OECD Skills Studies

OECD Skills Strategy Kazakhstan

ASSESSMENT AND RECOMMENDATIONS

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BETTER POLICIES FOR BETTER LIVES

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Foreword

Developing relevant skills and using them effectively is crucial for Kazakhstan's ability to thrive in an increasingly interconnected and rapidly changing world.

In recent years, Kazakhstan has made significant progress in strengthening its skills system, and in its economic and social performance. However, the coronavirus (COVID-19) pandemic has been a uniquely disruptive shock, leading to hundreds of thousands of deaths globally and causing the most severe global economic recession since the 1920s. Kazakhstan acted quickly to contain the spread of COVID-19 and limit the adverse economic impact, by adopting rigid social distancing policies and implementing a robust anti-crisis package worth 9% of its gross domestic product (GDP). Nonetheless, COVID-19 has still brought human suffering to Kazakhstan and is having a substantial negative effect on current and future growth prospects.

Evidence-based skills policies can play a vital role in mitigating the adverse impacts of the COVID-19 crisis and supporting the ensuing recovery. The crisis has affected more vulnerable groups most intensely, with unemployment hitting low-skilled and informal workers the hardest. School closures have had a stronger impact on children from vulnerable families because they are generally less able to learn in an online environment. In the shorter term, supporting vulnerable groups, for example, by ensuring that low-skilled adults can promptly reactivate their skills in the labour market, can help reduce poverty and inequality. In the medium- to long-term, megatrends, such as globalisation, digitalisation and demographic change, will continue to transform jobs, the way society functions and how people interact. A resilient and adaptable skills system will allow Kazakhstan to benefit from these transformations, achieving higher levels of economic growth and well-being in the process, and will enable Kazakhstan to face the economic and social shocks of the future.

In recent years, Kazakhstan has implemented several strategies and reforms to create a skills system capable of addressing many of these challenges. The Kazakhstan 2050 strategy, which sets the long-run objective of transforming the country into one of the top 30 most developed economies in the world by 2050, identifies the creation of a modern and relevant system of lifelong learning among its seven priorities. To help bring forward this ambitious objective in the short term, Kazakhstan has launched the *Enbek* programme, which aims to promote productive employment and to engage citizens in entrepreneurship. It has implemented various measures, such as introducing the concept of non-formal education in legislation.

This report identifies four priority areas for strengthening Kazakhstan's endeavour to build a strong skills system: improving the activation of skills of vulnerable populations; fostering participation in adult learning of all forms; building an effective skills information system; and strengthening the governance of the skills system. These priorities will be at the core of further development of Kazakhstan's skills strategies. The OECD worked collaboratively with Kazakhstan to develop policy responses that are tailored to specific skills challenges and needs. The process involved detailed analysis and widespread engagement with over 150 stakeholders, leading to the recommendations set out in this report.

The OECD stands ready to support Kazakhstan further, particularly in light of the enormous challenges now emerging as a result of the COVID-19 pandemic, as it seeks to implement effective skills policies and continues its transition to a knowledge-based economy and society.

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Our warm thanks go to the many government and non-government representatives who generously shared their time and insights during workshops, group discussions and many other meetings with the OECD team in Nur-Sultan and Almaty, virtually and via written contributions. Over 100 stakeholders participated in the various meetings and virtual consultations that took place during three OECD missions. These stakeholders represented government departments, government agencies, subnational authorities, education and training institutions, businesses and business associations, trade unions and community associations, academia, civil society and other organisations. We would also like to thank the many experts who volunteered as moderators and note-takers during the workshops.

The OECD Skills Strategy project was a horizontal and inter-institutional effort. The OECD Centre for Skills was responsible for oversight of the project and for the analysis and drafting of Chapters 3 and 5. The OECD Directorate for Employment, Labour and Social Affairs was responsible for the analysis and drafting of Chapters 2 and 4. The European Training Foundation (ETF) provided invaluable analysis and expertise throughout the project and contributed to the drafting of Chapter 5.

Andrew Bell (Head of National Skills Strategy projects in the OECD Centre for Skills) and Alessandro Goglio (Head of Non-Member Countries, Directorate for Employment, Labour and Social Affairs) provided analytical guidance, comments on chapters and supervision. Stefano Scarpetta, Director of the OECD Employment, Labour and Social Affairs Directorate, and Mark Pearson, Deputy Director of the OECD Employment, Labour and Social Affairs Directorate, both provided strategic oversight for the project, as well as comments.

