Commission, n.d.[37]). Although the plans guide adaptations across all areas of government, countries have outlined many measures addressing education and skills, some examples of which are outlined in the following sections.

Curriculum adaptations for compulsory education remain a way for countries to meet longer-term needs and shorter-term challenges

Curriculum adaptations remain an important area of policy work as countries transform their education offer to meet longer-term needs and shorter-term challenges. In particular, this includes adaptations to cross-curricular and subject-specific goals, as well as the introduction of new subjects (subject renewal), or adding or reducing content within pre-existing subjects (content renewal) (OECD, 2020[9]).

OECD research indicates that curriculum adaptations in recent years align with broad societal goals. In the OECD Policy Questionnaire on Curriculum Redesign (2016-18), 18% of the total number of reported policies, declarations and statements articulating education goals included goals relating to economic outcomes, 17% to social outcomes, 13% to future workforce needs, and 8% to environmental circumstances (OECD, 2020[9]). Many of these goals respond to common economic and demographic challenges (e.g. ageing population and declining birth rates), future workforce needs (e.g. lifelong learning, skills development, entrepreneurship) or global challenges (e.g. environmental awareness, sustainability). More recently, the COVID-19 pandemic appears to have pushed several countries to strengthen digital skills in their curricula.

Recent curriculum reforms in **Korea** focus on enabling learners to adapt to an uncertain future and to respond to trends such as digitalisation, the climate crisis, and population decline (OECD, 2020[9]; Korean Ministry of Education, 2021[38]). To develop the reforms, Korea used forecasting mechanisms and consultation with students and teachers, including an initiative to collect suggestions from students on the future of the education system (OECD, 2020[9]). Subsequent implementation plans have further emphasised the involvement of teachers, students, and parents: over 50% of teachers will participate as researchers in the development of the proposed curriculum (Korean Ministry of Education, 2021[38]). Such mechanisms help to ensure that the curriculum is relevant to the needs of students and practical realities of teachers, and can enhance implementation by giving these actors a sense of ownership.

Following a pilot programme in 2020 and accompanying broader curriculum reforms that emphasise skills development as a complement to knowledge acquisition, **Greece** rolled out 21st Century Skills Labs modules in all kindergartens, primary and lower secondary schools in 2021. The Skills Labs aim to develop the skills students will need for a rapidly changing world, with a particular emphasis on the 4Cs of 21st century learning (critical thinking, communication, collaboration and creativity) and the 4Cs in a digital environment (e.g., digital critical thinking, digital communication, etc.) (Institute of Educational Policy of Greece, n.d.[39]). During the pilot phase, some 2 500 teachers in 217 schools worked collaboratively within teaching teams to design skills programmes, but could also collaborate with colleagues across the country and access resources via an online learning environment (Global Education Network Europe, 2021[40]).

Based on the Strategy 2030+, the **Czech Republic** is introducing reforms to its framework curriculum for primary and lower secondary. These include the piloting, evaluation, and full implementation of a new framework curriculum for information science and digital literacy. The Ministry of Education, Youth and Sport has worked with expert panels to develop proposals for other subject areas, with a focus on updating the curriculum for recent scientific and technological advances and reducing curriculum overload. This material went through an external feedback process and a public consultation. Other measures, such as launching an online platform for curriculum development and developing professional support interventions for lower-performing schools, aim to support teachers and other professionals with implementation

(Ministry of Education, Youth and Sport of the Czech Republic, 2022[41]; Ministry of Education, Youth and Sport of the Czech Republic, 2020[35]). As part of the EU's Recovery and Resilience Facility, the **Slovak Republic** has also committed to reforming its primary and lower secondary curricula (2021) to strengthen the competencies learners will need for life in a low-carbon digital economy and society (e.g. critical thinking, digital skills, problem solving, and teamwork). Building on a pilot implemented in the early stages of the COVID-19 pandemic, the reforms will create new content organised in multi-year cycles as opposed to grade level. There is also an emphasis on moving beyond the transmission of information to a more active pedagogical approach where learners interpret information in real-life contexts. This is supported by a reform of teachers' professional learning to increase the focus on inclusive education and digital skills, and the development of new state textbooks (Ministy of Education, Science, Research and Sport of the Slovak Republic, n.d.[42]; European Commission, n.d.[43]).

Efforts targeting Vocational Education and Training and adult learning are taking place, with an emphasis on strengthening co-operation with employers and industry

Despite, or perhaps because of, the post-2020 disruptions, several countries have adapted ongoing reforms to improve the labour-market relevance and quality of existing VET and adult learning provision, with an emphasis on strengthening co-operation with employers and industry. This is important: as tertiary attainment levels continue to increase across the OECD, where 47% of 25-34 year-olds now have a tertiary qualification, VET must continue to offer a competitive alternative pathway to successful labour-market participation (OECD, 2022[6]).

Apprenticeship reforms in **England (United Kingdom)** (2015-21) aimed to align provision with international best practice, emphasise the role of employers, and ensure a skilled workforce for the future. By 2021, over 3 000 employers had been involved in the design of new apprenticeship standards to enhance the alignment of training with present and future skill and competency needs (Department for Education of England, 2021[44]). England has also introduced a minimum duration of one year for apprenticeships. An internal progress report found that these reforms had increased the quality of apprenticeships (Department for Education of England, 2021[44]). As in many countries, however, the COVID-19 pandemic impacted apprenticeship start and completion rates. The DfE therefore introduced short-term adaptations such as changes to final assessments, a new redundancy support service and financial incentives to encourage businesses to launch new apprenticeship schemes. Analysis of these measures concluded that efforts to strengthen quality within the system prior to 2020 facilitated flexibility during the pandemic (Department for Education of England, 2021[44]).

England (United Kingdom) went through a similar collaborative process to develop the T Levels, a two-year course launched in 2020 that combines practical and knowledge-based learning at school or college and at least 315 hours of work-based learning. Groups of employers have worked with education providers to define the content and skills requirements for each T level, based on the same standards as apprenticeships. While apprenticeships are more suited to those who want to earn a wage while learning and are ready to enter the workforce at 16, T levels prepare students for work, training, or further study (Department for Education of England, 2022[45]) .

In the **Republic of Türkiye**, in 2021, the Ministries of National Education and of Industry and Technology signed a co-operation protocol to strengthen links between VET institutions and Organised Industrial Zones (OSBs). OSBs are regional hubs that bring together representatives from different employment sectors. Each OSB is now linked with at least one VET provider and has a dedicated liaison office, each of which has a formal attachment with a teacher or training manager from each institution to facilitate institutional collaboration for curriculum planning (Ministry of National Education of Türkiye, 2022[46]). Prior to this, Türkiye introduced the School Protectorate Project (2016), which aimed to link all VET institutions to at least one sector organisation, and a revised co-operation model (2019) that requires sector representatives to collaborate on curriculum reform and provide workplace training for students and teachers (OECD,

2020[47]). Finally, a VET mapping study (2019) at provincial level aimed to assess the capacities, employment opportunities and investment plans of different sectors, and compare this with current VET provision (Ozer, 2019[48]).

In 2020, **Greece** began a broad reform of its VET and lifelong learning systems based on three core pillars: integrating strategic planning for VET and lifelong learning; enhancing the alignment of education and training pathways with the real needs of the labour market through collaboration with social partners; and upgrading the structures, procedures, curricular, and certification of initial and continuing. At the national level, a newly established Central Council for Vocational Education and Training conducts analysis of labour-market developments and makes recommendations for updates to VET courses, curricula, and infrastructure. Production-Labour Market Liaison Councils operate at the regional level, identifying gaps in VET and adult learning provision and developing proposals based on local skill needs (Ministry of Education and Religious Affairs of Greece, n.d.[49]; Government of Greece, 2021[50]; Government of Greece, 2020[51]). To support the upgrading of VET, Greece launched a three-year pilot to test and evaluate innovative practices in six upper secondary schools across the country in 2021. These schools have additional freedoms to develop new teaching methods and Greece plans to transform them into centres of vocational excellence in the medium term (ReferNet Greece; CEDEFOP, 2021[52]).

As part of the Recovery and Resilience Facility, **Italy** is implementing measures to better align the curricula of technical and vocational upper secondary education with the demand for skills, with a particular focus on digital innovation and the needs of regional labour markets. Italy also plans to expand its network of tertiary VET institutions and strengthen their partnerships with local companies, universities, and municipalities to develop courses in high-demand sectors (e.g. energy efficiency, sustainable mobility, and ICT) (Ministry of Education, University, and Research of Italy, n.d.[53]).

Similarly, **Spain**'s Recovery and Resilience Plan has introduced reforms to modernise the VET and adult learning systems to make them more dynamic and responsive to current and future needs, and to ensure unemployed and employed adults have flexible opportunities to develop their skills at any stage of their career. This includes working with employers from different sectors to review current VET qualifications and design new pathways in emerging fields. Measures to support upskilling and reskilling among adult workers include the introduction of Mentor Classrooms, which will provide non-formal training courses aligned with the National Catalogue of Professional Qualifications in rural areas, with a particular focus on women (Government of Spain, 2021[54]; European Commission, n.d.[55]).

Germany has taken steps towards a more co-ordinated approach to ensuring adult learning responds to structural changes in the labour market resulting from processes such as digitalisation and automation. In an effort to enhance collaboration and coherence within Germany's complex adult learning landscape, the National Skills Strategy brings together 17 key actors in Germany's continuing education and training (CET) system, including the Federal Ministries of Education and Research, and of Employment and Social Affairs, representatives of federal states, as well as trade unions, employer organisations, and other social and economic partners. This platform for exchange and policy development appears to be appreciated by participating stakeholders (OECD, 2021[56]).

The partners have identified ten objectives (e.g. enhancing transparency of the CET offer to support learners to identify suitable opportunities, expanding CET provision in response to structural changes, and improving strategic foresight and the use of CET data) with corresponding commitments. In 2021, analysis of the platform's work in view of the impact of the COVID-19 pandemic highlighted the importance of improving digital pedagogy and infrastructure. By 2021, ongoing actions included the development of an online catalogue of CET learning opportunities, the introduction of new online courses and the funding of several innovation projects run by regional clusters to enhance the attractiveness of CET (National Skills Strategy Implementation Committee, 2021[57]).

Micro-credentials are being propelled in many countries and economies

As a response to unemployment and labour market mismatch, micro-credentials—short, targeted and flexible qualifications programmes—can meet the needs of learners for whom traditional learning pathways are poorly suited, of employers who only require a narrow set of skills to fill vacancies, or to upskill employees as industries' skills requirements evolve. Pathway innovations of this type will be particularly important in increasing the share of older learners. In 2021, only 14% of adults had participated in either formal or non-formal education and training in the four weeks prior to being surveyed, and across all OECD countries participation decreased with age (OECD, 2022[6]). Ensuring that the pathway offer attracts learners of all ages will be crucial in helping societies transition to sustainable, digital futures.

The OECD's Labour Market Relevance and Outcomes of Higher Education Project has previously identified a need to support higher education institutions (HEIs) to build organisational capacity for supporting upskilling and reskilling learning opportunities. The COVID-19 pandemic added greater urgency to this need and propelled the development of micro-credentials in many countries. In **Japan**, for example, universities received funding in 2021 to develop courses in areas for which the pandemic led to higher labour market demand. Through this funding, about 40 HEIs developed over 60 courses in areas such as healthcare and ICT in collaboration with local employers and businesses. These programmes target people who are unemployed or on temporary contracts and aim to provide flexibility to facilitate access (OECD, 2021[58]).

In **Slovenia**, some HEIs have collaborated with employers through appointing company representatives to governing boards and programme development committees to better understand their upskilling and reskilling needs, and whether these can be met through existing provision. Ongoing challenges exist in ensuring that prospective adult learners can easily access information on available study programmes. One suggested approach is to develop a joint online platform bringing together the upskilling and reskilling opportunities offered by HEIs across the country.

Indeed, improving learners' access to information about micro-credential course offers is important. The OECD has previously observed that learner decisions could be better supported by a trusted source of public information that supports comparisons of micro-credential offers (OECD, 2021[58]). Micro-credentials providers and programmes in several countries are aiming to address this issue with the help of online portals. In **Australia**, the Higher Education Relief Package provided over AUD 4 million for the development of the Micro-credentials Marketplace, an online information portal to be completed in 2023 to allow learners to compare available courses and credit point value. The portal will also provide information on the stackability of micro-credentials courses for those intending to pursue a larger qualification or skillset. In **Ireland**, the Towards a Multi-campus Micro-credentials System project (MC2), led by the Irish University Association and financed by Human Capital Initiative grant funding, also envisages the creation of an online portal. This will provide information and gateway access to a curated menu of all micro-credentials across the seven universities participating in the MC2 project.

Some policy lessons emerge on adaptation for 2023

Recent data and analysis from these and other policy experiences since 2020 of adapting education and training opportunities to improve relevance offer some lessons to help guide education systems' efforts in 2023.

1. **Developing measurable strategies can help governments balance competing needs.**

Adaptation efforts generally involve bringing together diverse groups of people, often with contrasting or unrelated needs, and require policy makers to balance urgent and important priorities for individuals and societies. Breaking down high-level, strategic objectives into multiple, targeted and measurable actions can help governments respond to these different needs flexibly and focus public attention on areas where prioritisation is needed.

- *Recent **OECD data** indicate that measurable efforts introduced as part of COVID-19 adaptations are helping many countries understand how to enhance their recovery strategies. At the primary and lower secondary level, 15 out of 19 countries with available data reported that they have assessed the national recovery programmes implemented in 2021/22 in a standardised way, or that they plan such assessments* (OECD, 2022[6]).
- The experience of **Germany**'s National Skills Strategy is illustrative of the challenges that many education systems face in agreeing concrete, ambitious objectives among varied stakeholder groups. To develop the strategy further, Germany has been advised to develop overarching objectives for the whole strategy, clear objectives for each identified area of action, and a theory of change about how individual actions contribute to these objectives.
- In the emerging policy area of micro-credentials, governments are looking to strike a balance between the flexibility that micro-credentials offer in addressing specific needs and the more systemic priority of ensuring their quality and transferability beyond immediate demand, so that individual qualifications gained can lead to better employment opportunities and broader social outcomes. In the **European Union**, the European Consortium of Innovative Universities (ECIU) published a white paper on micro-credentials in 2021, setting out their future strategy on micro-credential development. This breaks down the strategy into efforts already made, and key actions to be taken across five areas: definitions and standards; quality assurance; credits and recognition; storage, portability and platforms; and successful uptake (Brown et al., 2021[59]).

2. **Financing adaptation calls for exploring ways to gain flexibility to attract new resources.**

As education systems adapt learning pathways to new contexts, education decision makers face challenges securing sufficient and adequate human and financial resources.

- *Recent **OECD data** reveal that in 2019/20 only 16 out of the 27 education systems with available data extended eligibility for tuition fee supports (e.g. public grants or scholarships) in tertiary education to part-time students, 19 extended it to those enrolled in online programmes, and 22 to those in blended learning* (OECD, 2022[6]). *In many countries, then, public financial support will need to become more flexible itself in order to ensure that the expansion of more flexible tertiary pathways is accessible to more than only relatively affluent learners, or those employed in firms with generous support for reskilling.*
- In **Finland**, VET and higher education providers have encountered challenges recruiting trainers in specialist, high-demand fields. This is particularly the case where they must compete with the higher salaries offered by the private sector. Besides revising the conditions that influence the attractiveness of the position, one suggested solution has been to recruit and train specialist trainers from abroad (Frisk et al., 2022[26]).
- In **Estonia,** the pandemic has led to an increase in the demand for labour in the ICT sector and industry experts have reported that workers from other sectors will need to take part in technical training to gain employment in the field. This training is both expensive and time-consuming. Possible identified solutions include strengthening co-operation with the unemployment insurance fund and providing on-the-job training for workers seeking to change fields (OSKA, 2020[14]). Furthermore, since larger institutions are often better placed to recruit staff and deploy resources flexibly, some countries could benefit from networking smaller institutions so they can share resources (Frisk et al., 2022[26]; Gouëdard, 2021[60]).
- In **Finland**, analysis of the capacity of VET providers to respond to new and fast-changing needs during the COVID-19 pandemic revealed that targeted project funding was conducive to their reported ability to act in fast-changing situations in the labour market. At the same time, there was also evidence that repurposing pre-existing financial resources within the block grant funding may have given some HEIs more flexibility to develop new provision (Frisk et al., 2022[26]).

Assessing the impact of policy efforts to enhance learning pathways needs to become more systematised for greater future resilience

Once adaptations to enhance the relevance of learning pathways have been made, efforts to assess the impact of these policy measures, and to provide feedback on the alignment of education policies or programmes and skill demands are important. Previous policy analysis undertaken by the Education Policy Outlook highlighted that this type of evaluative thinking is an important transversal component of responsive and resilient education ecosystems (OECD, 2021[8]).

Monitoring, evaluation, and other evidence-generation strategies have multiple uses for policy makers, particularly in contexts of disruption and change. As societies recover from the shock of the COVID-19 pandemic and navigate its economic aftershocks, as well as those of the war in Ukraine that include the additional pressures on energy and food prices, questions of efficiency and efficacy will be at the forefront of policy makers' minds. Many countries, for example, have made considerable investments in digital infrastructure or initiatives to support those who have been affected by the economic fallout of the pandemic and will be seeking to assess the impact of these investments (OECD, 2021[8]). In addition, systems will need to consider how well policies and pathways, including those mobilised in response to economic instability, are meeting the needs of learners, as well as the broader needs of labour markets and societies. Finally, the high level of policy activity and innovation demanded by the global pandemic has the potential to generate valuable lessons to support the continuous improvement and scaling up of new policies and practices (OECD, 2021[8]).

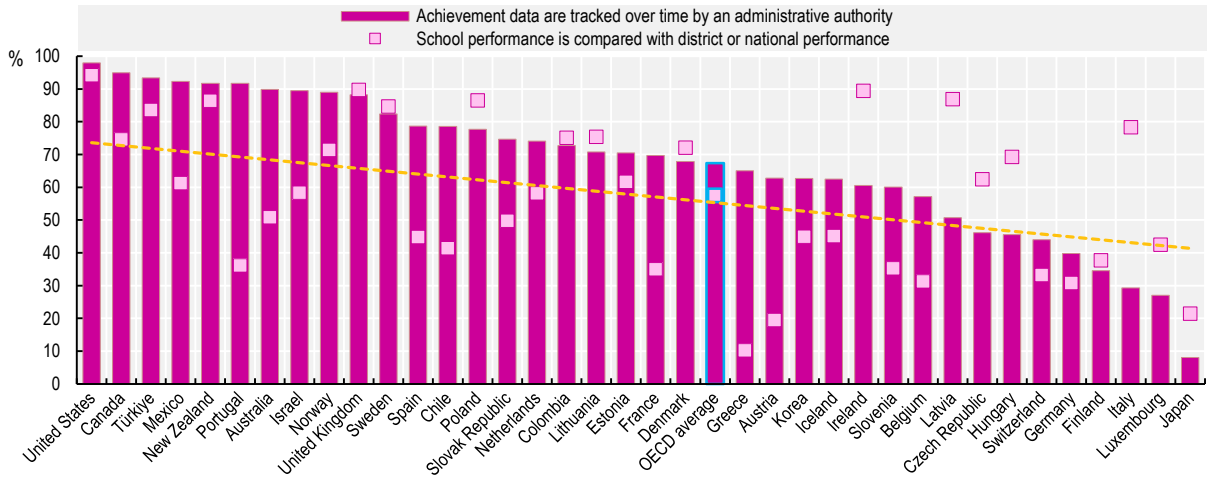
However, despite growing awareness of the importance of monitoring and evaluation in recent years, OECD evidence points to a need for more regular, systematic, and robust evaluation efforts in education policy. Previous analysis from the Education Policy Outlook suggests that while many education evaluations highlight changes in outcomes that occurred over the period of policy implementation, most were not designed to attribute the changes to the policy itself, or to control for contextual factors (Golden, 2020[61]; OECD, 2018[3]). Some education systems have looked to experimental or quasi-experimental methodologies, such as randomised controlled trials or impact evaluations, as a way of exploring a causal relationship between an intervention and a given outcome. However, there can be important ethical and logistical obstacles to developing robust analyses of this kind in education policy.

Selecting relevant indicators covering inputs (i.e. the financial, human and physical resources invested in a policy), outcomes (i.e. the desired results of a policy, both direct and indirect) and process (i.e. the performance of implementation processes and the participation of different actors) is also important (OECD, 2022[62]; Gouëdard, 2021[60]). Responsive education ecosystems also recognise that people are at the heart of policy making and play an important role in assessing the impact of reforms (OECD, 2021[8]). Teachers, learners, parents, and other education stakeholders provide a unique perspective on policy implementation. Strengthening their capacity to collect, provide and interpret evidence helps ensure monitoring and evaluation efforts support continuous improvement (OECD, 2018[3]; Gouëdard, 2021[60]).

Education systems tend to use student achievement data as evidence to guide the continuous improvement of education policy and practice, although with important variations across countries. On average across the OECD, just over two-thirds of students are in schools for which achievement data is tracked over time by an administrative authority (see Figure 2.3). Under three-fifths are in schools for which achievement data is used to compare the school's performance to district- or national-level performance. The mild association between the two indicators illustrates that systems where the tracking of data is less common are also systems in which using assessment data to analyse institutional and system performance is less common.

Figure 2.3. School monitoring by administrative authorities can vary largely across countries

Percentage of students in schools where school principals reported the following accountability practices (PISA 2018)



Source: OECD (2020[63]), *PISA 2018 Results (Volume V): Effective Policies, Successful Schools*, PISA, OECD Publishing, Paris, https://doi.org/10.1787/ca768d40-en.

StatLink https://stat.link/29szjf

Selected recent policy efforts

As education systems strive to return to some sense of stability after two years of significant disruptions, evaluative practices also need to re-establish themselves, or take root. This will help policy makers better understand how education and training pathways can be transformed to be more relevant for individuals' and societies' needs. This section considers evaluative approaches adopted by governments to better assess the impact of policies in VET, higher education and adult learning.

Some governments promote evaluative ecosystems including for VET and higher education

Beyond the evaluation of specific policies, some countries and economies are promoting evaluative ecosystems to understand better how different initiatives interconnect for impact. This approach can help education systems provide better opportunities to learners to succeed in their education opportunities or transitions into the labour market.

Finland's Education Evaluation Centre (FINEEC) conducts evaluations of the whole education system, from early childhood education and care (ECEC) to higher education, with some evaluations focusing on learning outcomes and others focusing on themes relevant to national policy goals. Between 2020 and 2022, FINEEC examined the ability of VET providers and HEIs to respond to challenges for continuing education and training caused by sudden structural changes in the labour market. This involved consultation with various VET authorities and stakeholders, along with a self-evaluation survey completed by all relevant institutions. This survey was completed by a small group of institutional representatives (e.g. leaders, teaching and guidance staff, key private sector partners, adult learners). The evaluation team also conducted two case studies based on focus group interviews, exploring both positive and negative structural changes (Frisk et al., 2022[26]).

The evaluation found that the ability of providers to respond to changes was generally good, although there was variation according to education level and regional administrative capacity. National and regional models to facilitate co-operation between different institutions, government agencies and partners in the

employment sector played an important role in helping providers to adapt, but institutions also developed their own models (Frisk et al., 2022[26]). Although COVID-19 was not the explicit focus of the study, the research provides insight into how some institutions adapted their offer in response to labour-market changes associated with the pandemic. For example, some HEIs reported that they had collaborated with employers in the healthcare sector's in-service training in the early stages of the pandemic while others had offered free open studies courses to the unemployed (Frisk et al., 2022[26]).

Evaluative work in **France** (2021) sheds light on the impact of COVID-19 on professional training activities, drawing on evaluations of activities organised as part of the Skills Investment Plan (PIC), established before the pandemic. The overarching objectives of the PIC are to train 1 million young people and 1 million unemployed people with low qualifications levels, but also to transform professional training through enhancing skills analysis, pedagogical practices, and the training offer (Bucher et al., 2021[28]). The government appointed a research committee to evaluate the PIC on an ongoing basis.

As part of its work, the committee develops and commissions national and regional evaluations, and uses the evidence to highlight effective practices and to assess how the PIC is transforming the professional learning landscape (Bucher et al., 2021[28]). For example, the committee conducts a trimestral survey of unemployed participants in adult learning between six and nine months after they have completed or left their programme. The survey gathers information on participants' satisfaction with their programme, the support they received, and the skills acquired, but also aims to identify common barriers to participation in adult learning and the reasons why some learners fail to complete their studies. Since the outbreak of COVID-19, the survey also includes a set of questions aimed at understanding how the pandemic has affected the implementation of training (Ministry of Labour, Full Employment and Integration of France, 2022[64]).

Some governments test innovative approaches to generate evidence for adult learning

The unseen benefit of contexts of change and disruption is that they can provide fertile soil for innovations. Governments have also been employing some evaluative techniques to help innovative and effective practices scale up to other contexts. Some recent examples come from the adult learning sector.

In 2019, **Canada**'s Future Skills Centre was created to be an independent innovation and applied research centre that identifies emerging in-demand skills, tests new approaches to skills assessment and development, and disseminates evidence widely to inform future programming. Projects are often identified through an open call process, and 50% of funding is reserved for projects that target under-represented groups. Based on evidence from the first wave of projects (2020), Blueprint, one of the founding partners of the centre, has developed a multi-dimensional framework that sets out the kinds of evidence required at different stages of a project, from piloting to evaluation and scaling up. Alongside evaluation methods such as cost-benefit analysis and process, implementation, and outcome evaluation, the framework includes models to support continuous learning and improvement in design and delivery, such as rapid cycle evaluation (Blueprint, 2022[65]).

As part of these efforts and through the Scaling Up Skills Development initiative, in 2021 the Future Skills Centre supported the expansion of 10 projects that showed early signs of success and had the potential for application in a wider context (Future Skills Centre, n.d.[66]). For example, one programme, first implemented in Toronto, Calgary, Halifax, and Vancouver, gave low-income young adults from diverse backgrounds access to professional and technical skills training and work placements to help them transition to employment in the ICT sector. Building on its early success, the programme is being expanded into Indigenous, francophone, and northern communities, as well as larger metropolitan areas. A randomised control trial will examine the effect of the training on participants' employment outcomes.

The evidence from this round of projects also pointed to a need for technical assistance and capacity building for project partners. As such, one-to-one coaching and training in innovation and evidence generation are being provided and Blueprint is commissioning independent impact evaluations (Blueprint,

2022[65]). Blueprint has also launched an initiative that supports community service organisations in using data and evidence to improve their service delivery. Moving forward, key priorities include improving the dissemination of insights from the innovation projects among policy makers and practitioners and testing innovative ideas for career guidance (Blueprint, 2022[65]).

Australia's Try, Test and Learn Fund (TTL, 2016-21) provided funding to stakeholder groups to trial new and innovative approaches to getting at-risk unemployed adults back into work or training. Through this, the government aimed to generate evidence on what works and for whom. Over 50 projects were implemented through the funding programme. Initial analyses indicate that the fund achieved its main purpose of generating insights and empirical evidence on what works to reduce long-term welfare dependence, even if individual projects varied with regards to their impact. A key identified strength of the TTL model is that it involved a broad range of stakeholders in the co-design and co-development of proposals. The number and diversity of the projects this attracted contributed to building a substantial evidence base for future policy design. Some 15 projects were identified as having the potential to reduce welfare dependency among at-risk groups. Common features included tailoring interventions to the specific target group and providing targeted vocational training, alongside pathways to employment and ongoing support during and after participants' transitions to work. Many also offered paid work experience or traineeships. Recognising that projects serving less work-ready groups may take longer to show impact, the Department of Social Services continues to monitor longer-term outcomes through administrative data (Institute for Social Science Research/The Melbourne Institute, 2021[67]).

Some policy lessons emerge on assessing impact for 2023

Recent data and analysis from these and other policy experiences since 2020 on assessing the impact of policies to improve the relevance of education and training opportunities offers some lessons to help guide education systems' efforts in 2023.

1. **Enhancing monitoring capacity for local actors can support the scaling up of innovations.**

The quality of evidence collected about the strengths and challenges of potentially scalable initiatives depends on the capacity of local teams to design and implement robust monitoring and evaluation strategies. Investing in the capacity of local teams to design and implement these can help enhance knowledge about how these initiatives can be better scaled up.

- *Recent **OECD data** indicate a research deficit among many actors at local level. School leaders, teachers and community members were least likely to be reported by participating education systems as being "active" or "very active" in research production, with just 9%, 6% and 3% of countries reporting them as such, respectively. In contrast, the most active contributors were academic researchers and government researchers who were reported as being "active" or "very active" by 88% and 70% of participating systems, respectively* (OECD, 2022[7]).
- Evidence from **Australia** underlines the importance of ensuring that procedures for data collection and evaluation are incorporated into the design of local initiatives. Since some local teams in the Try, Test, and Learn Fund projects lacked expertise in evaluation, it has been recommended that future initiatives of this kind require the inclusion of team members with previous experience in evaluation or engagement of external experts.
- **Canada**'s Future Skills Centre identified similar challenges during the first round of funded innovation projects. One of the aims of its evidence framework is to support local projects to generate evidence at different stages of implementation and scaling-up efforts. The Centre also supports capacity building in evidence generation through workshops and one-to-one coaching (Blueprint, 2022[65]).

2. **Building holistic approaches to monitoring and evaluation offers more insightful evidence.**

Recent evidence also underlines the need for different types of indicators and evaluative evidence that are relevant to different desired outcomes.

- *Recent **OECD data** reveal that in 2021/22, countries' efforts to assess the impact of COVID-19 in education have not been limited to examining learning losses. While studies to evaluate the impact of school closures on learning outcomes were undertaken at a national level in more than 50% of the countries with available data (at any level from primary to upper secondary), all but three undertook studies on the impact of COVID-19 on the mental health and well-being of students, and more than 75% did the same for teachers* (OECD, 2022[6]).
- One of the aims of **France**'s Skills Investment Plan (PIC) is to improve the quality of the follow-up support of trainees as well as encourage the development of adult learning pathways that link multiple interventions together and allow for better personalisation. This is a change of direction from previous adult learning initiatives, where targets focused on the volume of training activities. In some cases, this had the perverse effect of incentivising regional actors to organise shorter courses, rather than seeking to develop skills holistically and provide ongoing support for participants. The broader aims of the PIC therefore call for a more holistic approach to monitoring and evaluation. While quantitative indicators shed some light on the number of adults participating in more than one training activity, France has identified a need to conduct qualitative evaluations drawing on multiple sources and to generate more granular data to assess whether provision has evolved with the aims of the strategy (Bucher et al., 2021[28]).

Some policy pointers to move forward

In 2023, as governments continue to face the implications of local and global change and disruption in 2020-2022, undergoing policy efforts provide advice on steps they could take to enhance the relevance of their learning pathways. Key messages of the policy lessons mentioned earlier in this chapter follow below.

Anticipation of skills

1. **Strengthen anticipatory capacity at various levels of the education system to increase resilience.** While identifying national skill needs and supply is crucial in progressing towards a societal vision of the future, policy makers need to understand nuances at different administrative, sectoral and educational levels in order to foster greater coherence and equity.
2. **Adopt the perspectives of specific groups as inequalities risk deepening.** Labour market forecasts point to a need for policy makers to strengthen efforts to enhance employment and training strategies for groups such as women, young people, older workers, and the lowest-skilled in 2023.

Adaptation of education and training opportunities

1. **Develop measurable strategies to help governments balance competing needs.** Adaptation efforts generally involve bringing together diverse groups of people, often with contrasting or unrelated needs, and require policy makers to balance urgent and important priorities for individuals and societies. Breaking down high-level, strategic objectives into multiple, targeted and measurable actions can help governments respond to these different needs flexibly and focus public attention on areas where prioritisation is needed.
2. **Explore ways to gain flexibility to attract new resources in order to finance adaptation.** As education systems adapt learning pathways to new contexts, education decision makers face challenges securing sufficient and adequate human and financial resources.

Assessment of impact

1. **Enhance monitoring capacity for local actors to support the scaling up of innovations.** The quality of evidence collected about the strengths and challenges of potentially scalable initiatives depends on the capacity of local teams to design and implement robust monitoring and evaluation strategies. Policy makers need to invest in the capacity of local teams to design and implement these in order to help enhance knowledge about how these initiatives can be better scaled up.
2. **Build holistic approaches to monitoring and evaluation to provide more insightful evidence.** Recent evidence also underlines the need for different types of indicators and evaluative evidence that are relevant to different desired outcomes.

Table 2.1. Selected education policies and practices on enhancing the relevance of learning pathways

Anticipating the skills that learners will need in the emerging context		
Canada – Future Skills Council (2019); Labour Market Information Council reports on COVID-19 (2020)	**Estonia** – OSKA report on the impact of COVID-19 on the demand for labour and skills (2020)	**United Kingdom** – Working Futures 2017-2027 (2020); Skills and Productivity Board (2020-2022); Labour market and skills demand horizon scanning and future scenarios (2022); Unit for Future Skills (2022)
Adapting education and training opportunities to help learners navigate change		
Australia – Micro-credentials Marketplace (2023) **European Union** – Recovery and Resilience Facility (2020) **Flemish Community of Belgium** – Action plan on lifelong learning (2021) **Czech Republic** – Strategy 2030+ (2020); Primary and lower secondary curriculum reforms (2021) **Germany** – National Skills Strategy (2019) **Greece** – 21st Century Skills labs (2020); Holistic reform to vocational education, training, and lifelong learning (2020)	**Ireland** – Towards a Multi-Campus Micro-credentials System (MC2, 2020) **Italy** – Futura (2021) **Japan** – Third Basic Plan for the Promotion of Education (2018-22); Funding for higher education courses in high-demand sectors (2021) **Korea** – Curriculum Reforms (2022) **Latvia** – Education Development Guidelines 2021-2027 (2021)	**Slovak Republic** – Primary and lower secondary curriculum reforms (2021) **Slovenia** – Collaborations between HEI and employers **Spain** – Strategic Plan for the Promotion of VET (2021) **Türkiye** – School Protectorate Project (2016); Revised co-operation model (2019); VET mapping study (2019); Protocol to strengthen co-operation between VET institutions and Organised Industrial Zones (2021) **England (United Kingdom)** – Apprenticeships Reform Programme (2015-2021); T Levels (2020)
Assessing the impact of policy efforts to further enhance learning pathways		
Australia – Try, Test and Learn Fund (2016-21) **Canada** – Future Skills Centre (2018)	**Finland** – Report on the ability of the VET and FE systems to respond to sudden structural changes in the labour market (2022)	**France** – Skills Investment Plan (PIC, 2019)

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3 Easing transitions along learners' personal pathways throughout life by strengthening connections, preventing learners from leaving early, and supporting re-entrance

Across the OECD and beyond, the social and economic disruptions experienced since 2020 have dramatically affected learners' abilities to smoothly navigate their learning pathways. Traditional progression pathways are also evolving, meaning transitions will become more frequent, non-linear and multi-directional. Looking towards 2023, this chapter proposes options for policy makers to develop strategies for this changing context through: *Strengthening connections in learners' personal learning pathways throughout life* (supporting them to organise these coherently in order to facilitate transitions from one education level, programme or institution to another), *preventing learners from leaving early* (taking measures to reduce school drop-out and increase attainment of at least upper secondary education), and *supporting refugees to re-enter a learning or employment pathway* (in particular, efforts being undertaken by some countries to host immigrant people from Ukraine). Lessons are synthesised into key policy pointers.

In Brief

Easing transitions along learners' personal pathways by strengthening connections, preventing learners from leaving early, and supporting re-entrance

In 2023, countries and economies need to continue efforts to support learners to have greater ownership over what they learn, how they learn, where they learn and when they learn over their lifecycle. Easing people's transitions so they can shape and navigate the different pathways available to them through, and in and out of, education and training over a lifetime is key to this.

Infographic 3.1. Easing transitions along learners' pathways

	Key messages	Emerging policy pointers
Easing transitions throughout learners' pathways by strengthening connections, preventing learners from leaving early, and supporting re-entrance	Stronger **connections** in learners' personal pathways throughout their lives can make them more resilient	• **Embed** broader supports to help address longer-term disruptions to transitions • **Create** the conditions for effective collaboration to increase the longevity of emerging good practices
	Countries need to continue **supporting learners at greater risk of leaving early**	• **Monitor** the impact of COVID-19 on ESL through ongoing investigation to identify hidden or delayed developments • **Improve** the quality and accessibility of data, which is as important as people's ability to use it • **Prioritise** changing pedagogies, going beyond structural or procedural change
	Supporting refugees to **re-enter learning or employment pathways** is time-sensitive	• **Consider** the impact of system-level policies on refugees to support mid-term integration • **Promote** broader collaborations to foster more sustainable support for refugees

Key messages emerging from this chapter

1. ***Stronger connections in learners' personal pathways throughout life can make them more resilient.***

The current cohort of students has experienced disruptions whose impact may be felt for years to come. One year into the pandemic, in March 2021, the number of days of school closure experienced on average across the OECD represented roughly 28% of total instruction days over a typical academic year for pre-primary learners and more than 56% for upper secondary learners. These closures have disproportionately affected socio-economically disadvantaged groups, migrants, and those with low skill levels. Within this context, strengthening the connections between institutions, programmes and phases is particularly important for education systems looking to enhance equity in 2023.

It requires not only enhancing the links between pre-existing pathways, but also establishing new connections to allow learners to transition between pathways in new ways and in new directions as their personal contexts, interests and needs evolve throughout life.

Recent policy efforts collected for this analysis reveal that while process-oriented measures to enhance connections in student pathways are common at lower levels of education, structural approaches tend to dominate among higher levels—with some exceptions.

Analysis from recent policy efforts undertaken mostly since 2020 point to some **emerging lessons** that can help governments to strengthen connections in learners' pathways for 2023:

- Embedding broader supports can help address longer-term disruptions to transitions.
- Creating the conditions for effective collaboration can increase the longevity of emerging good practices.

2. Countries need to continue supporting learners at greater risk of leaving early.

Today, upper secondary attainment is considered the minimum qualification for successful participation in the labour market and for integration into society. However, early on in the pandemic, UNESCO estimated that about 24 million learners globally, from pre-primary to university level, were at risk of not going back to education following the disruption of COVID-19. Further research illustrated that after two years of global pandemic, around 147 million students had been unable to access in-person training, making them more vulnerable to disengagement. Meanwhile, the OECD warned that the pandemic could trigger hysteresis among students as the prolonged absence of learning makes it harder for students, particularly the disadvantaged, to re-engage once education returns to normal.

Recent policy efforts identified for this analysis that address early school leaving have focused on comprehensive strategies enhancing co-ordination across regional, national, local and institutional levels, developing early warning systems and providing holistic supports for targeted groups of students.

Analysis from recent policy efforts undertaken mostly since 2020 point to some **emerging lessons** that can help governments to strengthen connections in learners' pathways for 2023:

- Monitoring the impact of COVID-19 on Early School Leaving (ESL) requires ongoing investigation to identify hidden or delayed developments.
- Improving the quality and accessibility of data is as important as people's ability to use it.
- Changing pedagogies is key, and requires going beyond structural or procedural change.

3. Supporting refugees to re-enter learning or employment pathways is time-sensitive.

Russia's large-scale aggression against Ukraine in 2022 has brought about the greatest refugee surge to OECD countries since World War II. In September 2022, it was estimated that 5 million people from Ukraine had fled the country. Host education systems will need to support refugees more holistically to overcome trauma from war and disruption. An important part of this will be to help them re-enter education and employment in their host countries. The relatively well-educated profile of this refugee cohort means that skills and qualifications recognition procedures, and education and training opportunities that seek to quickly enable them to do this, are particularly important.

Analysis from recent policy efforts undertaken mostly since 2020 point to some **emerging lessons** that can help governments to support Ukrainian refugees to re-enter their learning pathway:

- Considering the impact of system-level policies on refugees supports mid-term integration.
- Promoting broader collaborations can foster more sustainable support.

Introduction

In 2022, Russia's large-scale and unprovoked aggression against Ukraine has implications for societies and education systems. High inflation twinned with high energy and food prices are affecting populations worldwide, particularly the most disadvantaged. At the same time, labour market tightness may encourage people to opt for employment over entering or completing education and training programmes while trends in previous downturns suggest many students are likely to defer higher or further education in favour of workplace learning (OECD, 2021[1]; OECD, 2022[2]). At a more local level, the war in Ukraine, which is a significant humanitarian crisis, caused a huge displacement of people escaping the war. This created a need in neighbouring and other European countries to rapidly integrate Ukrainian refugees into education and training systems and to recognise their skills and qualifications to facilitate access to training and labour markets.

Across the OECD and beyond, the social and economic disruptions experienced since 2020 have dramatically affected learners' abilities to smoothly navigate their learning pathways. At the height of COVID-19 lockdowns, as institutions across the world closed, everyday instruction was compressed into shorter virtual lessons or remote self-study units, assessment practices were adapted, work-based learning cancelled and many students became at risk of disengagement. The shocks that labour markets experienced with lockdowns caused many people to leave their jobs, sometimes seeking to reskill.

As these disruptions and evolutions continue in 2023, education systems need to enhance efforts to support people to have greater ownership over what they learn, how they learn, where they learn and when they learn over their lifecycle. Ensuring learners can shape and navigate more personal pathways through, and in and out of, education and training over a lifetime is key to this. Without such efforts, learners risk having to delay their transition to the next stage of their learning, finding certain pathways they aspire to unavailable to them, or falling out of education and training entirely. This can be financially and educationally costly to the individual and to society.

Transitions occur when an individual experiences change or moves from a familiar setting to one that is unknown. (OECD, 2017[3]; QAA Scotland, 2015[4]), In this sense, learners are full-time 'transitioners'. Vertical transitions happen as learners move between levels and programmes in formal education, or through non-formal and informal education arrangements, to obtain knowledge, skills and abilities that can help them meet individual, labour market and broader societal needs (OECD, 2017[3]; Reyes-Fournier, 2017[5]). Horizontal transitions refer to the daily transitions that learners make from an early age between the home and their education settings, or between digital, physical or hybrid environments. Both types of transitions are likely to become more frequent, non-linear and multi-directional, as individuals' and societies' needs and ambitions respond to the changes around them.

All transitions require structural arrangements and processes to help learners navigate them confidently, according to their needs and interests. Strengthening the structural arrangements for lifelong transitions in contexts of disruption and change may include curating a broad but coherent education offer, minimising rates of grade repetition, ensuring permeability between educational tracks, or facilitating flexible entry and exit points (OECD, 2021[6]). Creating processes that help these structural arrangements to function adequately can entail enhancing collaboration to ensure continuity and consistency in curriculum, pedagogy and learning environments, and support knowledge transfer across different levels of the system (OECD, 2017[3]; Government of Alberta, 2009[7]).

This chapter explores three ways in which education systems can support learners to smoothly shape and navigate lifelong transitions by bringing together structural arrangements and processes. These are:

- **Strengthening connections in learners' personal pathways throughout life:** this refers to efforts to reorganise learners' pathways coherently to facilitate transitions from one education level, programme or institution to another.

- **Preventing learners from leaving early:** this involves measures to reduce school drop-out and increase attainment of at least upper secondary education.
- **Supporting refugees to re-enter an education pathway or employment:** in the present context, this refers particularly to efforts being undertaken by some countries to host immigrant students from Ukraine.

For each of these areas, this chapter analyses selected emerging policy initiatives, principally across OECD education systems (see Table 3.1 at the end for the list of policies and practices included in this chapter). As in previous chapters, this analysis leads to some lessons of interest to guide policy makers' efforts in 2023. Lessons are then synthesised into key policy pointers for the longer term.

Stronger connections in learners' personal pathways throughout life can make them more resilient

Previous research and policy analysis undertaken by the Education Policy Outlook revealed that strong coherence between structures, people and processes across education and training institutions, programmes and phases is a key characteristic of responsive and resilient education systems (OECD, 2021[6]). Developing and implementing policy efforts to clearly connect learners' pathways throughout their lives, so they can shape them according to their evolving contexts, interests and needs, is therefore key work for today's policy makers.

Although in many countries, vaccine rollouts and greater systemic resilience are likely to reduce the impact of future COVID-19 variants on education delivery, the current student cohort has experienced disruptions whose impact may be felt for years to come. One year into the pandemic, in March 2021, the number of days of school closure experienced on average across the OECD represented roughly 28% of total instruction days over a typical academic year for pre-primary learners and over 56% for upper secondary learners (OECD, 2021[8]). In the immediate term, such closures directly impacted connections, disrupting examinations between secondary and higher education, and impeding transitions into work (OECD, 2021[9]). In the longer term, despite contingency efforts, learning losses and the impact on well-being and socio-emotional development are likely to complicate pathway connections from the youngest age.

Within this context, strengthening connections in learners' pathways requires action not only to enhance the links between pre-existing pathways and along traditional learning trajectories, but also to establish new connections that make it possible for learners to transition between pathways in new ways and along learning trajectories in new directions. This flexibility needs to be designed in ways that prevent inequities and, instead, help learners reach their potential. As such, and by adopting a learner perspective, education systems can become much more dynamic in the face of the short- and long-term economic and societal changes taking place.

Such efforts are particularly important for education systems looking to enhance equity in 2023. Disruptions disproportionately affect those with low skill levels. For example, in 2021, on average across OECD countries, employment rates for tertiary-educated 25-34 year-olds were 26 percentage points higher than for those who attained below upper secondary education, and unemployment during the pandemic increased much less among those with tertiary education than it did among those with lower levels of attainment (OECD, 2022[10]). Meanwhile, research from before the pandemic emphasised the additional challenges faced by vulnerable groups—including those from low socio-economic backgrounds, with immigrant or Indigenous backgrounds, and those with special needs—during their transitions within and between learning pathways (OECD, 2017[3]; OECD, 2019[11]; Brussino, 2020[12]).

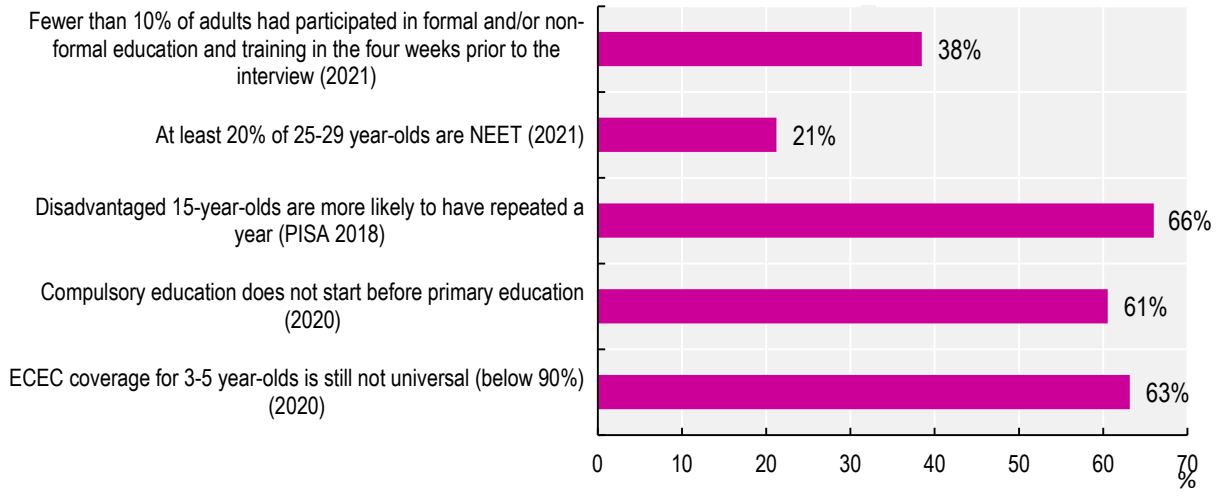
Available data provide insight into some of the structural characteristics that present challenges to better connecting pathways (see Figure 3.1). In over half of countries and economies participating in different OECD surveys, compulsory education coverage from Early Childhood Education and Care was not in

place in 2020, and learners appeared to experience difficulties in transitions at different ages. In 21% of education systems, at least one-fifth of 25-29 year-olds were neither employed nor in education or training in 2020.

More recent OECD data indicate that education systems have been able to prioritise and reprioritise to some extent according to contextual change. Although prior to the pandemic, policy efforts to align ECEC and lower primary education (e.g. curriculum continuity, assessing school readiness) were common across OECD countries, short-term responses to the pandemic made a shift towards strengthening transitions for older ages. In the Special Survey carried out by the OECD/UNESCO-UIS/UNICEF/World Bank in 2021, over half of education systems reported targeting remedial measures at students expecting to sit a national examination to access higher education, while one-third of education systems reported supporting transitions in lower and upper secondary education (OECD/UIS/UNESCO/UNICEF/WB, 2021[13]; OECD, 2021[6]).

Figure 3.1. Countries face challenges in securing education transitions throughout learners' lives

Percentage of OECD education systems with available evidence where the following happens



Source: Adapted from OECD (2022[10]), *Education at a Glance 2022: OECD indicators*, OECD, Paris, https://doi.org/10.1787/3197152b-en; OECD (2019[14]), *PISA 2018 Results (Volume I): What Students Know and Can Do*, PISA, OECD Publishing, Paris, https://doi.org/10.1787/5f07c754-en; OECD (2020[15]) *PISA 2018 Results (Volume V): Effective Policies, Successful Schools*, PISA, OECD Publishing, Paris, https://doi.org/10.1787/ca768d40-en.

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Selected recent policy efforts

Recent policy efforts collected for this analysis reveal that while process-oriented measures to enhance connections along student pathways are common at lower levels of education, structural approaches tend to dominate among higher levels—with some exceptions. The examples indicate that education systems could usefully consider both types of approach in a more complementary way across all levels of education. This section collects some recent experiences to make this happen.

Ongoing efforts to strengthen transitions at lower education levels include many process-oriented measures

Recent policy examples provide an insight into how education systems support learners, professionals and parents within different education levels or settings to establish a common ground on which to co-operate. By doing so, policy makers aim to encourage greater collaboration between these actors, improving the sharing of information about individual learners and the alignment of programme content and structures.

One key structural approach adopted by countries has been to introduce compulsory education before children enter primary school in some education systems, although this progress is uneven. In 2020, this was the case in 16 education systems across the OECD, with most having compulsory education from one year prior to the start of primary school but some having up to three or four years of compulsory pre-primary education. Some 11 countries offer distinct one-year programmes specifically for children in the year before starting primary school designed to help children with the transition from ECEC to primary education (OECD, 2022[10]).

Norway's Framework Plan for the Content and Tasks of Kindergartens (2017) sets out national-level expectations for transitions in early childhood education and care (ECEC) while encouraging ownership and adaptation at the local level. An interim implementation evaluation (2021) found that while kindergartens engaged with the requirements to facilitate all transitions (into, within, and out of kindergarten), many of these practices pre-date latest framework plans. Since transitions were regulated in previous framework plans (1996, 2006 and 2011), many kindergartens had already formalised these practices and developed written protocols for collaboration with primary schools, parents, and other relevant partners. For example, the City of Oslo has developed a transition framework to establish good co-operation routines and ensure pedagogical continuity between ECEC and primary school (Homme, Danielsen and Ludvigsen, 2020[16]). During the COVID-19 pandemic, maintaining such connections remained a priority for staff in kindergartens. For instance, where possible, children transitioning from ECEC to primary school were supported to visit their new school with their kindergarten teachers or parents, although in smaller groups, or at a later date than normal (Directorate of Education of Norway, n.d.[17]; Directorate of Education of Norway, n.d.[18]).

ECEC professionals in **New South Wales (Australia)** adapted their practices for the transition into school education in 2021 due to COVID-19 health restrictions. This included developing a digitalised version of the Transition School Statement, which summarises the child's strengths, interests, and approaches to learning in their year before starting school. The statement was designed to ensure continuity of learning by helping the primary teacher understand the child and how best to support their learning as soon as they enter schooling (Government of New South Wales, n.d.[19]).

New South Wales also produced a set of COVID-19 guidelines for ECEC professionals (2021) (Government of New South Wales, 2022[20]). In terms of supporting transitions, these highlight the need to consider the impact of disruptions to learning on student well-being and resilience, and to increase the consistency of communication with families to better understand their needs. Families can also provide insights on how children have been learning and behaving during periods where they were absent from ECEC, as well as any concerns about preparing for school. The guidelines suggest new ways in which ECEC professionals can work within their local transition networks—established to promote collaboration and information sharing between ECEC educators, schools, and other relevant stakeholders—in the context of COVID-19. Suggestions include organising collaborative meetings or orientation activities online and clarifying transition procedures early on (Government of New South Wales, n.d.[19]). A collection of case studies spotlighting how schools have supported students' transitions in unusual circumstances provides further support (Government of New South Wales, n.d.[21]).

Since the early 2000s, **Japan** has promoted connections between upper secondary schools and tertiary institutions. Programmes such as the Super Science High School (2002) link upper secondary students

with universities and tertiary-level scholars and researchers. Upper secondary schools designated as Super Science High Schools by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) are connected with universities to develop a shared vision of the skills needed for science, technology and innovation, and to enable students to participate in joint research projects. These schools also receive funding from the Japan Science and Technology Agency (JST) to provide for the equipment, training, and instructors required for advanced mathematics and sciences courses. As well as collaborating with higher education, Super Science High Schools share their expertise with neighbouring primary, lower secondary, and upper secondary schools. Some 217 Super Science High Schools were operating throughout the country by 2020. Under the Global Science Campus programme, the Japan Science and Technology Agency selects and supports universities to develop and implement programmes for upper secondary students with strong skills in science and technology (Japan Science and Technology Agency (JST), n.d.[22]; The Japan News, 2022[23]; Japan Science and Technology Agency (JST), n.d.[24]).

Taking inspiration from these programmes, further policy efforts to expand connections between upper secondary and tertiary education are under consideration in the government's upcoming five-year plan for fostering start-ups and entrepreneurship education. Options being reviewed for budgetary requests include initiatives that foster linkages between start-up founders and upper secondary students through seminars and lectures at school. These efforts may be submitted for budget consideration by MEXT as early as 2023.

Countries and economies have also been enhancing flexibility at upper education levels

Recent policy efforts indicate that strengthening connections across upper education levels can also involve providing greater flexibility to the students entering them. This flexibility can involve additional time to complete an education stage, alternative entry paths, or the provision of specific support mechanisms.

One common structural approach across countries in recent years has been to ensure that vocational upper secondary programmes do not close off access to tertiary education. In 2020, 76% of vocational graduates across OECD countries completed a programme that allowed direct access to tertiary education and in 11 countries, all vocational graduates completed such programmes (OECD, 2022[10]). However, data indicates the importance of process efforts beyond these structural approaches. On average, students who enter a tertiary pathway with a general upper secondary qualification have a higher completion rate at bachelor's level than those who start with a vocational upper secondary qualification (OECD, 2022[10]). VET pathways need not only to open doors to tertiary education but also to equip vocational students with the skills they will need to succeed in those pathways.

In **Denmark**, emergency measures implemented during the COVID-19 pandemic, together with reforms that began in 2015, aim to ensure students' successful transitions into vocational education and training (VET), as well as their progression through the different stages of VET, and to improve completion rates. A revised basic course allows students to try different specialisms before choosing their main pathway, with increased guidance from teaching staff. Previous efforts of this nature have been found to have contributed to students making more realistic and informed choices, with increasing attention to employment and internship opportunities (Denmark's Evaluation Institute, 2022[25]).

In 2021, the Danish government granted VET providers the freedom to extend the second part of the basic course to offset the potential impact of lockdowns on retention rates and students' progression to the main course. Providers could also give students additional chances to restart the basic course. In a study into the impact of the pandemic on students' learning outcomes and well-being (2022), some 56% of school leaders reported that the 4-week extension to the basic course had a positive impact on student learning outcomes to a great extent, while a further 31% said the measure had improved learning outcomes to some extent. Recognising that student well-being affects students' learning outcomes and attainment, the government also granted providers with funding to implement social and emotional support measures, such as introductory tours and mentoring programmes (Denmark's Evaluation Institute, 2022[25]). Several

school leaders plan to maintain these support measures to address gaps in students' practical knowledge and co-operation skills.

Through longer-standing reform efforts, Denmark has also strengthened admissions requirements for some VET courses to ensure students have the foundational skills required to succeed and provide a clearer signal to teachers of the skill levels required of students selecting these pathways. For example, Denmark has increased the mathematics and Danish language requirements for some courses, and implemented an overall assessment based on a written test and interview at the VET school for others.

The **French Community of Belgium** has also undertaken significant efforts to strengthen learning transitions, such as through the implementation of comprehensive education from pre-primary education to lower secondary education. The aim of this reform is to provide all learners with a fuller education experience by the end of lower secondary education through a common core curriculum. Implementation started gradually in 2022/23, with the first two years of primary school, to cover up to the third year of lower secondary education by 2028/29. As part of these measures, teachers will no longer systematically outsource remediation; it will take place within the class through personalised support by the teacher, with the help of additional teaching staff (Fédération Wallonie-Bruxelles, 2022[26]).

In addition, the government started implementing in 2022 a common structure in VET at upper secondary level, through the new Qualifying Education Pathway (PEQ). Through this structure, students will obtain VET qualifications during years 4 to 6 of secondary education, instead of starting from year 5. Individualised follow-up is also intended, for example, through an individual learning dossier, also accessible to parents. This new structure draws from experience gained through a pilot programme implemented in 2013, where certification was unit-based (CPU). The new structure ends the CPU, replacing it by ongoing qualification evaluations to take place throughout the PEQ (Fédération Wallonie-Bruxelles, 2022[27]; La Ligue de l'Enseignement et de l'Education permanente asbl, 2022[28]).

In the early stages of the COVID-19 pandemic, several higher education institutions (HEIs) in **Finland** developed more flexible methods for organising admissions. Finland's draft education policy report, submitted to parliament in 2021, includes an objective to clarify the role of the open studies pathway by developing a long-term vision for it. It also recommends that HEIs work with the secondary sector to develop admissions procedures (Government of Finland, n.d.[29]).

These measures are the culmination of longer-term efforts to smooth transitions to higher education in recent years, with measures aimed at school leavers as well as older learners seeking to change careers or upgrade their skills. These efforts support Finland's goal of achieving a 50% tertiary attainment rate among 25-34 year-olds by 2030 (Government of Finland, n.d.[29]). Finland's highly selective admissions system has historically meant that large numbers of applicants were rejected annually, contributing to a comparatively elevated age of first-time entry into higher education and delays in young people's entry into the labour market. As such, HEIs agreed to significantly reduce the role of the content-based entrance exams from 2018 and abandon what was previously the most common admissions route—based on combined points from a certificate and entrance exams—replacing it with a certificate-only-based admissions route that emphasises upper secondary qualifications. Quotas for first-time entrants were introduced in 2016. As of 2020, there were two main pathways to higher education—a certificate-based route and a route through entrance exams—with the certificate-based route being slightly larger. Universities of Applied Science (UAS) introduced a common digital entrance exam in 2019, while universities are working together to harmonise entry requirements (OECD, 2020[30]).

The admissions reform also led to the Alternative Pathway to University project (2019-21), in which 11 HEIs collaborated to develop Finland's existing open university courses as a credible route to higher education. These courses have no admissions requirements, come at a relatively low cost, and allow learners to combine their studies with work and other commitments. The project contributed to an increase in the number of students entering degree programmes via this route, providing learners who may not

otherwise have entered higher education with a viable alternative to the traditional competitive routes (Joutsen et al., 2021[31]).

Evidence from **Australia** (2022) suggests that the COVID-19 pandemic has been a catalyst for innovative and flexible approaches among HEIs to engage, admit and support students from under-represented groups (e.g. those from regional and remote areas, Indigenous students, and those with low socio-economic status). Some institutions intensified digital outreach and marketing campaigns aimed at these key target groups, while others have developed their offer of short courses and certificate programmes aimed at reskilling professionals. A key development was the expansion of alternatives to the competitive Australian Tertiary Admission Rank (ATAR) system. Some universities developed bridging programmes while others adjusted admissions requirements to account for learning lost during lockdowns. Although these alternative pathways may not always have been developed with key equity groups in mind, their expansion is likely to benefit these groups (Teague et al., 2022[32]).

Several HEIs also strengthened support mechanisms for vulnerable students, including financial support, transition support for first-year students, and peer and academic mentoring. Some redirected funding from the Higher Education Participation and Partnerships Program (HEPPP, 2010) to implement these measures. The HEPPP provides funding for programmes that support the transition of students from under-represented groups to higher education and that aim to increase their retention and completion rates. HEIs receive grants based on their share of undergraduate students from the target groups. In response to findings from a 2017 evaluation, the government has aimed to generate evidence on programmes and activities implemented by individual HEIs, as well as the overall impact of the HEPPP (OECD, 2021[6]). Finally, the evaluation identified a need for more consistent, rigorous and systematic data collection to monitor the impact of measures across a student's tertiary pathway (from pre-access, to entry, to transition out of university) and inform future policy improvements (Robinson et al., 2021[33]).

Some policy lessons emerge on strengthening connections in learners' pathways for 2023

Recent data and analysis from these and other policy experiences to strengthen connections in learners' pathways as they transition through them offer some lessons to help guide policy makers in 2023.

1. **Embedding broader supports can help address longer-term disruptions to transitions.**

In recognition of the longer-term repercussions of the pandemic experience on learners of all ages, there is a need to enhance and systemise support mechanisms provided in the early stages of the pandemic to strengthen connections across learners' pathways. Moreover, these supports will need to take account of the full breadth of impact that the pandemic, along with other important shocks and disruptions, have had on learners, beyond learning losses.

- *Recent **OECD data** indicate that measures introduced in the immediate recovery period will be scaled back during 2022/23. Whereas 21 countries implemented additional psychosocial and mental health support for primary and secondary students in 2021/22, only 13 planned to continue these into 2022/23. Similarly, only 12 planned to provide additional teacher training on mental health and well-being in 2022/23, down from 18 in the previous year* (OECD, 2022[10]).
- Some 55% of VET teaching professionals surveyed in **Denmark** reported that their students' practical skills were lower than those of previous cohorts after the lockdowns of 2020, with a similar picture emerging in relation to soft skills such as co-operation. These students missed out on the periods of practical learning that will prepare them for life in the workplace, but also on the social interactions that help them work effectively with others in school life and beyond. As was the case in other countries, the COVID-19 pandemic seems to have exacerbated some students' more acute mental health challenges such as depression and anxiety. Teachers have called for a renewed focus on strengthening social and professional communities and for the continuation of the

well-being and mentoring initiatives that emerged during the emergency phase of the pandemic to support these students to be ready for the next stages of their training and employment (Denmark's Evaluation Institute, 2022[25]).

- In **Australia**, experiences of supporting students from unrepresented backgrounds during the emergency phase point to a need to proactively invest in identifying the full breadth of needs of these students as they transition into tertiary institutions, since higher education professionals reported that institutional responses tended to lean on reaction to a perceived need. Achieving this aim involves developing mechanisms to collect and share student data (Teague et al., 2022[32]).

2. **Creating the conditions for effective collaboration can increase the longevity of emerging good practices.**

Recent policy efforts to strengthen the connections between students' pathways reflect growing recognition of the importance of professional collaboration. However, many education systems or institutions have evolved in ways that create barriers to collaboration, making such practices resource-intensive for education professionals. Policy makers need to ensure professionals have the time, guidance, and resources to make collaboration a success.

- *Recent **OECD data** reveal that, of the 14 OECD education systems where the content of compulsory professional development activities is mandated or specified in some way, this usually includes some form of formalised teacher collaboration. For example, at lower secondary level, five education systems reported specifying content related to teamwork for teachers, four mandated training related to communication and co-operation with parents and another four specified activities related to mentoring programmes and/or supports for new teachers. Nevertheless, 17 participating education systems reported having no compulsory professional development requirements in place* (OECD, 2022[10]).
- Evidence from **Australia** suggests the challenges associated with COVID-19 have highlighted the need for collaborative partnerships within and beyond HEIs to promote disadvantaged students' access to higher education. However, most of the successful access and support initiatives that emerged during the pandemic were organised by a small network of teams, and professionals reported a broader tendency for departments to work in silos. This often led to the duplication of work and a lack of cohesion and connection between staff working towards similar objectives. One identified solution is to develop institutional COVID-response plans that establish what is needed for the access, participation and success of target groups. Such plans could help to ensure different actors within an institution are working towards a co-ordinated response to students' evolving needs (Teague et al., 2022[32]).
- Evaluation studies from **Finland** highlight the need to ensure sufficient resources to support collaboration between upper secondary schools and HEIs, particularly by supporting smaller general upper secondary institutions. Implementing funding mechanisms that make it profitable for HEIs to collaborate with secondary VET institutions could motivate them to extend this work (Finnish Education Evaluation Centre, 2021[34]).
- Policy experiences from early education levels could support enhanced action elsewhere in the system. **Japan** established Compulsory Education Schools as a new type of school. These schools integrate elementary and lower secondary education with the aim of achieving coherence between education providers, education activities and school management. Results from an initial evaluation show that this has improved collaboration and reduced anxiety among students moving from primary to secondary education (OECD, 2019[35]). However, this structural change takes time and involves a considerable resource commitment.
- Countries such as **Slovenia**, **Denmark**, and some schools and municipalities in **Sweden** have appointed transition co-ordinators or organised local co-ordination mechanisms. These dedicated

roles or teams can liaise between professionals in different institutions, support information sharing, or organise collaborative activities (OECD, 2017[3]).

Countries need to continue supporting learners at greater risk of leaving early

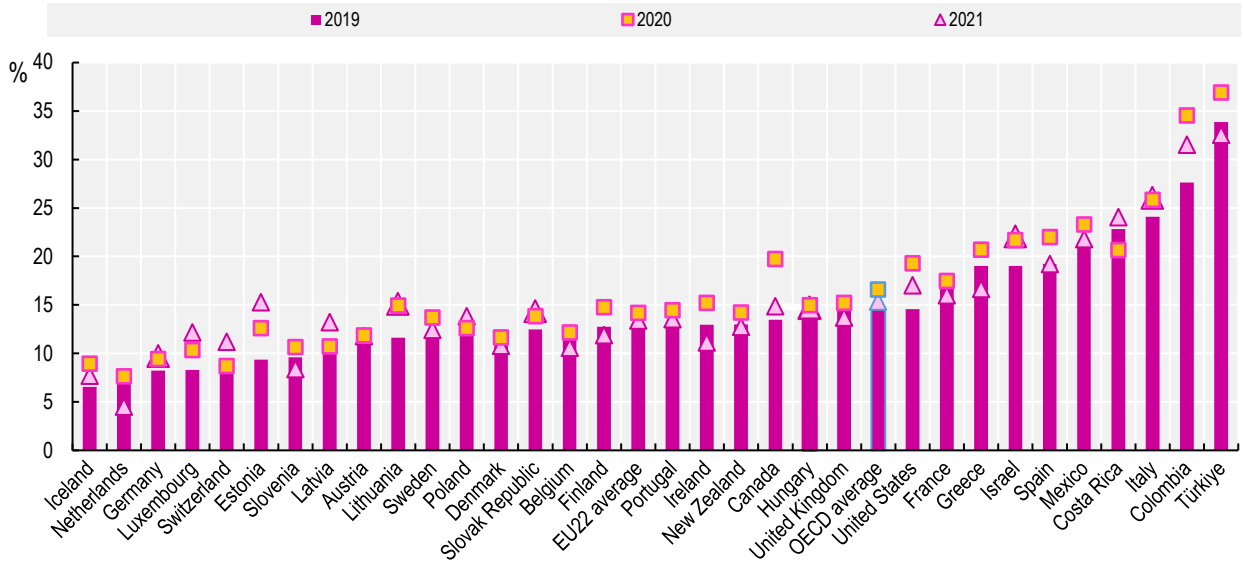
Today, upper secondary attainment is considered the minimum qualification for successful participation in the labour market and for integration into society. Learners who succeed to this level enjoy better employment and financial prospects, better health outcomes and life expectancy, a higher sense of social connectedness, and are more likely to engage in civic life (OECD, 2021[1]; OECD, 2019[36]). However, the disruption caused by the COVID-19 pandemic increased the risk of students dropping out of education prematurely. Early on, UNESCO estimated that about 24 million learners globally, from pre-primary to university level, were at risk of not going back to education following the disruption of COVID-19 (UNESCO, 2021[37]). Further research illustrated that after two years of global pandemic, around 147 million students had been unable to access in-person training, making them more vulnerable to disengagement (UNICEF, 2022[38]). Meanwhile, the OECD warned that the pandemic could trigger hysteresis among students as the prolonged absence of learning makes it harder for students, particularly the disadvantaged, to re-engage once education returns to normal (OECD, 2020[39]).

Policy action from before and since the pandemic indicates that measures can be put in place to reduce early school leaving. Indeed, for the period 2008-18, this was reported as a policy priority for 18 education systems across the OECD. Related policy trends included enhancing student guidance, revising qualifications, updating course curricula and increasing participation in STEM-related fields, as well as providing targeted supports to students most at risk of dropping out, such as migrants and refugees (OECD, 2018[40]).

According to the Special Survey (2021), many education systems introduced targeted measures to promote the return of students from vulnerable groups to education after school closures. Of these, 75% introduced school-based mechanisms to track the return of target populations, 50% leveraged community engagement activities, and around 25% provided financial incentives for at least one vulnerable group (OECD/UIS/UNESCO/UNICEF/WB, 2021[13]). Such efforts are important: providing earlier and more comprehensive individualised support to students at risk is a more effective and less costly measure than retrospectively reaching out to early school leavers (OECD, 2018[40]). Although many other factors contribute, data suggest that efforts implemented prior to the pandemic may have contributed to a reduction in the proportion of early leavers.

Recent disruptions may also have contributed to an increase in the share of young people who are not in employment, education, or training (NEET). Between 2019 and 2020, the majority of countries saw an increase in the share of 18–24-year-old NEETs, with some decreases in 2021 (see Figure 3.2). Changes in the share of NEETs were not limited to any one geographic area, with the eight countries whose share of NEETs increased between 2019 and 2021 distributed between Europe or the Americas. This suggests that national-level policies do have a role to play. However, efforts must continue. Between 2019 and 2021 the OECD-average share of NEETs for this age group increased from 14.6% to 15.3% (OECD, 2021[1]). Furthermore, experiences following the financial crisis of 2008 indicate that there is a certain lag time before the effect of economic disruptions is felt by this group; in addition, younger students disengaging from their learning are not yet captured in this data.

Figure 3.2. The share of 18-24 year-olds who are NEET has decreased somewhat since 2020



Source: Adapted from OECD (2022[10]), *Education at a Glance 2022: OECD indicators*, OECD Publishing, Paris, https://doi.org/10.1787/3197152b-en.

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Selected policy efforts

Recent policy efforts identified for this analysis that address early school leaving have focused on comprehensive strategies enhancing co-ordination across regional, national, local and institutional levels, developing early warning systems, and providing holistic supports for targeted groups of students.

Regional efforts include co-ordination across administrative levels in EU Member States

Recognising the importance of reducing ESL in achieving the Europe 2020 strategy objectives of improving education and training levels and reducing unemployment, EU Member States set the target of reducing the average share of early school leavers to less than 10% by 2020 (Council of the European Union, 2011[41]). By 2021, the share was 9.7%. The current target is to reduce the average to below 9% by 2030: 18 EU member states have already reached this target, including the Netherlands, Belgium, and Latvia. Their strategies to reduce ESL reflect several of the principles of the European framework for designing evidence-based policies to address ESL (see Box 3.1).

Prior to the pandemic, the **Netherlands** had made considerable progress in reducing ESL: the share of early school leavers fell from 15.1% in 2001 to 7.0% in 2020. A decentralised approach is in place, combining preventative action at the school level, intervention measures at the municipal level, and regional co-operation. Schools and municipalities in 40 regions make joint agreements on ESL measures and produce annual impact assessments to measure progress. These agreements were adjusted to meet new challenges during the COVID-19 pandemic when the share of early school leavers increased. Common measures aim to strengthen guidance efforts for at-risk students, their well-being, and their transitions to the workplace. Municipalities have a statutory duty to combat ESL through the Regional Reporting and Co-ordination (RMC) function. RMC advisors reach out to early school leavers through phone calls, letters, or home visits, and guide them back to education, employment or other activities based on an assessment of their needs. They have access to data from schools and the Public Employment

Service to help them identify young people outside of the system. In addition to collaborating with schools and municipal authorities, they work with social and health organisations to support students with additional personal or mental health needs (Dijkgraaf, 2022[42]).

The **Flemish Community of Belgium** has updated previously successful initiatives to reduce school drop-out in response to the impact of COVID-19 on ESL rates. The share of early school leavers fell from 12.1% during 2018/19 to 9.4% during 2019/20. However, rates remained disproportionately high among secondary VET students (14%) and male students (12%). The data also points to a relationship between ESL and socio-economic disadvantage, the language learners speak at home, and residing in urban areas. Possible explanations for the overall decline in ESL include a relatively weak labour market in 2020, which made young people less likely to leave education for paid employment. The government has called for further research to understand these trends and has renewed efforts to address ESL (Flemish Ministry of Education and Training, 2022[43]).

In response to the pandemic, in 2022, the Flemish Education Council and the Social and Economic Council of Flanders were charged with updating the Together Against School Dropout action plan (2016). The Flemish Community's six school drop-out networks are also conducting an analysis of their strengths and weaknesses in this field (Flemish Ministry of Education and Training, n.d.[44]). An 18-month action research project on effective practices for preventing ESL and tackling truancy will inform future policy development and practice at the school level. Drawing on a review of Flemish and international experiences, the project will identify practices to be tested by schools and make concrete recommendations their implementation in different contexts (Flemish Ministry of Education and Training, 2022[43]). The transition pathway initiative (2022), an early intervention measure aimed at students in secondary VET and technical education who schools have identified as being at risk of drop-out, has also been introduced. The initiative offers students career guidance and personalised training or work-based learning opportunities to help ensure they complete their studies and transition to a sustainable career after leaving secondary education (Flemish Ministry of Education and Training, n.d.[44]).

Drawing on EU frameworks, the Together Against School Dropout action plan identified actions for data collection, co-ordination and collaboration, prevention, intervention, and compensation. Schools are required to develop, implement, and evaluate a student guidance policy to ensure successful transition between grades and education levels. These plans include measures for all learners and targeted measures for those who need additional support (Flemish Ministry of Education and Training, n.d.[45]). As part of the plan, the Flemish government established six school drop-out networks, bringing together local partners from the education, welfare, and work sectors under the guidance of a network co-ordinator. Finally, the government established an Early School Leaving Monitor to track the outcomes, socio-economic characteristics and study progression of early school leavers, and appointed a truancy officer in charge of following up on and evaluating implementation.

In **Latvia** the share of early school leavers fell from 8.7% to 7.2% between 2019 and 2020, although this was followed by a slight increase to 7.3% in 2021 (Eurostat, 2022[46]). Since the outbreak of the pandemic, the Tackling Early School Leaving (implemented in 2017) has strengthened measures to support teachers and other professionals working with at-risk students and their families in contexts of disruption. This included workshops for inter-professional teams within municipalities and seminars in educational institutions to support the development of preventative measures and develop professional competence in working with at-risk students. In 2021/22, the target group for the project was extended from students in grades 5-12 and grades 10-13 in VET to include students in grades 1-4. This reflects the project's focus on early intervention. Professional development activities focused on strengthening teachers' co-operation with parents, including those of younger learners. This points to some of the lessons learnt in the early stages of the COVID-19 pandemic, which highlighted the important role parents play in supporting learning in the home (Latvian Ministry of Education and Science, 2021[47]).

Box 3.1. Addressing early school leaving in the European Union: Pathways to School Success

The European Commission launched the Pathways to School Success initiative (2021) to support member states in achieving the EU-level targets on reducing the share of low achievers in PISA reading, mathematics, and science tests to 15% and that of early leavers from education and training to 9% by 2030. These challenges have become more visible in the context of COVID-19, with recent evidence suggesting that the share of underperforming students has increased during the pandemic. Building on lessons from past work, evidence from research, and consultation activities, the initiative combines different instruments to stimulate policy reform. These include policy guidance, peer learning activities, information exchange and best practices, and financial incentives (European Commission, n.d.[48]; Koehler, Psacharopoulos and Graaf, 2022[49]).

As part of the initiative, in June 2022, a new framework for the development of policies aimed at addressing early leaving and promoting learners' success was launched. The framework identifies:

- **Key enablers**, such as a clear vision and strong political commitment to address early leaving and underachievement. These should translate into a comprehensive and integrated strategy at the national or regional level based on horizontal co-operation between policy areas (e.g. education, health and employment) and vertical co-operation between different governance levels. Data collection and monitoring—based on quantitative and qualitative data on learners and the factors that affect their outcomes—at the national, regional and local level is another a key enabler.
- **System-level measures** including replacing grade repetition with targeted support and ensuring permeable pathways through the education system.
- **School-level measures** including quality assurance arrangements with clear targets and indicators, and active engagement of parents and families.
- Measures to **support educators**, including promoting communities of practice and networking, as well as professional learning activities that address themes such as well-being and mental health, conflict resolution, and bullying and fighting.
- Measures to **support learners**, such as early identification of difficulties and needs, social and emotional learning, and targeted and individualised support.

Source: European Commission (n.d.[48]), "Pathways to School Success", *European Education Area: Quality education and training for all*, https://op.europa.eu/en/publication-detail/-/publication/b43aac1a-cc1b-11ec-b6f4-01aa75ed71a1/language-en/format-PDF/source-260381074 (accessed on 27 July 2022); Koehler, C; Psacharopoulos, G; Graaf, L (2022[49]), *The impact of COVID-19 on the education of disadvantaged children and the socio-economic consequences thereof*, Directorate-General for Education, Youth, Sport and Culture, European Commission, https://data.europa.eu/doi/10.2766/787550 (accessed on 27 July 2022); Eurostat (n.d.[50]), "Education and Training: Policy Context", https://ec.europa.eu/eurostat/web/education-and-training/policy-context (accessed on 27 July 2022).

The initiative was established in 2017, and involves education institutions, municipalities, and youth-sector organisations in Latvia collaborating to identify young people at risk of drop-out and provide them with personalised support. Teachers develop an individualised support plan for at-risk students based on an assessment of different risk factors. Support could include consultations with municipal specialists to address risk factors or financial support for transport, accommodation, or leisure activities. Municipalities also provide funding to youth-sector organisations to implement projects aimed at increasing the motivation of at-risk students, with young people playing a key role in initiating and implementing these projects. A combined database supports the regular exchange of information on preventative measures and their impact between the state, municipal, and institutional levels. An evaluation (2019) found that training

opportunities helped staff engage with the database and effective protocols were in place to ensure co-operation between the different partners involved at the local level (Latvian Ministry of Education and Science, 2020[51]).

Many Latin American and Caribbean countries continue relying on early warning systems

In the Latin American and Caribbean (LAC) region, early warning systems have developed in recent years across a range of countries. During the pandemic and the extensive, prolonged school closures experienced in the region, they have been part of efforts implemented or scaled up by governments to identify students at risk of ESL. Through them, governments have aimed to target interventions that could be mainstreamed in a timely manner (World Bank, 2021[52]).

In **Chile**, the Early Warning System (SAT, 2019) was developed by the Ministry of Social Development and Family together with the Ministry of Education; its implementation was accelerated in response to the COVID-19 pandemic. The system uses administrative information about students to identify patterns of conditions that suggest an elevated risk of ESL. Indicators include the socio-economic status of the student, family, peers and wider social environment, and attendance and disciplinary record. The goals of the SAT are twofold: first, it serves to log timely information about students whose situation suggests a higher probability of ESL, in turn drawing the attention of school leaders and staff. Second, it uses this information to guide decisions at multiple levels of the education system aimed at promoting the continuation of studies. Although initially implemented amongst a limited number of schools, a working group on ESL within the Ministry of Education later recommended expanding it to all parts of public education as part of a suite of education proposals aimed, in part, at promoting continuity of study for students at high risk of ESL in the early stages of the COVID-19 pandemic. Among the higher-risk groups identified in the proposal were students excluded from the education system prior to the pandemic, students identified as possible leavers according to the SAT, and enrolled students who had little to no contact with their teachers during the first term (Chilean Ministry of Education, 2020[53]).

In **Colombia**, the Information system for the monitoring, prevention and analysis of School leaving (SIMPADE) was developed by the Ministry of National Education to monitor, prevent and analyse ESL. The system provides school leaders and their staff with information that can be used to follow students, especially those at greater risk of leaving school, and identify the common causes of ESL. The SIMPADE helped monitor the evolution of school enrolment and ESL during the pandemic (Ministry of Education of Colombia, 2022[54]). For example, reporting from the SIMPADE and the District Education Secretariat of Bogota (SED) were used to support evidence of a gradual fall in ESL in Bogota between 2018 and 2020, including at the start of the pandemic (Ballén Cifuentes et al., 2021[55]). International analysis has noted that the complementary information of instruments like the SIMPADE can help to provide a more complete overview of the experience of students and contribute to the planning efforts of the National Committee for the Comprehensive Action Plan for School Harmony (2013), an inter-sectoral effort which aims to promote the development of citizenship, school coexistence and human, sexual and reproductive rights at the national level (World Bank, 2021[56]).

In a similar vein, the **Costa Rican** Ministry of Education highlighted the importance of early warning in addressing ESL during COVID-19, as the pandemic intensified risk situations for students and increased the likelihood that they leave education prior to finishing. The first phase of Costa Rica's Early Warning System was launched in 2020, focusing on the creation of a national student register to allow for online enrolment and the centralisation of student records (Rivera Pizarro, 2020[57]; UNESCO, 2021[58]). This enables the Ministry of Education to trace the file of each student and alert actors at different level of the system—from schools, to school leaders, to regional directors—to take appropriate steps to prevent ESL. Further planned expansion of the system will allow it to register and store data on student performance, attendance, and behaviour (Rivera Pizarro, 2020[57]). Overall, the system envisages using predictive

algorithms contextualised with complementary information to quickly identify at-risk students and rapidly address emerging issues before they fully develop.

Brazil's School Active Search strategy (2017) relies on municipal-level inter-sectoral collaboration, with state support, to identify, enrol and monitor disengaged students through a free digital platform and phone application. From 2017, the federal government has funded a network of agents to support national implementation. By July 2020, over 3 160 municipalities had adopted the strategy, with over 60 000 students (re)enrolled. In 2020, guidelines were adapted for the COVID-19 context and the platform continued to be a useful real-time tool to track students (OECD, 2021[59]). These have since been developed into a crisis and emergencies strategy paper for further iterations of the pandemic, as well as natural disasters and other possible emergencies.

National efforts are also underway in other regions to propose holistic approaches

Elsewhere, some efforts at national level emphasise the importance of reaching out to target groups of students in a tailored way that takes a holistic approach to assessing and addressing their needs.

In 2021, **Canada** announced additional funding for its Supports for Student Learning Programme (SSLP) to help ensure that students from key target groups do not face additional challenges because of the pandemic. The SSLP funds programmes that help students with additional barriers to complete secondary education and continue to post-secondary education. This includes Indigenous students, students from minority ethnic backgrounds, students living with disabilities, students from low-income households, and LGBTQ+ students (Government of Canada, 2022[60]).

Since the outbreak of the pandemic, for example, the nationwide Pathways to Education programme has provided a range of academic, financial, social, and one-to-one supports to help students overcome the additional barriers they face in the current climate to ensure COVID-19 does not lead to an increase in drop-out rates. This includes tutoring and tailored study plans that help young people build successful study habits and stay on track with their learning. Programme staff have also connected students with mentors from different professional fields who provide career guidance and advice (Pathways Canada, 2022[61]). A recent evaluation (2022) found that the programme had adapted well to the pandemic, with programme staff making regular contact with young people and their families and providing financial support and online resources (Pathways Canada, 2022[62]). Previous evaluations have highlighted the model's flexible structure—which allows staff to adapt provision to the needs of different target groups—as a key success factor (Employment and Social Development Canada, 2019[63]).

Recent guidelines for **Victoria**'s **(Australia)** School Focused Youth Service (SFYS) draw attention to the possibility that schools may be experiencing higher numbers of students at risk of disengaging from their studies following periods of remote learning in 2021. The programme funds agencies across the state to deliver targeted interventions for primary and secondary students who are currently attending school but who are at risk of disengaging, and provides capacity building for schools to support these students. Common interventions include programmes to address challenging behaviours, team projects to strengthen social and emotional skills and build self-esteem, and targeted programmes aimed at specific cohorts such as young parents. Teachers follow professional development activities tailored to barriers experienced by their students, addressing issues such as how to respond to signs of disengagement and raising awareness of different barriers (State Government of Victoria, 2021[64]).

SFYS works alongside the Navigator programme (2021) which provides more intensive, holistic support for 12-17-year-olds who have less than 30% school attendance, and who have already received additional support from their school. Navigator providers reach out to young people and their families through phone calls, messages and home visits, and deliver intensive case management based on their needs, referring them to other support services where necessary (State Government of Victoria, 2021[65]; Victorian Auditor-General's Office, 2022[66]). Finally, a Staying in Education Dashboard helps schools identify students at risk of disengagement and ESL. This enables school well-being teams to implement school-based

interventions as a first priority or refer students to programmes such as the SFYS or Navigator (State Government of Victoria, 2021[65]).

Some policy lessons emerge on addressing early leaving for 2023

Recent data and analysis from these and other policy experiences to prevent ESL as learners transition through their education pathways offer some lessons to help guide policy makers in 2023.

1. **Monitoring the impact of COVID-19 on ESL requires ongoing investigation to identify hidden or delayed developments.**

Although in many countries, the proportion of early school leavers continued to fall throughout 2020 and 2021, short-term measures implemented in the early stages of the pandemic mean that some students' exit may have been delayed, or that those at risk of drop-out have not yet been identified.

- *Recent **OECD data** indicate that among 25-29 year-olds in 2021, those who had left school prior to attaining an upper secondary qualification were twice as likely to not be in employment, education or training than those who had an upper secondary qualification. Therefore, NEET data can reveal some of the longer-term implications of ESL. By 2021, the share of young adults who are NEET had returned to, or fallen below, pre-COVID levels in about two-thirds of OECD countries. However, longitudinal data reveal the risk of a delayed effect as disruption to learning and disruption to labour markets combine. Following the economic crisis of 2008, the share of unemployed NEET youth peaked in 2013, five years after the initial shock.*
- Research from the **Netherlands** suggests that the cancellation of central examinations during 2020/21 and adjustments to the requirements for progression to the next grade meant that some students who would previously have failed were able to continue their studies but dropped out at a later stage. In this sense, emergency measures may have delayed the point at which some students leave education but did not resolve the underlying issues affecting these students' performance. The pandemic also disrupted admissions and guidance procedures, meaning that some learners may have made poor study choices, making them less likely to complete their course (Dijkgraaf, 2022[42]). The government has instructed the regions to consider the risk factors identified in their impact assessments. Many have already implemented measures to improve guidance and well-being support for learners.
- Teachers in **Denmark** reported that, while in previous years students left their courses throughout the academic year, issues with early leaving tended to manifest only as schools reopened. A possible explanation for this was that teachers were less likely to monitor early warning signs such as poor attendance during periods of distance learning. Distance learning also made it more difficult to have informal conversations about students' study choices, to assess their exam readiness, or to identify gaps in learning (Denmark's Evaluation Institute, 2022[25]). This underlines the importance of keeping early warning systems and data collection practices operating. It also points to a need to ensure that any adjustments to assessment or graduation requirements are accompanied by measures to support students who may not have mastered the competencies they need to succeed in their next step.

2. **Improving the quality and accessibility of data is as important as people's ability to use it.**

Collecting timely and granular data on risk factors that may have intensified needs to be matched with efforts to make it accessible and understandable. Education systems must also strike the balance between protecting sensitive information and providing access to information that supports collaboration.

- *Recent **OECD data** indicate that data literacy is not commonly identified as a core component of teacher training across OECD education systems. In 2021, 21 of the education systems with available data reported requiring content related to research skills development as part of initial*

teacher education for lower secondary teachers. In comparison, academic subjects, pedagogy and teaching practicum were mandatory in 33 education systems (OECD, 2022[10]).

- A recent audit of **Victoria**'s **(Australia)** navigator programme points to a need to collect data over time and to link programme participation data to student attendance and achievement records to monitor the medium-term impact of interventions, and to account for a broader range of factors that may indicate that a student is re-engaging with education (Victorian Auditor-General's Office, 2022[66]).
- A study from the **Flemish Community of Belgium** highlights some of the challenges involved in identifying students who truant occasionally, since they may combine legitimate absences with more problematic ones. A common challenge identified was that information about truants did not follow the student as they moved between schools or support services, meaning that it often took time to address the underlying causes of truancy. Identified solutions include streamlining and clarifying the processes for recording absences in schools and the optimal conditions for early intervention to ensure consistency and comparability between schools. Experiences also point to a need to strengthen teachers' data literacy to improve the way individual schools address truancy. Achieving greater consistency in data use, along with promoting collaboration through learning networks (especially since collaboration across education levels can facilitate an early intervention approach) are potential solutions (Keppens and Spruyt, 2019[67]).
- A solution implemented in **Latvia** involves training educational staff on how to collect, analyse and use data on the risks associated with ESL.
- In the **Netherlands**, the national government supports local and regional actors by conducting its own research into the causes of ESL and is developing a range of dashboards that aggregate regional-level data (Dijkgraaf, 2022[42]).
- In **Brazil**, the School Active Search strategy is accompanied by a freely available, certified, self-study online course for municipal and state level actors. Modules are tailored to the needs of actors with different roles and incorporate a range of multi-media resources (UNDIME et al., 2021[68]).

3. Changing pedagogies is key and requires going beyond structural or procedural change.

Preparing learners for their next step may require teachers and other professionals to develop their pedagogical practices or acquire new competencies. This will be especially important in the current context, as teaching professionals in many countries seek to mitigate the impact of recent unprecedented disruptions on students' learning and well-being.

- *Recent **OECD data** indicate that lessons learnt through the adoption of emergency response measures during the pandemic may be helping to facilitate the integration of digital pedagogies in the longer term. In 2022, 75% of countries with available data reported planning to maintain or further develop enhanced provision of digital training for students, although the share was smaller (52%) for those reporting the same for hybrid learning. These efforts need to be evidence-based and 70% of countries reported that they were undertaking studies to evaluate the effectiveness of distance learning strategies during the pandemic* (OECD, 2022[10]).
- Recent evidence from **Denmark** underlines the relationship between the quality of teaching and learning and the likelihood that learners will remain on their pathway, but suggests that bringing about change in teachers' practices can take longer than implementing structures and procedures. While the structural elements of Denmark's VET reforms had been widely implemented, the evidence suggests there has been less progress towards making teaching more varied, differentiated, and practice-oriented (Slottved et al., 2020[69]). This aligns with the recommendations of the European Commission's framework (see Box 3.1), which highlights the importance of supporting teachers in providing differentiated instruction and creating learning environments that support at-risk pupils.

Supporting refugees to re-enter learning or employment pathways is time-sensitive

Russia's large-scale aggression against Ukraine in 2022 has focused attention on the importance of providing refugees and migrants of all ages with routes into education and training and helping them adjust to changed circumstances. At international level, this has meant the greatest refugee surge to OECD countries since World War II. In September 2022, it was estimated that 5 million people from Ukraine had fled the country. Although many refugees have settled in neighbouring countries, such as Hungary, Poland and the Slovak Republic, countries such as Germany and the Czech Republic have also welcomed large numbers.

A majority of these refugees are women and children, as Ukraine's mobilisation required men aged 18 to 60 to remain in the country. Many of these children are unaccompanied or separated from their families. In July, organisations tasked with child protection as part of the Ukraine refugee response estimated that hundreds of thousands of child refugees were in unknown locations without residency status, hindering their access to basic social services and education (OECD, 2022[70]; OECD, 2022[71]). The specific profile of the Ukrainian refugee population therefore makes the education sector integral to the host countries' response. In addition to providing a sense of security and stability, timely access to education can prevent young learners becoming disengaged from their learning pathways, hence minimising further risks to their future well-being and prospects should they stay in the host country or on their return to Ukraine.

Older displaced learners will also need timely access to education and training opportunities, or qualification recognition processes, that help them transition into further education or the labour market, bridging the gap between qualifications acquired in Ukraine and those recognised in the host country. Identifying and formally recognising the skills and qualifications that refugees bring with them will also be important so that both refugees and host societies can benefit from them. A relatively high share of Ukrainian refugees are tertiary-educated, which could facilitate their adaptation and integration. However, in the shorter term, language barriers and efforts to establish other basic needs may have inhibited their capacity to find jobs that align with their skills and qualifications. Supporting them to participate in education and training opportunities that help them make this transition requires acknowledging that the typical profile of the Ukrainian adult refugee is a tertiary-educated woman, often with accompanying children. This is an important difference from previous refugee crises, such as that experienced in Europe in 2014-17, where refugees were typically lower-educated young men. As such, beyond facilitating the recognition of their skills and qualifications, enabling access for their children to education or childcare services can also facilitate parental integration into the labour market.

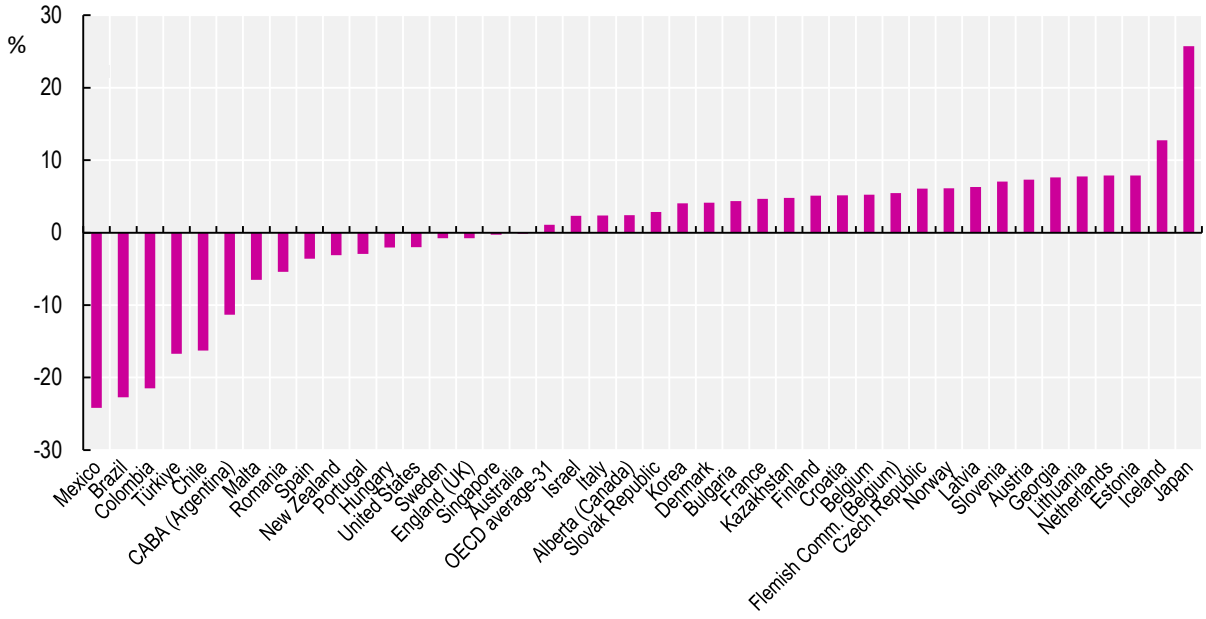
The effective integration of refugees places considerable pressure on public resources, but also on the capacity of actors interacting with refugees on a day-to-day basis. Indeed, an important component of promoting the educational integration of refugee children involves equipping educators with the skills necessary to teach in diverse environments. Figure 3.3 compares the share of teachers in TALIS 2018, who reported a high level of need for professional development in teaching in multicultural or multilingual settings and for whom such training was included in professional development activities, compared to the share of teachers who expressed the same high level of need but for whom such training was not included. On average across countries and economies in this survey, a marginally higher share of teachers reported access to this type of training.

Receiving countries across Europe are implementing emergency measures to provide Ukrainian refugees of all ages with access to education and training and to support educational institutions to meet their needs. This requires an important effort from host countries, notably those with limited experience of integrating refugee learners into their education systems, or who have more limited resources. At the same time, many newly arrived families wishing to return to Ukraine as soon as possible may be less likely to enrol their children in school or to participate in adult learning. Education systems will therefore need to reach out to

these refugees to prevent education rupture and disengagement as families wait to return. The European Commission has recommended that countries develop guidance materials and establish help centres and hotlines to provide information on the education system. Since the situation in Ukraine remains unstable, it is equally important to ensure that short-term measures also support integration over the longer term.

Figure 3.3. Teachers' access to professional development in teaching in a multicultural background or multilingual setting could be enhanced

Teachers who reported a high need for this type of training and receiving it minus teachers who reported a high need for this type of training and not receiving it (TALIS 2018)



Source: OECD (2019[72]), *TALIS 2018 Results (Volume I): Teachers and School Leaders as Lifelong Learners*, TALIS, OECD Publishing, Paris, https://doi.org/10.1787/1d0bc92a-en.

StatLink https://stat.link/zcirx0

Selected policy efforts

As the war in Ukraine endures, groups of refugees are expected to continue to arrive. To support their efforts to settle despite an uncertain context, host governments will need to provide support to meet complex needs in an accessible way. Furthermore, this support will need to evolve as new challenges emerge, remaining flexible and reactive to help address these in a timely manner. For older youth and adults, support to develop skills that can help them access the labour market will bring mutual benefits for host countries and refugees over the mid-, short and longer term.

Policy efforts include meeting the needs of the whole child

The OECD recommends that education systems in host countries consider holistic approaches to support refugee students. Addressing refugee students' learning needs entails providing them with flexible pathways and an early needs assessment of their language skills (both native and host language) as well as wider skills and well-being needs to inform personalised learnings plans. Targeted language support in

both languages matters as well, as does strengthening the capacity of teachers to support the needs of refugee students. Furthermore, host education systems will need to support refugee students more holistically to overcome trauma from war and disruption. This includes providing social and mental health support from early on and ongoing monitoring. Opportunities for identity construction are important as well through, for example, interactions between refugee students and other students, or by involving parents and communities in the integration of refugee students (OECD, 2019[11]; OECD, 2022[70]).

Luxembourg aims to facilitate arrivals for families coming from Ukraine by establishing a single point of contact within the Ministry of Education's Department for the Education of Foreign Children (SECAM). The SECAM meets with children and their families to suggest possible schooling options; parents make the final decision. Most students arriving from Ukraine attend newly established English-speaking reception classes in six international public schools. English is the selected language of instruction since students in Ukraine study it from their third year of schooling. Students then transition to a mainstream class at the same school, adding either German or French as an additional language. Parents can choose to send their child to a municipal school, where they will attend induction courses in German or French. Students aged 3-5 can enrol in ECEC programmes provided by local primary schools. The Ministry of Education has recruited English-speaking teachers for the international schools, and Ukrainian-speaking assistants to support teachers and students. The SECAM has a website with resources and information to support teachers in meeting the needs of newly arrived students (Ministère de l'Éducation nationale, de l'Enfance et de la Jeunesse (MENJE), 2018[73]).

In **Sweden**, a dedicated webpage sets out the procedures for integrating newly arrived students from all countries, while providing specific guidance on supporting Ukrainian learners. Ukrainian learners with a residence permit are not obliged to attend education in Sweden, but municipalities must provide those under 18 with the opportunity to attend if they want to. As such, the National Agency for Education (NAE) and the Swedish Migration Agency organised a series of webinars to support municipalities in planning for the summer and autumn term of 2022. These provided information on reception procedures, forecasts of expected numbers of new arrivals, and examples of good practice. Schools are responsible for carrying out an assessment of new arrivals' previous schooling, as well as their literacy and numeracy skills, within two months of registration, using materials provided by the NAE. Based on this, school principals decide which grade level the student should be placed in and develop an appropriate education plan. A webpage provides information on the Ukrainian education system to support schools in this process (Swedish National Agency for Education [Skolverket], 2022[74]). As in Luxembourg, some newly arrived students are initially taught in separate introductory classes but must transition to mainstream classes as soon as they develop language proficiency, and at least within two years. The NAE also provides support for the reception of newly arrived children at ECEC level.

Since many new arrivals from Ukraine wish to return home as soon as possible, receiving countries should provide opportunities for learners to maintain their mother tongue or follow subjects in the Ukrainian curriculum (OECD, 2022[70]). Following the Russian invasion, the **Czech Republic** collaborated with the Ukrainian embassy to provide primary and lower secondary students with distance learning based on the Ukrainian curriculum. This takes place alongside students' gradual integration into mainstream education. Another collaborative project provides textbooks and other teaching materials from Ukraine to participating schools and has established a database to support schools' recruitment of Ukrainian teachers and Czech volunteers (UNESCO, 2022[75]). In June 2022, the Ministry of Education, Youth and Sports announced funding for intensive holiday language courses for students arriving from Ukraine to support students' transitions to mainstream education and prevent drop-out. Some 406 of these courses were implemented in the summer of 2022 and could be taken at any time during the day to provide families with greater flexibility (Czech Ministry of Education Youth and Sports, 2022[76]).

These reception efforts require an important investment from educators catering to refugee students. With this in mind, the **Slovak Republic**'s National Institute of Education (SPU) has implemented several measures to support teachers and education institutions in meeting the language and social-emotional

needs of Ukrainian refugee students. This includes a series of webinars and online discussion events that began in March 2022. One webinar, for example, introduced a peer support framework to facilitate the social integration of new arrivals, drawing on experiences from the Slovak Republic and the Czech Republic, while a discussion at the end of the 2021/22 school year aimed to support teachers to assess Ukrainian students' learning, taking account of the differences in the two countries' education systems (National Institute for Education in the Slovak Republic, 2022[77]; National Institute for Education in the Slovak Republic, 2022[78]; UNESCO, 2022[79]).

Following an agreement signed in May 2022, SPU is also collaborating with UNICEF in a project aiming to increase institutional capacity for planning, implementing and monitoring the integration of Ukrainian students. The project will provide counselling, support, and professional development to teachers and school leaders, as well as Slovak language training and certification for teachers from Ukraine (Ministry of Education, Science, Research and Sport of the Slovak Republic, 2022[80]; National Institute for Education in the Slovak Republic, 2022[81]). **Sweden**'s National Agency for Education has also organised professional development activities and produced online resources to support municipalities and teaching professionals to provide education for newly arrived learners from Ukraine.

Recognising previous skills and qualifications can facilitate access to appropriate learning and work opportunities

Although the current cohort of Ukrainian refugees appears to be highly educated, both relative to other refugee populations and to the general Ukrainian population, research suggests that when highly educated refugees are forced to look for work abroad, host markets tend to devalue foreign qualifications, introducing unnecessary barriers to training and work (OECD, 2022[82]). This system rigidness can have longer-term implications for refugees, their families, and societies, who fail to benefit from refugees' existing available skills, or nurture them into new skills.

In April 2022, the European Commission adopted the *Recommendation on the Recognition of qualifications for people fleeing Russia's invasion of Ukraine* providing guidance and practical advice to ensure a quick, fair and flexible recognition process for academic and professional purposes. The *Recommendation* calls for member states to quickly adapt existing skills and qualifications recognition to the needs of Ukrainian refugees. Where the minimum training requirements are not met, the recommendation calls for support packages to be provided, such as language courses, supervised practice and considering informal and non-formal skills and competences (European Commission, 2022[83]).

To support Ukrainian refugees' access to European higher education institutions, guidelines on fast-track recognition of Ukrainian academic qualifications (2022) aim to support the implementation of this recommendation. These include an up-to-date description of Ukraine's education system and detailed information on the types of Ukrainian educational qualifications, along with guidance to help higher education institutions interpret them and verify their authenticity (European Commission, 2022[84]). In the same way, research by the European Commission indicates that 13 of its Member States have systematically used the Toolkit for the Recognition of Refugees' Qualifications developed by the National Academic Recognition Information Centres of several countries in the region prior to 2022, but updated for the current context. This toolkit includes principles, tools and approaches for the implementation of fair, accessible and transparent recognition procedures (European Commission/EACEA/Eurydice, 2022[85]). In 2022, a country briefing with detailed information on the conflict in Ukraine was added, as well as an online library of resources to support academic and professional institutions to assess educational qualifications from the Ukrainian system.

Experiences from previous crises can help inform new actions in the wake of new crises. In 2022, **Germany** has made efforts to enhance its qualification and skills recognition procedures for refugees to meet the needs of newly arrived Ukrainian refugees. These measures build upon Germany's Recognition Act (2012), which legally entitled all migrants to such procedures, regardless of status. Five years after its

implementation, the number of recognition processes more than doubled to almost 25 000, including a substantial increase for refugees. For the arriving Ukrainian population specifically, over 6 200 recognition procedures had been approved between 2016 and 2020, particularly for sectors with skills shortages, such as health and nursing. In addition, the Federal Employment Agency (BA) also developed the MySkills (2017) computer-assisted tests offered by all Public Employment Services, which also provide feedback and follow-up advice (OECD, 2020[86]). This platform contains tests for 30 professions in six languages, including Russian. By mid-2022, the national online portal for foreign professional qualifications held information on over 130 Ukrainian professional profiles, including content, duration and the learning locations of the formal training courses. This information was being greatly expanded and supplemented throughout 2022 (Werner et al., 2022[87]).

In **Latvia**, which has welcomed over 1 300 students into its school system, new legislation introduced in March 2022 facilitates the integration and progression of Ukrainian minors into and through the national education system. Students from grades 1-8 and 10-11 can be transferred to the next class without conditions while students in grades 9 and 12 who pass the relevant examinations will receive an educational certificate, attestation or diploma. Ukrainian refugees under 18 years old are also exempt from having to pass the state examination to access their vocational programme. Latvian universities are opening additional study places to accommodate for refugee students; those who should have sat upper secondary examinations in 2022 before entering tertiary education are exempted from the examinations in Latvia (UNESCO, 2022[88]).

Providing vocationally oriented support is an important tool to support refugees' integration into the labour market

Evidence collected by the OECD points to the possible benefits of Ukrainian refugees participating in VET programmes, regardless of how long they stay in the host country. Well-designed VET programmes can help those who choose to stay to acquire skills that help them access the labour market. They can also support social integration and language acquisition by giving migrants opportunities to develop their skills in real-world settings. At the same time, the technical skills refugees acquire in VET will be useful for the reconstruction of Ukraine; interruptions to VET during war years means essential skills may subsequently be in short supply.

However, new arrivals may be unfamiliar with VET or its benefits. They may also experience barriers to participation, such as poor language skills or unfamiliarity with different professions or work environments. As such, host countries will need to provide targeted and personalised information and guidance for those arriving from Ukraine. VET transition programmes available in some countries aim to provide language skills and help newcomers build social networks and familiarity with the host country's labour market (OECD, 2022[89]).

For example, **Germany**'s Youth Migration Services (JMD) have adapted their offer of activities to support the social, professional, and educational integration of migrants aged 12-27 in order to meet the needs of those arriving from Ukraine. Their online portal now includes email and chat services in languages such as Russian and English. Face-to-face or online counselling in Ukrainian via a national network of over 500 JMD centres is also available to them, along with training courses and practical support with issues such as finding an apprenticeship (Jugend Migrations Dienste (JMD), n.d.[90]; Jugend Migrations Dienste (JMD), n.d.[91]). Those past the age of compulsory schooling can access VET preparation courses, which integrate job-specific language training, specialist knowledge, work-based learning opportunities and personalised support. Participants take part in practical workshop days where they can try different professional pathways to see which best suit their skills and interests at the same time as learning about the structure and content of dual training in that field. Courses are also offered part-time, enabling those with young children to combine training with caring responsibilities. (Bundesinstitut für Berufsbildung, n.d.[92])

For the older population, **Sweden**'s fast-track programme provides an example of how countries can support adult migrants' entry into the labour market and training while addressing skills shortages in key sectors. The programme, established in 2015, aims to provide quick routes into employment to newly arrived migrants with skills or experience in fields with labour shortages. It is based on agreements between Sweden's Public Employment Service (PES), employers, and trade unions that help to ensure the programme meets the demands of the labour market. The agreements currently cover 30 skills deficit professions in fields such as teaching, the social sciences, the medical profession, electronics, and carpentry. The PES reviews an applicant's previous skills and designs a pathway that may involve certification and validation of prior experience, work-based learning, language training or tailored professional or academic training.

The latest progress report (Swedish Public Employment Service, 2019[93]) highlights key factors that contribute to participants' successful transition to training or employment that matches their previous skills, as well as key obstacles. One key success factor was the participation of employers who could offer participants work placements in their field. In many cases, this led to employment. The report also points to the importance of validating prior skills as early in the process as possible, regardless of participants' language level, since this enabled participants to complete professional training alongside language training. Fast-track was implemented during a period where large numbers of refugees were arriving in Sweden, and participation rates have declined in line with the number of new arrivals. In 2021, 332 people started a fast track, of which 170 were women and 162 were men. Compared with October 2017, a total of 5 316 people had started a fast track since January 2016. Of them, 30% were women and 70% were men.

Ukrainian adults benefiting from the EU's Temporary Protection Directive have an immediate right to work in Sweden and can register with the PES to get their competencies mapped. This system benefits employers looking for labour as well as new arrivals seeking to understand which jobs best suit them. As of October 2022, some 2 000 individuals from Ukraine were registered with the Swedish PES (Swedish Public Employment Service, 2022[94]).

Some policy lessons emerge on supporting refugees to re-enter a learning pathway for 2023

Recent data and analysis from these and other policy experiences to support foreign learners to re-enter an education pathway offer some lessons to help guide policy makers in 2023.

1. **Considering the impact of system-level policies on refugees supports mid-term integration.**

In the short term, some high-impact policy efforts previously identified by the OECD include providing language instruction, offering high-quality ECEC, reaching out to parents, and supporting teachers to prepare for diverse classrooms. Moving towards the mid-term, governments should be careful to avoid concentrating immigrant or refugee students in the same disadvantaged schools and reconsider how system-level policies (e.g. ability grouping, tracking, grade repetition) may affect integration (OECD, 2015[95]).

- *Recent **OECD data** highlight the role funding arrangements may play. In pre-primary education across the OECD, a large share (51%) of initial funds come from regional or local levels of government; this rises to 57% among European Member States* (OECD, 2022[10])*. As refugees likely settle in concentrated areas (e.g. border regions, capital regions or regions with pre-existing Ukranian communities), the pressure on public finances to meet the growing demand for pre-primary education will be disproportionately felt within education systems. Governments may need to reconsider public subsidies of central transfers to alleviate the strain and ensure the youngest Ukrainian refugees can access learning.*

- In **Sweden**, experience from previous refugee waves has brought about some changes to legislation regarding how refugee learners are received in the system, in an effort to reduce the risk of longer-term segregation. Prior to 2016, municipalities could place newly arrived children in separate reception classes for an indefinite period, sometimes reaching up to three years. Through legislation passed in 2016, students are considered as newly arrived for up to 4 years after arrival but cannot be in *preparatory classes* for more than 2 years, and these should be alternated with regular teaching classes. It has been found that shorter immersion periods need to be combined with longer support in regular classes (Crul et al., 2019[96]).
- At the same time, consideration needs to be given to system-level policies that may disproportionately affect refugees on their arrival in host education systems. In systems with early selection, such as **Germany**, if not supported by timely and sound support to develop language proficiency, refugee students can become over-represented in VET (Crul et al., 2019[96]).

2. Promoting broader collaborations can foster more sustainable support.

Since February 2022, governments have very rapidly undertaken significant efforts to ensure education continuity for refugee students arriving from Ukraine. Moving forward, strengthening collaboration with different actors—including parents (and particularly mothers, given the profile of the Ukrainian refugee population), employers, or the community at large—to support the transitions of refugee learners will help sustain these efforts over the mid- to longer term.

- *Recent **OECD data** show that during the COVID-19 pandemic, community mobilisation campaigns to bring primary-upper secondary students back to school were implemented in 8 countries in 2021/22* (OECD, 2022[10]). *With the exception of Latvia, none of these were countries currently experiencing an influx of Ukrainian refugees. However, their experiences may offer valuable lessons for countries looking to implement such measures in 2023.*
- Promoting parental figures as points of contact has been a growing practice in some education systems. In **Germany**, the role of "Neighbourhood Mothers" has extended across the country, with similar programmes also implemented in Denmark and the Netherlands (UNHCR/UNICEF/IOM, 2019[97]). Through this role, voluntary women from immigrant backgrounds receive training to become contact and resource persons to newly arrived families. In **Denmark**, for example, neighbourhood mothers receive a manual and face-to-face training which address aspects such as the everyday life of children and youth in Danish society (Bydelsmødre, n.d.[98]).
- Broader dialogue and collaboration with employers needs to continue in order to provide more realistic and relevant opportunities for employment or certification in the host country. Experiences from **Sweden** point to some of the obstacles that can prevent refugees and migrants from finding a job that matches their existing qualifications and professional experience. In fields such as teaching, catering, and healthcare, a combination of language barriers, longer qualification periods and a strong labour market meant that some fast-track participants chose employment in less qualified roles (e.g. qualified teachers working as teaching assistants). According to a recent report, participants' capacity to achieve certification in their field while working in a less qualified role depends on the employers' commitment and the study opportunities they provide. Policy makers can also create opportunities for part-time study or distance learning to enable newcomers to combine study with work (Swedish Public Employment Service, 2019[93]).
- **Denmark** launched the longstanding "We Need All Youngsters" campaign (2003-18), with the aim of promoting representation of role models for migrant and refugee children in the education system in Denmark (School Education Gateway, n.d.[99]; School Education Gateway, n.d.[100]). Youth aged 13-20 years old from migrant origins and disadvantaged backgrounds were the key target of this initiative, which included activities such as homework cafés, social entrepreneurship activities, educational counselling, or parental engagement activities. As a result of the campaign, most projects were able to reach their targets, and demonstrated an improvement in participants' social,

personal and education skills. Identified challenges included a need to avoid having too many actors in the same area, so projects do not try to reach out to the same group simultaneously. It was also acknowledged that real change—such as establishing and sustaining youth and parental engagement—takes time.

Policy pointers to move forward

In 2023, as governments continue to face the implications of local and global change and disruption in 2020-2022, undergoing policy efforts provide guidance on steps they could take to strengthen transitions through learners' pathways. Key messages of policy lessons mentioned earlier in this chapter follow below.

Strengthening connections in learners' pathways

1. **Embed broader supports to help address longer-term disruptions to transitions.** In recognition of the longer-term repercussions of the pandemic experience on learners of all ages, policy makers need to enhance and systemise support mechanisms provided in the early stages of the pandemic to strengthen connections across learners' pathways. Moreover, these supports will need to take account of the full breadth of impact that the pandemic has had on learners, beyond learning losses.
2. **Create the conditions for effective collaboration to increase the longevity of emerging good practices.** Recent policy efforts to facilitate students' transitions reflect the growing recognition of the importance of professional collaboration. However, many education systems or institutions have evolved in ways that create barriers to collaboration, making such practices resource-intensive for education professionals. Policy makers need to ensure professionals have the time, guidance, and resources to make collaboration a success.

Preventing learners from leaving early

1. **Monitor the impact of COVID-19 on ESL through ongoing investigation to identify hidden or delayed developments.** Although in many countries, the share of early school leavers continued to fall throughout 2020 and 2021, short-term measures implemented in the early stages of the pandemic mean that some students' exit may have been delayed, or that those at risk of drop-out have not yet been identified. Policy makers need to take into account this hidden or delayed potential ESL.
2. **Improve the quality and accessibility of data, which is as important as people's ability to use it.** The data that is collected is as useful as its accessibility and the capacity of actors to engage with it. Collecting timely and granular data on risk factors needs to be matched with making it accessible and understandable. Education systems must also strike the balance between protecting sensitive information and providing access to information that supports collaboration to prevent ESL.
3. **Prioritise changing pedagogies, going beyond structural or procedural change.** Preparing learners for their next step may require teachers and other professionals to develop their pedagogical practices or acquire new competencies. This will be especially important in the current context, as teaching professionals in many countries seek to mitigate the impact of recent unprecedented disruptions on students' learning and well-being.

Supporting foreign learners to re-enter a learning pathway

1. **Consider the impact of system-level policies on refugees to support mid-term integration.** In the short term, some high-impact policy efforts previously identified by the OECD include providing language instruction, offering high-quality ECEC, reaching out to parents, and supporting teachers to prepare for diverse classrooms. Moving towards the mid-term, governments should be

careful to avoid concentrating immigrant or refugee students in the same disadvantaged schools and reconsider how system-level policies may affect integration.

2. **Promote broader collaborations to foster more sustainable support to refugees**. Since February 2022, governments have very rapidly undertaken significant efforts to ensure education continuity for refugee students arriving from Ukraine. Moving forward, strengthening collaboration with different actors—including parents (and particularly mothers, given the profile of the Ukrainian refugee population), employers, or the community at large—to support the transitions of refugee learners will help sustain these efforts over the mid- to longer term.

Table 3.1. Selected education policies and practices on easing transitions along learners' personal pathways

Strengthening connections in learners' pathways		
Australia – Higher Education Participation and Partnerships Programme (HEPPP, 2010); University responses to enhancing equity in the post-COVID landscape (2022) **New South Wales (Australia)** – Guidance for ECEC professionals to support transitions during COVID-19 (2021)	**French Community of Belgium** – Common curriculum for primary and lower secondary education (2022); Qualifying Education Pathway (PEQ, 2022) **Denmark** – VET reforms (2015); Measures to support VET students' transitions following closures (2021) **Finland** – Higher education admissions reform (2018-20); Alternative Pathway to University (2019-21)	**Japan** – Compulsory Education Schools (2016); Super Science High School (2002); Global Science Campus (2017); Five-year plan for start-up and entrepreneurship education (2022) **Norway** – Framework Plan for the Content and Tasks of Kindergartens (2017)
Preventing learners from leaving early		
Victoria (Australia) – School Focused Youth Service (SFYS, 2013); Navigator (2021) **Flemish Community of Belgium** – Together Against School Dropout (2016; 2022); Transition Pathway (2022); Action research on early school leaving (2022) **Brazil** – School Active Search Strategy (2017)	**Canada** – Additional funding for Supports for Student Learning Programme (SSLP, 2022) **Chile** – Early Warning System (2019) **Colombia** – Information System for the Monitoring, Prevention, and Analysis of School Leaving (SIMPADE, 2012); Comprehensive Action Plan of School Harmony (2013)	**Costa Rica** – Early Warning System (2020) **Latvia** – Tackling Early School Leaving (2017) **Netherlands** – Regional approach to addressing early school leaving (2005)
Supporting refugees to re-enter a learning pathway		
Czech Republic – Collaboration with the Ukrainian government to support Ukrainian language and curriculum provision (2022); Intensive holiday language courses for students arriving from Ukraine (2022) **Denmark** – Neighbourhood Mothers (2008); We Need All Youngsters (2003-18)	**European Commission** – Recommendation on the Recognition of Qualifications for People fleeing Russia's invasion of Ukraine; Fast-Track Recognition of Ukrainian Academic Qualifications **Germany** – Neighbourhood Mothers (2004); Recognition Act (2012); MySkills (2017); VET preparation courses for migrants (2019); Youth Migration Services for arrivals from Ukraine (2022)	**Luxembourg** – Helpdesk for students and families arriving from Ukraine (2022) **Slovak Republic** – Measures to support teachers and school leaders in integrating students from Ukraine (2022) **Sweden** – Fast-track (2015); Measures to support municipalities and schools receiving students from Ukraine (2022)

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4 Nurturing learners' aspirations through outreach, perspective and agency

The current context, which anticipates the continuation of important labour market transformations, adds momentum to the long-recognised need for policy to guide and support career aspirations for learners and workers, young and old. Looking towards 2023, this chapter proposes options for policy makers to develop strategies for this through: *outreach* (efforts of governments, private sector and civil society to engage with target populations to inform their aspirations or guide them back to education or training), *perspective* (the strategic use of realistic and relevant information on education, training, and employment opportunities to modify the perceptions of a target population) and *agency* (interventions that aim to develop learners' capacity to identify and capitalise on the opportunities provided by the education system and labour market, and to create their own opportunities, in order to bring their aspirations to fruition). Lessons are synthesised into key policy pointers.

In Brief

Nurturing learners' aspirations through outreach, perspective and agency

In 2023, governments need to further support learners and workers to gain realistic, relevant and ambitious aspirations to navigate change. Learners also need to be able to take steps to turn these aspirations into reality. However, aspirations are shaped very early on in a learner's journey and are narrowed by disadvantage. The current context, which anticipates the continuation of important labour market transformations, therefore adds momentum to the long-recognised need for policy to nurture learners' aspirations, enhancing career guidance for learners and workers, young and old.

Infographic 4.1. Nurturing learners' aspirations

	Key messages	Emerging policy pointers
Nurturing learners' aspirations through outreach, perspective and agency	**Outreach** strategies can help engage target learners in education, training or work opportunities	• **Combine** datasets and monitoring eligibility to help identify target groups more effectively • **Design** special incentives to help engage those hardest to reach • **Curate** information for different actors and their needs to enhance impact
	Learners' **perspectives** need to be enriched and expanded from an earlier age	• **Shift** younger learners' perspectives by shifting those of the adults in their lives • **Upskill** teachers/guidance professionals to positively shape young people's aspirations • **Engage** employers in career education by creating the right conditions • **Reiterate** action to shift perspectives across the life cycle as learners' needs and contexts evolve
	Learners need **agency and co-agency** to identify and capitalise on opportunities	• **Consider** that some younger learners may need additional support to develop professional behaviours • **Give** additional time to some individuals who may need it more to develop agency • **Provide** practical tools to motivate and empower individuals with longer unemployment periods to support their resilience

Key messages emerging from this chapter

1. ***Outreach strategies can help engage target learners in education, training or work opportunities.***

Younger workers were over-represented in the sectors most affected by the pandemic, and were more likely to be on temporary contracts. While youth unemployment across OECD countries had been in decline in the decade prior to the pandemic, the weighted average unemployment rate among 15-29 year-olds increased from 8.6% at the end of 2019 to 11.5% at the end of 2020. Yet OECD data from 2021 suggest that outreach and registration challenges in the early stages of the COVID-19 crisis may have contributed to a further decline in the share of young people registering with employment services. Beyond the data, previous policy analyses indicate that target populations do not always use career guidance or employment services even when in place, skills policies often fail to reach higher-risk adults, and outreach efforts are underdeveloped.

Countries have been implementing measures to support young people who have fallen out of work, education, or training since 2020. One approach to the outreach challenge involves providing learners in compulsory education with regular career learning and planning opportunities, from an early age.

Many countries and economies are developing or revising inter-sectoral youth strategies, often with a focus on strengthening employment services, career guidance, and training and upskilling opportunities.

Analysis from recent policy efforts undertaken mostly since 2020 point to some **emerging lessons** that can help governments improve their outreach to learners for 2023:

- Combining datasets and monitoring eligibility helps identify target groups more effectively.
- Designing special incentives can help engage those hardest to reach.
- Curating information for different actors and their needs enhances impact.

2. ***Learners' perspectives need to be enriched and expanded from an earlier age.***

Students' perspectives for the future can be distorted by stereotypical thinking from the youngest age. As they grow, their perspectives of educational and employment opportunities can be narrow and outdated. Overcoming self-limiting perspectives is also even more crucial in contexts of crisis and change, where particularly the most disadvantaged can be at risk of making biased decisions with longer-term implications for their future career pathways. In PISA 2018, 93% of school leaders reported that career guidance was available in their school. However, in some of these countries and economies, no single delivery method of delivery at school dominates, which may inhibit the system's ability to ensure efforts reach all learners.

Policy efforts identified for this analysis to enrich and expand learners' perspectives focus on enhancing career guidance from primary education level, either as part of wider national frameworks, or as part of deliberate efforts to overcome barriers to participation, including in high-priority science, technology, engineering and mathematics (STEM) pathways.

Analysis from recent policy efforts undertaken mostly since 2020 point to some **emerging lessons** that can help governments improve their efforts to enrich and expand learners' perspectives for 2023:

- Shifting younger learners' perspectives requires shifting those of the adults in their lives.
- Upskilling teachers/guidance professionals can positively shape young people's aspirations.
- Engaging employers in career education can be encouraged by creating the right conditions.
- Shifting perspectives requires reiterated action across the life cycle as learners' needs and contexts evolve.

3. ***Learners need agency and co-agency to identify and capitalise on opportunities.***

As educational pathways become more flexible, and labour markets experience short-term disruptions and longer-term transformations, learners' agency is critical in ensuring that they continue to reflect and act upon their changing aspirations and opportunities, as well as engaging in lifelong learning.

Policy efforts analysed in this report include some efforts to help strengthen social capital, or more holistic interventions that address more complex barriers to employment or education, including non-vocational barriers. At the same time, these policies suggest that some individuals or groups may benefit from more targeted or specific measures.

Analysis from recent policy efforts undertaken mostly since 2020 point to some **emerging lessons** that can help governments improve their efforts to develop learners' agency for 2023:

- Younger learners may need support in developing professional behaviours.
- Some individuals need more time than others to develop agency.
- Motivating and empowering individuals with longer unemployment periods through practical tools can support resilience.

Introduction

In 2023, governments need to further support learners and workers to develop realistic, relevant and ambitious aspirations to navigate change. Learners also need to be able to take steps to turn these aspirations into reality.

Despite the current tight labour markets, in many countries, the job losses associated with the pandemic disproportionately affected young workers, often on more precarious contracts and in hard-hit sectors, while the entry-level professions in which young people are concentrated are at greatest risk of automation (Nedelkoska and Quintini, 2018[1]; OECD, 2021[2]). In addition, the fiscal pressures associated with ageing populations and a concurrent decline in fertility rates mean workers will remain in the labour market for longer. But older adults may experience additional challenges finding work or changing paths, and are at risk of skills obsolescence as societies strive to transition to greener, digital economies. They may also be less predisposed to investing in adult learning (OECD, 2020[3]). Across all OECD countries, regardless of survey method, adults' participation in non-formal education and training decreases with age. The same is true for enrolments in formal tertiary programmes: an OECD adult aged 25-29 years old is 12 times more likely to be pursuing a tertiary degree than one aged 40-64 years old (OECD, 2022[4]). These challenges have been exacerbated by the pandemic, which sped up longer-term trends towards a digital transformation.

The emerging global energy and food crisis, brought about by Russia's illegal war against Ukraine, adds to the challenges facing education systems (see Chapter 1). This current context, which anticipates the continuation of important labour market transformations, adds momentum to the long-recognised need for policy to enhance career guidance for learners and workers, young and old. Contexts of change and disruption can lead individuals to make poor assessments of risk and reward and take decisions that could negatively affect their future careers (Biddle, 2021[5]). Disadvantaged people, who are already less likely to have aspirations that match their abilities or the needs of the 21st century job market, and whose educational choices may be constrained by financial or social barriers, are also at greater risk of making decisions that are either biased or based on stereotypes (Biddle, 2021[5]; Mann et al., 2020[6]). Disadvantaged students participating in PISA 2018 were less likely to aspire to getting a tertiary education than their advantaged peers, but also less likely to exhibit a growth mindset (i.e. disagreeing or strongly disagreeing that "your intelligence is something about you that you can't change very much"). This is important as students holding a growth mindset establish more ambitious academic goals for themselves, ascribe greater importance to school and are more likely to report a stronger belief in their general capabilities (OECD, 2019[7]). On average in PISA 2018, students reporting a growth mindset performed 32 score points higher in reading compared to their peers not reporting it, even after controlling for socio-economic background.

Meanwhile, OECD surveys across different age groups illustrate that learners shape their aspirations from a very early age. In 2018, when asked what future career they aspire to, 5-year-olds and 15-year-olds gave very similar answers, with four of the top ten responses for girls aligning across the age groups, and the same for boys (Mann et al., 2020[6]; OECD, 2021[8]).

In response to the need for education systems to better nurture learners' aspirations, various policy options are available including providing guidance and information via compulsory education, targeting extra efforts to groups who are most likely to benefit, and adult learning specifically targeting older workers. Whatever the selected policy intervention, a focus on strengthening learners' aspirations to make them more coherent and well-informed will be important. This requires that education policy makers develop strategies focused on:

- **Outreach:** this refers to the efforts of governments, the private sector and civil society to engage with target populations to inform their aspirations or guide them back to education or training.

- **Perspective:** this involves the strategic use of realistic and relevant information on education, training and employment opportunities to modify the perceptions of a target population.
- **Agency:** this encompasses interventions that aim to develop learners' capacity to identify and capitalise on the opportunities provided by the education system and labour market, as well as creating their own opportunities, in order to bring their aspirations to fruition.

For each of these areas, this chapter analyses selected emerging policy initiatives, principally across OECD education systems. As in previous chapters, this analysis leads to some lessons of interest to guide policy makers' efforts in 2023 (see Table 4.1 at the end for the list of policies and practices included in this chapter). Lessons are then synthesised into key policy pointers for the longer term.

Outreach strategies can help engage target learners in education, training or work opportunities

In 2021, in the context of strengthening system-level responsiveness and resilience in education, the Education Policy Outlook asked for critical and courageous reflection on the following question: what if students' futures were no longer defined by students' backgrounds? (OECD, 2021[9]). Outreach—an education system's capacity to access and engage with target populations to inform educational or professional aspirations, or guide them back to education or training—is critical to achieving this.

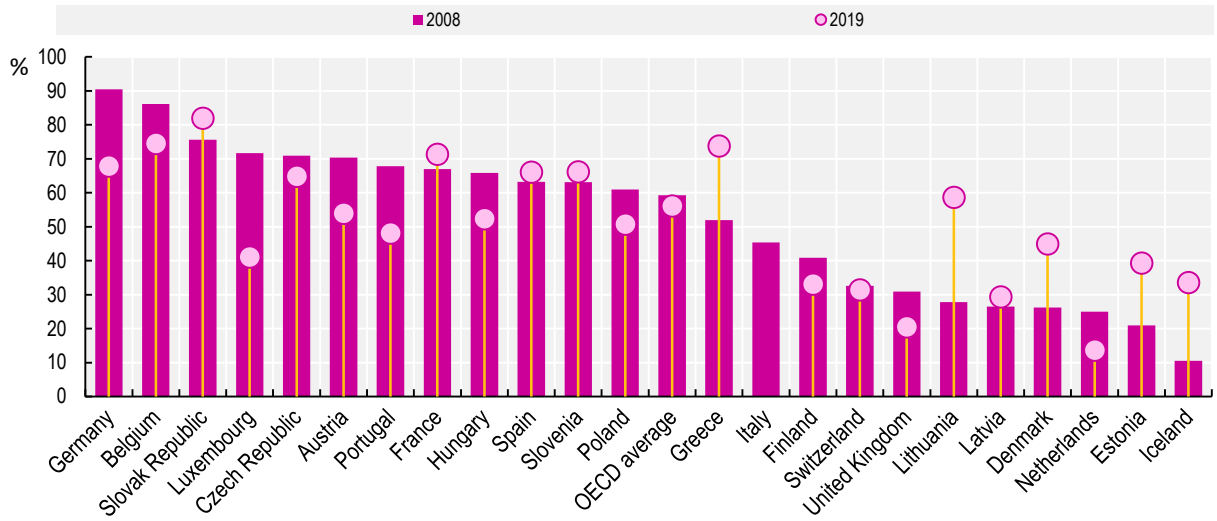
The capacity to aspire is unequally distributed across society: the more disadvantaged or marginalised a young person is, the less access they have to quality information and support regarding educational and professional opportunities (Mann, Denis and Percy, 2020[10]). If education systems fail to break this link in the earliest stages of education, inequalities will likely endure, or even intensify, as those young people move through education and into work. At the individual level, this can negatively impact students' efforts in school and their insertion into the labour market; at societal level, it can prolong or reduce education completion, increase the share of young people not in employment, education or training (NEETs) and inhibit social mobility (Covacevich et al., 2021[11]; OECD, 2019[12]).

Current contexts of disruption and change, along with longer-term evolutions, intensify the need for outreach to help people upskill, reskill and access future-relevant programmes. As illustrated by the current and previous crises, disadvantaged or marginalised young people are more vulnerable to economic and societal shocks. Younger workers were over-represented in the sectors most affected by the pandemic, and more likely to be on temporary contracts (OECD, 2021[2]). While youth unemployment across OECD countries had been in decline in the decade prior to the pandemic, the weighted average unemployment rate among 15-29 year-olds increased from 8.6% at the end of 2019 to 11.5% at the end of 2020 (OECD, 2021[13]).

Nevertheless, OECD data indicate that many young people do not have access to key career guidance opportunities. On average across the OECD, the share of unemployed 15-29 year-olds registered with the public employment service decreased between 2008 and 2019, with considerable declines in several European countries (see Figure 4.1). OECD data from 2021 suggest that outreach and registration challenges in the early stages of the COVID-19 crisis may have contributed to a further decline in the share of young people registering with employment services (OECD, 2021[13]). Among younger students, PISA 2018 data reveal that on average across participating OECD countries, disadvantaged 15-year-olds are less likely to have the opportunity to engage in career exploration (e.g. career conversations, job fairs worksite visits) despite longitudinal data indicating that career development activities at this age are associated with better employment outcomes (Covacevich et al., 2021[11]). Disadvantaged students are also more likely to misalign education and career expectations (OECD, 2019[12]). Beyond the data, previous policy analyses indicate that target populations do not always use career guidance or employment services

even when in place, skills policies often fail to reach higher-risk adults, and outreach efforts are underdeveloped.

Figure 4.1. The share of unemployed youth registered with public unemployment services has decreased



Source: OECD (2021[13]),"What have countries done to support young people in the COVID-19 crisis?", *OECD Policy Responses to Coronavirus (COVID-19)*, OECD Publishing, Paris, https://doi.org/10.1787/ac9f056c-en.

StatLink https://stat.link/q73nsx

Selected recent policy efforts

The lockdowns and economic instability of the last three years have increased the need for governments to build on lessons learnt from previous outreach experiences, and to harness new approaches and tools that enhance flexibility. Countries have been implementing measures to support young people who have fallen out of work, education, or training due to the COVID-19 pandemic. These outreach efforts require strategic and concerted efforts from a variety of actors (e.g. governments, private sector, civil society) to provide adapted support to youth at risk of disengagement from education, training or work. These new efforts can also provide lessons to move forward in 2023.

Countries and economies need to reach out to learners from a younger age to inform their first and future aspirations

One approach to the outreach challenge involves providing learners in compulsory education with regular career learning and planning opportunities, from an early age. Compulsory education has a democratising effect, and embedding career guidance early on can reduce the need for outreach strategies later. This is important because once young people have fallen out of the system, they are much harder to re-engage (OECD, 2019[12]).

In **New Brunswick (Canada)**, the Future Ready Learning K-12 strategy (2019) aims to embed evidence-informed career education practices from ECEC through to upper secondary education. The strategy takes a whole-school approach to career learning, recognising the important role all adults play in influencing young people's ideas about careers. The strategy draws on insights from a review of best practice in career education and interviews with educators, parents, current school students, and adults (2013-15). This evidence highlighted a need to develop basic career and labour market awareness among all teachers

and to make intentional efforts to integrate careers education from grade 5 onwards while including labour market themes in all subjects (Canadian Career Development Foundation, 2015[14]).

To facilitate implementation, a series of online modules supports teachers of all subjects and grades to embed career development practices. Examples include social-emotional learning, experiential learning, making use of labour market information, and career planning. Some address the specific needs of at-risk students, such as those from a migrant background. Furthermore, a personal development and career planning course for students in grades 9 and 10—a graduation requirement for all students—enables staff to offer more individualised support to target learners (OECD, n.d.[15]). Established shortly before the pandemic, evidence suggests students' and teachers' engagement with the platform grew significantly during the first year of implementation, and that many continued to use the platform in the early stages of the COVID-19 pandemic (Berry, 2021[16]). The use of digital tools likely facilitated this.

Many countries and economies are relying on inter-sectoral youth strategies to reach out to disengaged youth in a more intentional way

Disruptions to learning in the early stages of the pandemic may have led some vulnerable young people to fall off their education or training pathway (see Chapter 3). In response, many countries and economies are developing or revising inter-sectoral youth strategies, often with a focus on strengthening employment services, career guidance, and training and upskilling opportunities.

For example, in 2020, EU member states reinforced their commitment to ensure that all young people under 30 receive a good-quality offer of employment, continued education, apprenticeship, or traineeship within four months of leaving employment or education. This builds on the Youth Guarantee (2013) by extending the target group to include 25-29 year-olds and requiring member states to develop targeted, individualised measures for vulnerable groups (European Commission, n.d.[17]).

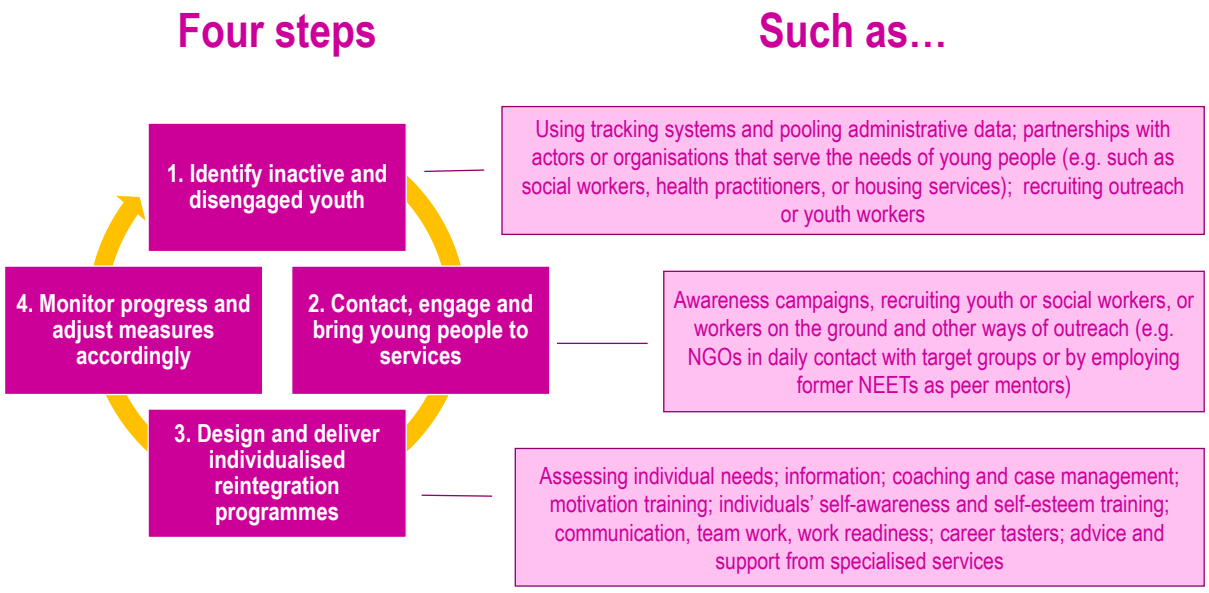
Implementation experiences from the Youth Guarantee (2013) point to a need to improve outreach to NEETs who do not receive support from any public service providers and are therefore 'off the radar' (ILO, 2017[18]). Analysis of implementation plans revealed that few included explicit outreach measures. Furthermore, the authors urge governments to adopt identification approaches that take the whole life situation of the most vulnerable young people into account. This may involve engaging actors outside of the education and employment sectors, as more holistic outreach approaches tended to be organised at the local or community level (Andersson and Minas, 2021[19]). Further evaluative evidence emphasises the importance of better meeting the needs of disengaged young people through more personalised guidance and greater co-operation between the employment, social and education sectors (European Commission, 2020[20]).

Based on evaluations of interventions piloted as part of the Youth Guarantee, the European Commission and the International Labour Organisation developed a four-step intervention model to support governments to design effective outreach (see Figure 4.2). Echoing the findings outlined above, the model focuses on identification, pro-active engagement, individualised interventions and monitoring progress. (ILO, 2017[18]).

Recent outreach strategies in some European countries draw on this approach. Through **Latvia**'s Know and Do initiative, mentors and programme managers identify inactive NEETs within municipalities through strategic partnerships with actors in NGOs, social services, youth centres, police, and trade unions. Once engaged, staff develop an individual needs profile of the young person, drawing on factors such as psycho-social and economic problems, as well as education and labour market experience. This informs a personalised support programme combining group activities, specialist support and mentoring. The strategic partnerships have been identified as a key strength, since the knowledge and skills of different partners helped reach and support target groups. The sharing of best practices between mentors and

programme managers in different municipalities was also valuable (European Commission, 2018[21]; Agency for International Youth Programs (Latvia), n.d.[22]; OECD, 2021[13])

Figure 4.2. A model of outreach approaches (EC and ILO)



Source: Adapted from ILO (2017[23]), *Guide for developing national outreach strategies for inactive young people*, https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_613351.pdf (accessed on 30 August 2022).

In 2021, the **Netherlands** announced additional funding for its 35 Regional Mobility Teams, established early in the pandemic to provide personal guidance, support, and training opportunities to workers affected by COVID-19, including young people. The teams work with employment services, employer organisations and trade unions to access individuals in the identified target groups (OECD, 2021[13]; Government of the Netherlands, 2021[24]). Also in the context of the pandemic, **Luxembourg**'s revised implementation plan for the Youth Guarantee includes measures for mapping and reaching out to vulnerable groups (OECD, 2021[13]). Demonstrating the need for flexibility, **Germany**'s Federal Employment Agency adapted its outreach practices when COVID-19 made face-to-face engagements more difficult, conducting virtual career orientation and providing open-air counselling in parks to reach target groups (OECD, 2021[13]).

Some policy lessons emerge on outreach to learners for 2023

Recent data and analysis from these and other policy experiences since 2020 that employ outreach strategies to inform targeted learners' aspirations offer some lessons to help guide policy makers in 2023.

1. **Combining datasets and monitoring eligibility helps identify target groups more effectively.**

Policy experiences indicate that some target groups may be difficult to identify and less likely to reach out for training opportunities (e.g. NEETs, the long-term unemployed, and adults with low qualifications) while overly specific eligibility criteria can limit the scope of outreach efforts.

- *Recent **OECD data** from the COVID-19 pandemic reveal that only some countries implemented such approaches as part of their outreach efforts for young NEETs. For example, while 86% of countries participating in the OECD Questionnaire on Policy Responses to the COVID-19 Crisis reported having established local-level partnerships between the Public Employment Services*

(PES) and key stakeholders such as schools and civil society organisations by November 2021, only 39% reported the same for formal tracking systems of school dropouts, with the same share reporting publishing official guidelines for PES and other stakeholders on outreach measures (OECD, 2022[25]).

- In **Australia**, building data systems that link administrative datasets to better identify and recruit participants has been an important practical solution to these challenges (Institute for Social Science Research/The Melbourne Institute, 2021[26]). Similarly, **the Netherlands**' regional approach to tackling early school leaving and youth unemployment sees Regional Registration and Coordination Centres use early school-leaving data from schools and Public Employment Service data to identify young people who have fallen out of the system (see Chapter 3) (OECD, 2021[9]).
- Integrating mechanisms for the continuous monitoring and evaluation of policies allows policy makers to identify issues with defining and engaging target groups early on and to adjust the design of policies accordingly (OECD, 2019[27]). **Australia** has adjusted the eligibility criteria for its Transitions to Work programme (2022) to capture a broader range of risk factors associated with youth unemployment.

2. **Designing special incentives can help engage those hardest to reach.**

Evidence collected from reviews of more established policies offer some lessons on ways in which governments can attract target groups which are particularly hard to reach.

- *Recent **OECD data** indicate that during the pandemic, many countries looked to provide more comprehensive, tailored measures to support labour market inclusion for young people facing major or multiple employment obstacles. At the end of 2021, three-quarters of OECD countries reported providing individualised support to unregistered NEETs to better establish their relationship with PES and support them to find work* (OECD, 2022[25]). *Where this increases pressure on resources, contracting out employment services to external providers or collaborating with local stakeholders could increase capacity to personalise supports.*
- Evaluative work from **Austria**'s Initiative for Adult Education calls for a focus on areas where the demand for places outstrips supply, as this discourages providers from actively engaging those who do not reach out for support. The study therefore recommends introducing funding targets to incentivise participation among harder-to-reach groups, providing financial support for local targeted information campaigns and community outreach work, as well as collaborating with local organisations with established connections to under-represented groups (Steiner et al., 2017[28]).
- Evidence from **Estonia** highlights some solutions to the challenge of motivating participants from key target groups (e.g. older adults, men, and workers with lower qualification levels) to participate in non-formal learning. These include strengthening collaboration between services that have contact with these groups and developing the competencies of guidance counsellors to direct adults towards training tailored to their needs (Praxis/CentAR, 2019[29]). Moreover, the evidence indicates that engaging unemployed populations may require addressing practical barriers such as individuals' physical distance from high-demand industries, or disparities in wage levels across sectors (OSKA, 2020[30]).

3. **Curating information for different actors and their needs enhances impact.**

In order to have impact, information about education and skill needs and pathways must be engaged with and understood by different audiences (i.e. learners and workers from target groups, employers, and teaching and guidance professionals) with different information needs. Policy experiences indicate that this requires balancing oversimplification and excessive technical detail, and investigating how different groups use information to make decisions (OECD, 2021[9]).

- *Recent **OECD data** indicate that 14 out of 27 (50%) countries and economies for whom data is available had specific labour market or social policies for racial/ethnic minorities in place during the*

COVID-19 pandemic to reach out to them and help them with their specific needs. For 8 of these countries and economies, these were new measures introduced since the start of COVID-19. However, many (68%) also reported experiencing new or intensified difficulties in providing individualised support to jobseekers from racial/ethnic minorities since the start of the crisis. In 17 of 25 OECD countries for which data are available, the PES experienced such difficulties in job searches for people from racial/ethnic minorities (OECD, 2022[25]).

- **Canada**'s Future Skills Council has identified the need for the provision of relevant, reliable and timely labour market information and tools, to ensure that Canada's skills policies and programs respond to the needs of Canadians. At user level, suggested efforts include developing a platform where individuals can generate personalised training plans that link jobs and skills profiles to training options and related supports. At institutional level, Canadian governments and relevant organisations are encouraged to focus on disseminating the necessary information to education, training, and counselling providers to support them to align their services with evolving skills needs (Future Skills Council, 2020[31]). The Future Skills Centre is collaborating with the Labour Market Information Council to pilot the creation of an open cloud-based data repository to facilitate and streamline access to practical and relevant information to support the development of front-line career-planning and guidance tools.
- The **United Kingdom**'s Discover Uni platform provides prospective higher education students with information for different stages of the application process. From 2020, the platform has synthesised information on how the COVID-19 pandemic is affecting admissions and enrolments procedures (Discover Uni, n.d.[32]). Previous to this, in the design of the platform, insights from behavioural economics and social psychology, as well as qualitative interviews and large-scale student surveys, revealed that different population groups consider different factors when making a decision, and therefore have different information needs. Part-time and mature students, for example, value practical information such as the costs involved in study. Furthermore, the quality of information was found to be more important than the quantity, especially since users can easily become overwhelmed (Office for Students, 2018[33]; Diamond et al., 2018[34]). As such, Discover Uni aims to provide a personalised experience for users, with an emphasis on reducing clutter and helping them to navigate and make sense of the different datasets the platform draws upon. This includes data visualisations shown to help with information overload (Office for Students, 2018[33]).

Learners' perspectives need to be enriched and expanded from an earlier age

As well as reaching out to target groups specifically, the Education Policy Outlook has previously highlighted that responsive and resilient education systems support all learners to develop ambitious and realistic career expectations (OECD, 2021[9]). This often entails working with children, young people and adults to help them develop career aspirations that are both achievable and reflective of their interests and ambitions through a more strategic use of realistic and relevant information on education, training, and employment opportunities. Such efforts can widen the scope of learners' aspirations, ensure alignment with present and future labour needs, and overcome potentially inhibiting biases.

Recent OECD analysis of longitudinal datasets in multiple countries has provided new insight into the power of career guidance to enhance the employment outcomes of young people. Young adults, typically aged 25, have been found to commonly exhibit lower NEET rates, higher wages and greater job satisfaction if they had participated in a range of career guidance activities and demonstrate clearer career thinking at age 15. Such benefits typically amount to wage premia of 5% to 10% in periods of both economic growth and contraction (Covacevich et al., 2021[11]). Unfortunately, data suggest that relatively few young people at age 15 are being well prepared for their working lives (OECD, 2021[35]).

At the same time, OECD data indicate that students' perspectives of educational and employment opportunities are commonly narrow from an early age, as well as outdated:

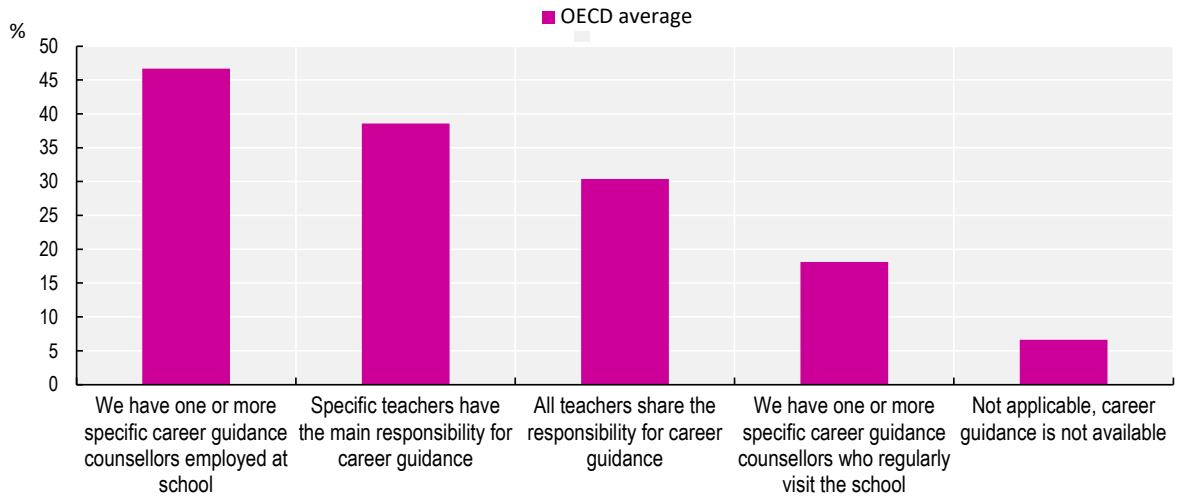
- Even from a very young age, students' perspectives of the futures available to them can show bias. In a survey of 5-year-olds in Estonia and England, one-quarter of the most popular roles girls reported aspiring to were in traditionally female-dominated occupations; the equivalent share among boys was over half, meaning that starting efforts to overcome such bias in secondary education is too late (OECD, 2021[8]).
- On average across OECD countries, half of 15-year-olds identified an occupation from the same pool of 10 jobs when asked in PISA 2018 what job they expected to be doing at age 30 (Mann, Denis and Percy, 2020[10]).This career concentration has been growing since 2000 and is particularly common among girls and advantaged students.
- At the same time, in some OECD countries, up to half of students selected jobs at risk of automation, with higher shares among disadvantaged students and boys (Mann et al., 2020[6]).
- Bias may be particularly influential in students' perspectives of science, technology, engineering and mathematics (STEM) careers. Evidence indicates that, besides women and girls, ethnic minorities and disadvantaged groups are under-represented in STEM fields (Mohr-Schroeder et al., 2020[36]; Buck, Cross Francis and Wilkins-Yel, 2020[37]).

In many societies, narrow, outdated and biased perspectives are self-perpetuating as young people often turn to parents and their immediate social network to discuss career plans, whose support is constrained by their own experiences (Mann, Denis and Percy, 2020[10]). High-quality, school-based career guidance is therefore one intervention seen to have a positive impact (Covacevich et al., 2021[11]). In PISA 2018, 93% of school leaders reported that career guidance was available in their school. Commonly reported approaches included having specific, school-based career guidance staff or teachers. However, significant shares of students were in schools where the responsibility was shared across existing teaching staff or external career guidance staff. Further analysis indicates that in some education systems, such as Norway, Ireland, Finland or Germany, the vast majority of students are covered by the same delivery method, suggesting a comprehensive system-level policy is in place. However, in others, no single model dominates; this may inhibit the system's ability to ensure efforts reach all learners (see Figure 4.3 and Figure 4.4). Beyond the data, previous policy analysis by the Education Policy Outlook has revealed that young people, particularly those with complex needs, benefit from career guidance with multiple complementary actions, that the quality of information provided is crucial, and that links with employers are important (OECD, 2021[9]; OECD, 2018[38]).

Adults' perspectives matter too. With rapidly changing job markets, guidance enables reskilling, upskilling and mobility. It is especially important to older workers needing to move within the labour market and to people who have migrated between countries and who want to have their skills validated. However, according to one major study in Europe, only one adult in four ever uses a career guidance service. This is even less among individuals with lower levels of qualifications whose employment is most commonly precarious. Awareness of services can be low and adults can be confused by what support they are entitled to (Cedefop, European Commission, European Training Foundation, OECD, ILO and UNESCO, 2019[39]).

Figure 4.3. School-based career guidance is the predominant approach on average across OECD countries

Percentage of students in schools where the principal reported the following about who has the main responsibility for career guidance for 15-year-old students at school (PISA 2018)

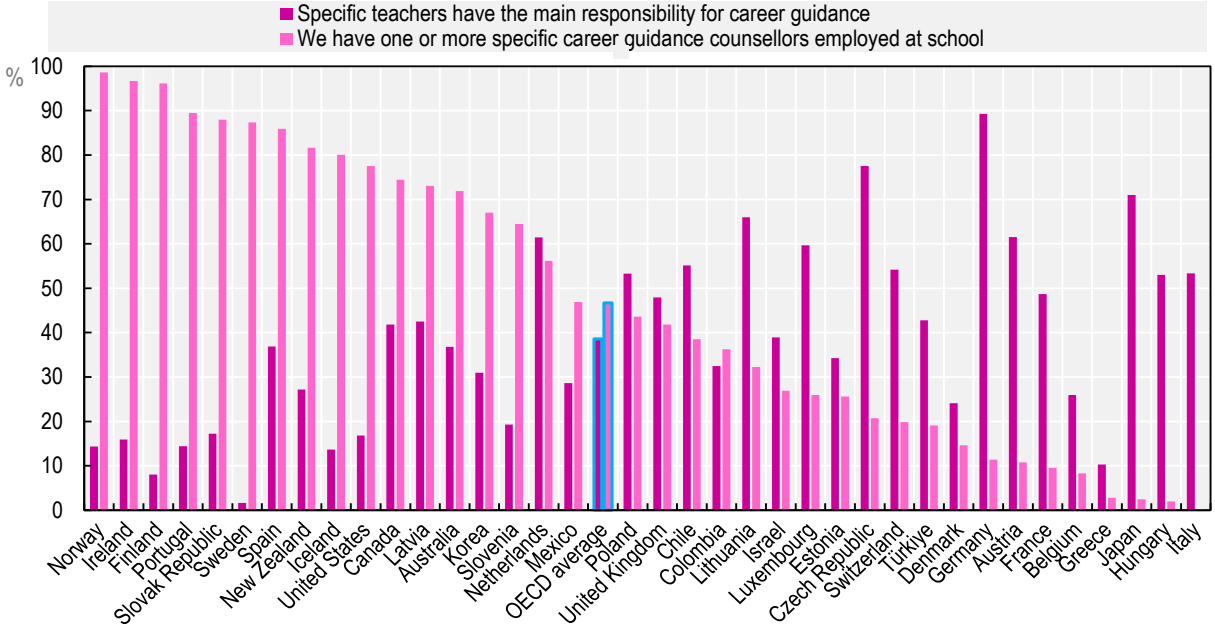


Source: OECD (2019[12]), *PISA 2018 Results (Volume II): Where All Students Can Succeed*, PISA, OECD Publishing, Paris, https://doi.org/10.1787/b5fd1b8f-en.

StatLink https://stat.link/542sk3

Figure 4.4. Within schools, responsibility for career guidance can vary across countries

Percentage of students in schools where the principal reported the following about who has the main responsibility for career guidance for 15-year-old students at school (PISA 2018)



Source: OECD (2019[12]), *PISA 2018 Results (Volume II): Where All Students Can Succeed*, PISA, OECD Publishing, Paris, https://doi.org/10.1787/b5fd1b8f-en.

StatLink https://stat.link/6swat5

Selected recent policy efforts

Policy efforts identified for this analysis to enrich and expand learners' perspectives focus on enhancing career guidance, either as part of wider national frameworks, or as part of deliberate efforts to overcome barriers to participation in high-priority STEM pathways.

Some career guidance efforts are taking place as part of broader national strategies

Several ongoing policy developments to improve guidance support are part of more comprehensive system-level efforts that include the update of national frameworks. Where these cover lifelong learning, policy makers could explore introducing them from the earliest age, although policy action at these levels remains less evident. Nevertheless, by incorporating them into national frameworks, efforts to modify perspectives can help promote career and study paths that support the needs of wider society.

In 2022, **Ireland** established a National Policy Group for Lifelong Guidance charged with developing a strategic framework for lifelong guidance. Reflecting the focus on lifelong learning, the group brings together representatives from multiple ministries (e.g. Department of Social Protection; Department of Enterprise, Trade and Employment; Department of Education). The group aims to ensure progress on the implementation of recommendations from an independent review which highlighted the crucial role played by guidance counsellors and other teachers, particularly among disadvantaged students (Department of Education of Ireland, 2022[40]).

According to findings from this work, students from the lowest income groups were less likely to report that they had consulted with their parents about their career plans than those from higher-income backgrounds. They were also more likely to report that one-to-one counselling had played an important or very important role in helping them decide what to do after school (Indecon, 2019[41]; Department of Education of Ireland, 2022[40]). With this in mind, Ireland has already taken steps to strengthen professional development for school guidance. From September 2022, school leaders and guidance counsellors will have access to related professional learning and collaboration opportunities, as well as support in using evidence-based practices.

Finland has also implemented a Career Guidance Development Programme to support the extension of compulsory schooling and implementation of the whole-of-government Lifelong Guidance Strategy (2020-22). The Career Guidance Development Programme targets students in basic, upper secondary, and vocational education and training (VET) and aims to strengthen existing career guidance practices, provide more personalised guidance, and promote equity—particularly for Special Education Needs (SEN) students, students with an immigrant background, and students with mental health issues (Ministry of Education and Culture of Finland, 2020[42]).

Since 2021, schools in Finland have been required to provide enhanced career guidance for students in grades 8 and 9 identified by teachers and counsellors as requiring extra support for the transition into upper secondary education. VET providers are also required to set out the procedures for collaboration with parents, employers, and other partners, including arrangements for bringing students into contact with the world of work. The Lifelong Guidance Strategy includes broader measures to evaluate and strengthen the training of career guidance professionals, and the National Board of Education established a working group to rewrite criteria for effective career guidance, paying particular attention to inter-professional co-operation between education levels (Ministry of Education and Culture of Finland, 2020[43]; Council of State of Finland, 2020[44]; Covacevich et al., 2021[45]; Ministry of Education and Culture of Finland, 2020[42]).

In **Estonia**, in response to recommendations from an interim evaluation of the Lifelong Learning Strategy, the government has introduced mandatory career counselling for low-skilled adults wishing to access free labour market training. The employment service agrees on an individual training plan for successful applicants, guiding them towards areas where there is a demand for skills, including areas with growth in demand since COVID-19. This training plan is based on an assessment of the skills the individual needs

to continue working or find new work. Such measures help to make adult learning more responsive to individuals' skills gaps and to ensure public investment leads to meaningful employment (Praxis/CentAR, 2019[29]; Estonian Unemployment Insurance Fund, n.d.[46]).

Furthermore, career guidance efforts in **New Zealand** aim for a more holistic approach to support learners' transitions from school to tertiary education. As part of these, the School Leavers' Toolkit provides information to students about tertiary education options for study and training. This information also covers aspects such as scholarships and other types of financial support available to them to pursue their studies. Practical guidance on skills that employers are looking for, how to prepare a curriculum vitae, or to prepare for an interview is also included. The toolkit is designed as a dual set of resources addressed to students, but also to teachers and career advisors in schools.

Furthermore, the toolkit aims to help learners progress into other broader aspects related to adult life, such as moving out of home, civics and politics, managing their finances and tax obligations, or taking care of oneself and others (e.g. discrimination, mindfulness, sexual health) (Ministry of Education of New Zealand, 2022[47]).

In some countries and economies, career guidance efforts are specifically promoting STEM pathways

Strengthening STEM learning in education and training goes beyond the need of governments to prepare its population for technological change. STEM is associated with key competencies such as critical thinking, creativity, or a growth mindset, among others (National Inventors Hall of Fame, 2022[48]). In 2023 and beyond, all of these are valuable to both individuals and societies to help shape technological evolutions, address climate change challenges, or even interact better in a world of ubiquitous online information, misinformation and disinformation.

Recognising the importance of STEM pathways for the future of their economies and society, several countries are implementing strategies to improve the quality of learning and increase participation in related fields. These aim to overcome challenges experienced in many countries in encouraging young people to pursue STEM pathways, in part due to prevailing biases in young peoples' perspectives.

The **Flemish Community of Belgium** is currently moving to a broad STEM agenda for 2030 to better link up existing initiatives and broaden the focus beyond the education system. The previous STEM Action Plan (2012 - 2020) largely focused on increasing STEM participation in secondary and higher education, although some measures targeted individuals who had already entered the labour market. Building on the successes of the STEM Action Plan, the STEM Agenda 2030 places a strong focus on the adult population and training for guidance professionals outside of school settings. The new agenda is informed by evidence of the impact of different intervention approaches, and aims to respond to trends that have been accelerated by COVID-19, such as digitalisation.

The STEM Action Plan involved measures to improve study and career guidance processes, such as training for teachers and workplace experiences for job seekers and school students in STEM professions. Over 100 STEM academies were established in municipalities across the region to provide young people with informal learning opportunities in STEM. Representatives from different sectors signed agreements setting out actions they would take to promote STEM careers. For example, to improve the offer of STEM subjects and the quality of teaching, the Department of Education and Training developed a Quality Framework for STEM Education based on international best practice and research on motivating students in STEM. This informed the development of STEM attainment targets for the end of primary and secondary schooling (2018). There were also efforts to improve STEM pedagogy through professional learning networks (De Coen et al., 2019[49]; Government of Flanders, n.d.[50]).

Monitoring data of the Action Plan show progress in increasing the share of female entrants to STEM pathways in upper secondary and higher education: by 2020/21, the share of female entrants was 50% in

the academic track of upper secondary school and 37% in academic bachelor programmes. Measures contributing to this success include teaching materials to combat gender stereotypes (De Coen et al., 2019[49]; Government of Flanders, n.d.[50]).

Furthermore, **Ireland**'s STEM Education Policy Statement (2017-26) includes objectives to increase participation in STEM subjects at upper secondary level, particularly among girls. An implementation group within the Department of Education co-ordinates the various actions laid out in the statement (Department of Education of Ireland, 2017[51]). Recent measures include a set of recommendations on promoting gender balance in STEM education (2022) to inform the second phase of implementation. This drew on a literature review of broadening girls' perspectives and overcoming bias. The review pointed to the need for multiple interventions that address different aspects of the ecosystem—including school culture and students' home lives—as well as a need to move away from seeking to change girls' attitudes and behaviours towards a focus on policy and broader representation in society. Recognising the importance of gender-inclusive language, visual prompts, and examples in STEM curricula and resources, Ireland has been advised to review these in national curriculum specifications and in a national programme of mathematics and science resources, as well as in teacher Continuous Professional Development (Gender Balance in STEM Education Advisory Group, 2022[52]).

Further recommendations include embedding training within initial teacher preparation on the barriers to participation of under-represented groups in STEM and introducing a related Continuous Professional Development programme for early years educators. Finally, the Department of Education has been advised to evaluate and develop current practices that provide learners from under-represented groups with access to meaningful role models and career awareness activities that challenge stereotypes (Gender Balance in STEM Education Advisory Group, 2022[52]).

Other education systems have undertaken more targeted efforts to promote participation in STEM. These are more centred on raising awareness among key relevant actors. Since 2020, for example, **New South Wales**' **(Australia)** STEM Industry School Partnership has organised a free, online and on-demand event to promote STEM careers and learning. The 2022 edition brings together a series of talks and practical workshops that teachers can use with their students in the classroom, or for their own STEM professional development. These are released in a single webpage to coincide with events such as Australia's National Science Week, National Cyber Week, and World Space Week. For example, one video introduces teachers to a Careers with STEM platform that enables students to find pathways that suit their interests and inspires them to pursue careers in STEM by challenging stereotypes, showcasing diversity, and revealing unexpected career paths (Department of Education of New South Wales, 2022[53]). The online format emerged as a response to the outbreak of COVID-19 when the planned face-to-face conference was cancelled (Department of Education of New South Wales, n.d.[54]). This and the new on-demand format have the potential to reach a wider audience, with teachers across the state using the materials at their own convenience.

The STEM Industry School Partnership was established in 2018 as part of the New South Wales government's response to Australia's National STEM School Education Strategy (2016–26). Through collaboration with Australian companies, industry, universities, and government agencies, the programme aims to inspire young people to study STEM subjects and prepare them for STEM careers. Key objectives include developing school-industry partnerships to provide students with real-world STEM experiences and improving outcomes for Aboriginal and Torres Strait Islander students, females, and students from low socio-economic backgrounds (Department of Education of New South Wales, n.d.[55]). Schools work with partners such as Google, Microsoft, Engineers Australia, and the Australian National University to ensure that curriculum is engaging and relevant (Department of Education of New South Wales, n.d.[56]).

Another recent effort includes **Mexico**'s NiñaSTEM initiative (2017), which reached 3 200 girls across the country by 2020. Recent developments include a hybrid mentoring programme launched in the State of Coahuila, aiming to reach 25 000 female students during 2021/22. The programme included 12 virtual

mentoring sessions that were broadcast live and repeated face-to-face in schools for students without digital access. Each session was also followed by a classroom discussion led by teachers (OECD, n.d.[57]).

In 2021, **Hungary** launched a career orientation and measurement tool aimed at students in primary and secondary education. It contains self-reflection questions and tasks to assess students' STEM-related competencies and direct them to the most suitable careers and learning paths. To support successful implementation, some 4 000 teachers participated in professional development activities aimed at supporting their integration of the tool into their everyday classroom practice and raising awareness of the importance of career guidance. This included workshops and fora to share best practices (Office of Education of Hungary, 2021[58]; Office of Education of Hungary, n.d.[59]).

Some policy lessons emerge to shift learners' perspectives for 2023

Recent data and analysis from these and other policy experiences since 2020 to enrich and expand learners' perspectives offer some lessons to help guide education systems' efforts in 2023.

1. **Shifting younger learners' perspectives requires shifting those of the adults in their lives.**

Families, teachers, guidance professionals, and other adults play an important role in influencing young people's aspirations and career or study decisions. As such, measures that address the perspectives of these significant adults and support their capacity to guide learners can contribute to strengthening learners' aspirations.

- *Recent **OECD data** illustrate the persistence of gender-based professional stereotypes among adults. On average across OECD countries in 2020, 21% of new entrants to STEM short-cycle tertiary programmes were women, rising to 31% at bachelor's level. As this field of study is associated with high earnings, in comparison to the relatively lower earnings of female-dominated fields (e.g. education, arts and humanities) this gender imbalance exacerbates the wage gap between men and women. Nevertheless, across the OECD even when comparing tertiary-educated workers from the same field of study, women's work is less well-remunerated than men's* (OECD, 2022[4]).
- Recognising that career education is a collaborative effort between educational institutions, communities, and families, **New Brunswick**'s **(Canada)** career education strategy includes measures to better connect families with labour market information. The online career planning tool also supports families with career development discussions and decisions (New Brunswick Department of Education and Early Childhood Development, n.d.[60]).
- Recent recommendations provided to **Ireland** on promoting gender balance in STEM include developing guidance on STEM subject choices for primary school children and their parents to be provided at key transition points, and implementing a large-scale awareness campaign aimed at parents and other significant adults, with a focus on challenging stereotypes in STEM (Gender Balance in STEM Education Advisory Group, 2022[52]).

2. **Upskilling teachers/guidance professionals can positively shape learner's aspirations.**

Teachers and guidance counsellors have a crucial role to play in ensuring learners from all backgrounds have access to information on the full range of educational and professional opportunities. However, it cannot be taken for granted that they will have the information and skills they need to have meaningful careers conversations with young people. Enhancing their connections to others, particularly people in different professional sectors, can help update their knowledge on an ongoing basis.

- *Recent **OECD data** reveal that teachers are commonly expected to engage in student counselling, including career counselling, but they do not always receive training to prepare for this role. In 2021, 27 countries reported that student counselling activities are mandatory for all or some upper secondary teachers, while 5 reported that participation is voluntary. However, only 5 of those with*

available data reported that student counselling was among the mandated content components of professional development for upper secondary teachers (OECD, 2022[4]).

- Evidence from the **Flemish Community of Belgium** draws attention to some of the challenges teachers face in keeping up to date with rapid changes in the labour market and the need to provide career-wide professional learning opportunities. It highlights a need to develop teachers' capacities for career coaching, as well as keeping them abreast of technical innovations in STEM fields (De Coen et al., 2019[49]). The Flemish Community of Belgium plans to expand its STEM Learning Networks for teachers as part of the STEM Agenda 2030 (Government of Flanders, n.d.[50]).
- Survey data from **Ireland** suggest that only a minority of guidance counsellors are satisfied with the quality of available information on labour market trends and pathways such as self-employment and apprenticeships. Options identified for addressing this include investing in providing accessible labour market intelligence to educational professionals and increasing the participation of parents and teachers in careers information activities (Indecon, 2019[41]).

3. Engaging employers in career education can be encouraged by creating the right conditions

Employers, entrepreneurs, and other labour market partners can play a crucial role in widening learners' perspectives and supporting teaching professionals in the delivery of career education.

- ***Recent OECD data*** *show that during the COVID-19 crisis, around one-third of OECD countries for whom there is available data introduced new or extended existing hiring subsidies for employers who recruited young people. Another third continued schemes already in place prior to 2020. To foster longer-term benefits, these subsidies can be paired with additional support measures as a condition of their payment. Only some OECD countries reported doing so: 8 had on-the-job training requirements; 7 countries requested on-the-job mentoring; and 4 obliged companies to keep the subsidised employee for a certain period after the contract ends* (OECD, 2022[25]).
- Recent evidence from **Australia** highlights three ways that school-industry partnerships can support the broader aim of increasing the supply of STEM skills: improving careers awareness and understanding of the opportunities afforded by STEM through work-related activities; supporting teachers' professional learning through collaboration on learning materials and providing opportunities such as industry requirements; increasing outcomes and impact through use of data and evidence (Education Services Australia, 2018[61]) .
- However, evidence from **Ireland** points to a need for mechanisms to bring employers and schools or other educational institutions together. There is a risk that employer involvement in career education could be ad hoc and dependent on pre-existing local relationships. There is also a need to make the case to employers and to overcome some of the barriers they may face in engaging with schools. Possible solutions include implementing a programme to highlight benefits for the enterprise of participating in career guidance and the support measures that exist to help them. Encouraging schools to collaborate on workplace visits to ensure employers' time can be used efficiently has also been recommended (Indecon, 2019[41]).

4. Shifting perspectives requires action across the life cycle as learners' needs and contexts evolve.

Evidence from recent policy efforts highlights the importance of starting guidance efforts early, opening learners' minds to a range of possible pathways from a young age, and reiterating this guidance as learners evolve along their career pathways (Covacevich et al., 2021[11]). However, policy makers must also take a global vision, providing opportunities for individuals to change pathways after they enter the workforce.

- In the **Flemish Community of Belgium**, the initial STEM Action Plan (2012-20) overlooked the monitoring of impact on older women's participation in STEM occupations, despite including indicators to monitor participation at secondary and higher education levels in STEM subjects.

Similarly, actions to improve career and study guidance only targeted school students. While measures to promote STEM in compulsory education will continue, the STEM Agenda 2030 deepens the focus on adult career guidance and training and includes measures to support upskilling and reskilling. This includes an initiative aimed at promoting STEM adult learning opportunities among young people in insecure or temporary work. Achieving this aim will be especially important in the current context, since recent data suggest that the COVID-19 pandemic has exacerbated pre-existing skills deficits in STEM professions (Government of Flanders, n.d.[50]).

Learners need agency and co-agency to identify and capitalise on opportunities

Policy analysis undertaken by the Education Policy Outlook in 2021 indicated that in order to implement policy efforts that help nurture resilient learners, education systems should favour approaches that foster learners' agency and co-agency (OECD, 2021[9]). When it comes to aspirations, this means empowering learners to identify and capitalise on the opportunities given to them by the education system, and create their own, in order to bring their aspirations to fruition.

As educational pathways become more flexible, and labour markets experience short-term disruptions and longer-term transformations, such agency is critical in ensuring that learners continue to reflect and act upon their changing aspirations and opportunities, and proactively engage in lifelong learning. Moreover, many of the competences and attitudes contributing to a sense of agency are particularly important in times of stress, helping young people respond positively to uncertainty (Chernyshenko, Kankaraš and Drasgow, 2018[62]; Jiao et al., 2020[63]).

Previous international work on career guidance also emphasises the need to develop students' agency. A joint report from several high-level organisations stated that effective career guidance should empower learners by allowing them to get to know themselves, their talents, interests and potential, and by encouraging them to think critically about personal or common assumptions (Cedefop, European Commission, European Training Foundation, OECD, ILO and UNESCO, 2019[39]). The OECD has also pointed to evidence that the primary purpose of career guidance should be to help students visualise and plan their futures within a self-driven cyclical process, shaping the ways in which they seek out and engage in future career-related activities (Covacevich et al., 2021[11]).

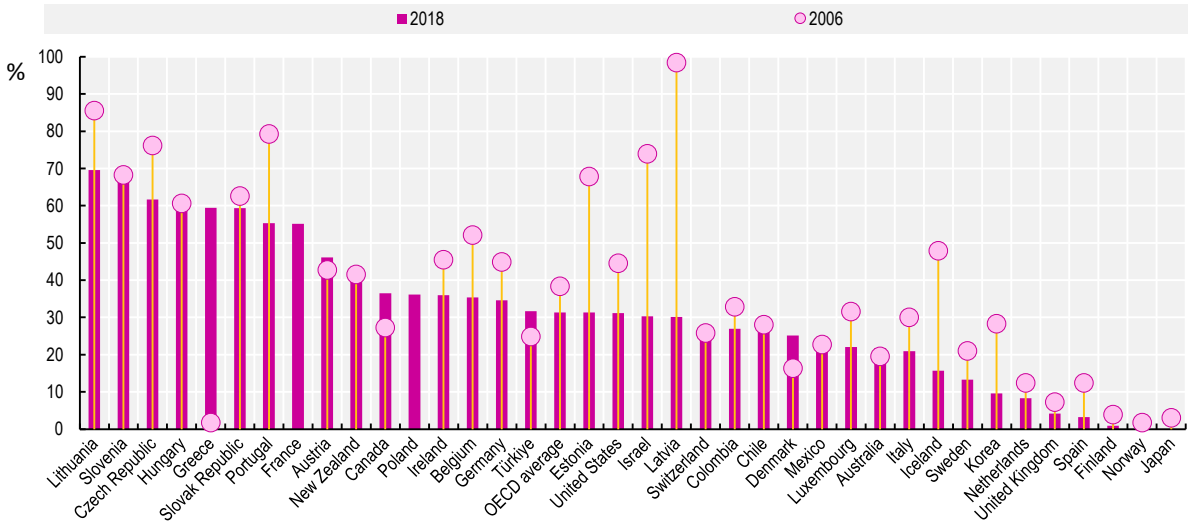
Enhancing students' agency through career guidance initiatives requires addressing a range of knowledge, skills, attitudes and social connections. For example, development activities focused on application and interview skills have been shown to support career readiness (Covacevich et al., 2021[11]). Career conversations that encourage critical reflection, both school-based and work-based, are seen to provide young people with greater benefits than other interventions such as presentations (OECD, 2021[64]; Mann, Denis and Percy, 2020[10]). At the same time, wider definitions of student agency highlight the importance of social-emotional skills and transformative competencies such as motivation, self-regulation, growth mindset and self-efficacy (OECD, 2021[9]; Talreja, 2017[65]). However, OECD data indicate that an important share of learners need further support to develop their sense of agency. For example, in PISA 2018, 16% of 15-year-olds disagreed that in difficult situations, they can usually find a way out, and 43% felt that it was only somewhat or not at all like them to be able to adapt to different situations even when under stress or pressure (OECD, 2020[66]; OECD, 2019[7]). Further research reveals that youth who work part-time, intern or volunteer are significantly more likely to be confident in dealing with unfamiliar situations (Mann, Denis and Percy, 2020[10]).

Efforts to enhance learner agency when it comes to their aspirations may include helping them develop a broad social network made up of people with different expertise and connections, explicitly teaching skills that individuals may need to look for work and supporting them to critically reflect on work and workplaces through work experience placements. When it comes to career guidance among younger learners, nurturing students' agency requires, among other things, creating space for it.

Figure 4.5 shows the change in the shares of 15-year-olds in PISA 2018 who must voluntarily seek out career guidance. In the vast majority of education systems, this share has decreased since 2006, and in some cases by a large amount. The average drop in the share of students for which receiving career guidance depended on voluntarily requesting it (for countries with data in both periods) was 7.8 percentage points. This suggests that more education systems are prioritising formally scheduled career guidance, displacing the voluntary approaches. However, while the former approach is important in democratising access to career guidance and ensuring comprehensive coverage, the latter is crucial in promoting agency. As such, education systems will need to find ways to promote and protect the two.

Figure 4.5. More formally scheduled career guidance is being favoured among OECD countries

Percentage of students in schools where the principal reported that career guidance is formally scheduled into students' time (PISA 2006, 2018)



Source: OECD (2019[12]), *PISA 2018 Results (Volume II): Where All Students Can Succeed*, PISA, OECD Publishing, Paris, https://doi.org/10.1787/b5fd1b8f-en.

StatLink https://stat.link/scgb8m

Selected recent policy efforts

Although the policies collected for this section target different age groups, they include practices that can support the agency of individuals at any stage of their education or career. Some measures aim at developing participants' social capital through activities that expand their network, such as work placements. Countries are also developing holistic interventions that address more complex barriers to employment or education, including non-vocational barriers. At the same time, the policy examples from this report suggest that some individuals or groups may benefit from more targeted or specific measures.

A programme developed by a Community College in **New York State (United States)**—which has now spread to other HEIs—aims to strengthen the agency and social capital of students from disadvantaged backgrounds (many of whom have narrow and limited family-based networks and face additional challenges transitioning to the workplace) through critical investigation of the labour market (Guttman Community College, n.d.[67]; Bunker Hill Community College, n.d.[68]). Ethnographies of Work is a compulsory course for first-year students, who use ethnographic and other social science methods to investigate a range of careers and work-related issues. Students begin by exploring dimensions of working

life in contexts of disruption, uncertainty and innovation, and are encouraged to uncover myths and stereotypes about the world of work. They then conduct an ethnographic investigation on an occupation of interest to them, carrying out fieldwork at a worksite. They also research quantitative data on occupations and employment trends (Guttman Community College, n.d.[67]).

Findings from student focus groups following the pilot of the programme (2018) indicate that students had become more metacognitive about their career choices, showed better understanding that they may change pathways over time, and that they could follow routes that did not conform with family expectations. Students also showed better understanding of the importance of social capital in the job market, such as the role of gatekeepers and networking. Finally, contact with the world of work challenged some of the myths students held about certain occupations (Gatta and Hoffman, n.d.[69]). The OECD has found that while the programme was designed for higher education students, there are several useful lessons that could apply to programmes for younger students (OECD, n.d.[70]).

Other programmes aim to support the agency of older workers by targeting specific skills related to looking for work. The **Netherlands**' Successful Transitions to Work programme targets over-50s and consists of ten group meetings and three individual interviews led by a PES employee. It aims to decrease long-term unemployment among older adults by strengthening job search skills such as self-presentation, use of social media, networking, and interview technique. Early monitoring mechanisms enabled policy makers to adjust the initiative considering emerging evidence. For example, since take-up of the training was lower than expected in the first year, the eligibility criteria was reduced from over 55s to over 50s (Institute of Employee Benefit Schemes, n.d.[71]; Institute of Employee Benefit Schemes, n.d.[72]).

The Netherlands also conducted a randomised field experiment to assess the impact of the first phase of implementation (2013-2016). This found that, compared to the control group, participants had a better knowledge of different application methods, were more likely to use social media platforms such as LinkedIn, and reported increased confidence and better social support. They also spent more time on job applications. There was a smaller positive effect on the number of job interviews they gained and the chance of returning to work (van Hooft and van den Hee, 2017[73]) .

In 2022, **Australia** adjusted its Transition to Work programme, which provides support to young people aged 15-21 at risk of long-term unemployment. While the maximum duration of 18 months remains in place for young people with mainly vocational barriers, the programme can now be extended to 24 months for those with more complex non-vocational barriers (Department of Education, Skills and Employment of Australia, 2021[74]). In a summative evaluation of the first phase of the programme (2021), providers indicated that having a small caseload enabled caseworkers to adopt a participant-centred approach, incorporating feedback. Another key success factor was the use of a broad range of assessment tools, dedicated case managers, and specialists such as youth workers and Indigenous mentors increased over time (Department of Education, Skills and Employment of Australia, 2021[75]).

The programme was delivered by youth providers with strong existing connections to local schools and the community. Caseworkers and providers tailored support to the agency of participants, enabling them to drive their own skill development, and identifying appropriate education and training opportunities. Upfront payments also gave flexibility to providers to support young people in covering costs related to pursuing employment opportunities, such as enrolling for training, paying for interview clothes or work uniforms, or covering transportation costs (Department of Education, Skills and Employment of Australia, 2022[76]).

Some policy lessons emerge on developing learners' agency at different ages for 2023

Recent data and analysis from these and other policy experiences since 2020 on supporting learners to develop agency offer some lessons to help guide education systems' efforts in 2023.

1. **Younger learners may need support in developing professional behaviours.**

Although contact with the working world can support the agency of younger learners, many will be entering the workplace for the first time. Policy makers or education professionals will need to take steps to ensure they know what to expect, and how to develop a network, but also what employers expect of them.

- This was a challenge identified in **New York State (United States)**, where employers reported that some participants in the Ethnographies of Work programme exhibited behaviours that did not meet their standards of professionalism. Recognising that visiting a workplace was a new experience for learners—many of whom had only recently left secondary education—teaching staff developed a workshop on the theme of professionalism that was delivered as part of the institution's transition programme. This aimed to prepare young people for the workplace visits (Gatta and Hoffman, n.d.[69]).

2. **Some individuals need more time than others to develop agency.**

Circumstances experienced by some individuals may be more complex than for others, meaning that additional resources or time should be factored into the design of a policy aiming to provide support for agency.

- Recent experiences from **Australia** point to the need to allow sufficient time and resources to address the more complex non-vocational barriers that prevent some people from entering education or employment. Providers reported that the most common non-vocational barriers related to substance misuse and mental health issues such as depression and anxiety. Identifying and addressing these barriers was often time-consuming, especially since some providers experienced delays when referring young people to mental health services and other forms of support (Department of Education, Skills and Employment of Australia, 2021[77]). As such, Australia has extended the maximum duration of the Transitions to Work programme and has sought stakeholder feedback on what characteristics should be used to decide if a young person may need more time (Department of Education, Skills and Employment of Australia, 2022[76]). This underlines the fact that addressing more complex needs holistically may require additional resources as well as additional time.

3. **Motivating and empowering individuals with longer unemployment periods through practical tools can support resilience.**

Maintaining a sense of agency and motivation to find work can be difficult for individuals who have been unemployed for longer periods of time, and who have experienced challenges in their job search. Programmes should therefore focus on strengthening participants' autonomous motivation while helping them navigate challenging circumstances.

- *Recent **OECD data** reveal that, during 2021, long-term unemployment increased in many countries despite the general improvement in labour market conditions. By early 2022, long-term unemployment was still above pre-crisis levels in 20 of the 32 countries with available data and on average across the OECD for younger adults (15-24 year-olds)* (OECD, 2022[25]). *Responses to the OECD Questionnaire on Policy Responses to the COVID-19 show that many countries (63%) adapted the design of employment incentives to better suit the needs of target groups, including those at risk of long-term unemployment. However, a much smaller share (23%) adapted job search support and counselling in the same way* (OECD, 2022[25]).

- A surprising finding in the **Netherlands** was that the focus on networking in the Transitions to Work programme may have had the perverse effect of convincing participants that finding work depends on factors outside of their control, such as being in the right place at the right time. More broadly, the data suggest that participants' motivation to look for work declined the longer they were unemployed—possibly because of unsuccessful applications—and that the training had done little to compensate for this decline. Previous research suggests that giving participants the opportunity to share their negative thoughts and experiences of looking for work and seeking to transform these thoughts through motivational interviewing can support autonomous motivation. The research also recommends that the training should focus less on the importance of the network as such, and more on providing them with tools to create a network and manage it. The focus should then be on empowering the participant as the agent of change (van Hooft and van den Hee, 2017[73]).

Policy pointers to move forward

In 2023, as governments continue to face the implications of local and global change and disruption in 2020-2022, undergoing policy efforts provide guidance on steps they could take to nurture learners' aspirations as they transition through their education pathway. Key messages of the policy lessons mentioned earlier in this chapter follow below.

Outreach to engage target learners

1. **Combine datasets and monitoring eligibility to help identify target groups more effectively.** Policy makers need to consider that some target groups may be difficult to identify and less likely to reach out for training opportunities (e.g. NEETs, the long-term unemployed, and adults with low qualifications) while overly specific eligibility criteria can limit the scope of outreach efforts.
2. **Design special incentives to help engage those hardest to reach.** Evidence collected from reviews of more established policies offer some lessons on ways in which governments can attract target groups that are particularly hard to reach.
3. **Curate information for different actors and their needs to enhance impact.** In order to have impact, policy makers need to help so that information about education and skill needs and pathways is engaged with and understood by different audiences with different information needs. Policy experiences indicate that this requires balancing oversimplification and excessive technical detail, and investigating how different groups use information to make decisions.

Enriching and expanding learners' perspectives

1. **Shift younger learners' perspectives by shifting those of the adults in their lives.** Families, teachers, guidance professionals, and other adults play an important role in influencing young people's aspirations and career or study decisions. As such, it is important that policy makers consider measures that address the perspectives of these significant adults and support their capacity to guide learners to strengthen their aspirations.
2. **Upskill teachers/guidance professionals to positively shape young people's aspirations.** Teachers and guidance counsellors have a crucial role to play in ensuring learners from all backgrounds have access to information on the full range of educational and professional opportunities. However, policy makers cannot take for granted that teachers and guidance counsellors will have the information and skills they need to have meaningful careers conversations with young people. Enhancing their connections to others, particularly people in different professional sectors, can help update their knowledge on an ongoing basis.
3. **Engage employers in career education by creating the right conditions.** Employers, entrepreneurs, and other labour market partners can play a crucial role in widening learners' perspectives and supporting teaching professionals in the delivery of career education.

4. **Reiterate action to shift perspectives across the life cycle as learners' needs and contexts evolve.** Opening learners' minds to a range of possible pathways from a young age and reiterating this guidance as learners evolve along their career pathways is important, as well as providing opportunities for individuals to change pathways after they enter the workforce.

Developing learners' agency at different ages

1. **Consider that some younger learners may need additional support to develop professional behaviours.** Although contact with the working world can support the agency of younger learners, many will be entering the workplace for the first time. Policy makers or education professionals will need to take steps to ensure they know what to expect, and how to develop a network, but also what employers expect of them.
2. **Give additional time to some individuals who may need it more to develop agency.** Circumstances experienced by some individuals may be more complex than for others, meaning that additional resources or time should be factored into the design of a policy aiming to provide support for agency.
3. **Provide practical tools to motivate and empower individuals with longer unemployment periods to support their resilience.** Maintaining a sense of agency and motivation to find work can be difficult for individuals who have been unemployed for longer periods of time. Programmes should therefore focus on strengthening participants' autonomous motivation while helping them navigate challenging circumstances.

Table 4.1. Selected education policies and practices on nurturing learners' aspirations

Outreach to engage target learners in education, training or work opportunities		
Austria – Initiative for Adult Education (2012) **Canada** – Future Skills Council (2018) **New Brunswick (Canada)** – Future Ready Learning K-12 (2019)	**Germany** – Adaptations to youth outreach strategies during COVID-19 (2020) **Latvia** – Know and Do (2014) **Luxembourg** – Revised Youth Guarantee (2021)	**Netherlands** – Regional approach to addressing early school leaving (2005); Regional Mobility Teams (2021) **United Kingdom** – Discover Uni (2019)
Enriching and expanding learners' perspectives		
Australia – National STEM Education Strategy (2016-26) **New South Wales (Australia)** – STEM Industry-School Partnership (2018) **Flemish Community of Belgium** – STEM Action Plan (2014-20); STEM Agenda 2030 (2021)	**Estonia** – Career guidance for adult learners (2020) **Finland** – Career Guidance Development Programme (2020); Lifelong Guidance Strategy (2020-22) **Hungary** – Career orientation and measurement tool (2021)	**Ireland** – STEM Education Policy Statement (2017-26); Indecon Review of Career Guidance (2019); National Policy Group for Lifelong Guidance (2022) **Mexico** – Niña STEM (2017) **New Zealand** – School Leavers' Toolkit (2019)
Developing agency in learners		
Australia – Transition to Work (2022)	**Netherlands** – Successful Transitions to Work (2013)	**New York State (United States)** – Ethnographies of Work (2018)

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Education Policy Outlook 2022

TRANSFORMING PATHWAYS FOR LIFELONG LEARNERS

The effects of 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 in some parts of the world in 2022 are expected to reverberate into 2023. International implications for education and training include economic uncertainty and tight labour markets, ongoing digital transformation, and continued growth and influence of mass information. These trends challenge education policymakers to transform existing pathways in their countries and economies, so people can become effective lifelong learners to navigate change. Building on the OECD's Framework of Responsiveness and Resilience in Education Policy, as well as analysis of international policies and practices from over 40 education systems implemented mainly since 2020, this report identifies three areas of policy effort that education policymakers can undertake in 2023: 1) enhancing the relevance of learning pathways; 2) easing transitions throughout learners' pathways; and 3) nurturing learners' aspirations. Lessons emerging from recent policy efforts are synthesised into key policy pointers for 2023. The report has been prepared with evidence from the Education Policy Outlook series—the OECD's analytical observatory of education policy.

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