Stefano Piano (OECD Centre for Skills) was responsible for co-ordinating the OECD Skills Strategy project. The main authors of this report were:

- **Chapter 1. Key insights and recommendations for Kazakhstan**: Stefano Piano, Aleksei Sarapultcev and Sam Thomas (OECD Centre for Skills)
- **Chapter 2. Improving the activation of skills of vulnerable populations in Kazakhstan**: Miso Lee (OECD Directorate for Employment, Labour and Social Affairs)
- **Chapter 3. Fostering participation in adult learning of all forms in Kazakhstan**: Stefano Piano and Sam Thomas (OECD Centre for Skills)
- **Chapter 4. Building an effective skills information system in Kazakhstan**: Miso Lee (OECD Directorate for Employment, Labour and Social Affairs)
- **Chapter 5. Strengthening the governance of the skills system in Kazakhstan**: Jose Manuel Galvin Arribas (European Training Foundation) and Stefano Piano (OECD Centre for Skills).

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Sam Thomas (OECD Centre for Skills) co-ordinated the publication process and the launch of the report. Jennifer Cannon, Véronique Quénehen, Rasa Silyte-Niava and Aleksei Sarapultcev (OECD Centre for Skills) provided invaluable support for mission organisation, report layout and design and publication planning. Julie Harris copy-edited the report, and the report was translated into Russian by Sergey Stefanishin.

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Abbreviations and acronyms

The main abbreviations and acronyms used in the report are listed below.

Acronym	
ALMIS	Automated Labour Market Information System
ALMP	Active Labour Market Programme
CAREC	Central Asia Regional Economic Co-operation
ECEC	Early Childhood Education and Care
EEC	Eurasian Economic Commission
ETF	European Training Foundation
EQF	European Qualifications Framework
FTU	Federation of Trade Unions
GDP	Gross Domestic Product
GVC	Global Value Chain
HE	Higher Education
HPWPs	High-Performance Workplace Practices
IAP	Individual Action Plan
ICT	Information and Communication Technology
ILAs	Individual Learning Accounts
ILO	International Labour Organization
ILS	Individual Learning Scheme
ISIT	Innovative School of Internet Technologies
KIMEP	Kazakhstan Institute of Management, Economics and Strategic Research
LFS	Labour Force Survey
MF	Ministry of Finance
MIPD	Ministry of Information and Public Development
MLSPP	Ministry of Labour and Social Protection of the Population
MNE	Ministry of National Economy
MOES	Ministry of Education and Science
MOOCs	Massive Open Online Courses
NCDSLS	National Council for Development of Social and Labour Sector
NCE or Atameken	National Chamber of Entrepreneurs
NCPT	National Council of Public Trust
NEET	Not in Education, Employment, or Training
NGO	Non-Governmental Organisation
NQF	National Qualifications Framework
NQS	National Qualifications System
NSLFF	National System for Labour Force Forecasting
PES	Public Employment Services
PIAAC	Programme for the International Assessment of Adult Competencies
PISA	Programme for International Student Assessment
PPPs	Public-Private Partnerships
RIA	Review of Institutional Arrangements

Acronym	
RPL	Recognition of Prior Learning
SAA	Skills Assessment and Anticipation
SIS	Skills Information System
SMEs	Small and Medium-sized Enterprises
SQFs	Sectoral Qualification Frameworks
SSCs	Sector Skills Council
STF	Skills Technology Foresight methodology
VET	Vocational Education and Training
WDC	Workforce Development Centre
WTO	World Trade Organization

Executive summary

OECD-Kazakhstan collaboration on the OECD Skills Strategy project

The OECD Skills Strategy project provides Kazakhstan with an assessment of its skills performance and tailored recommendations. As part of the project, the OECD team organised three main consultations to generate a shared understanding of skills challenges and opportunities among governmental actors and non-governmental stakeholders. During these consultations, the OECD engaged with a range of departments and government agencies and over 150 stakeholders in interactive workshops, group discussions, and bilateral meetings in Nur-Sultan and Almaty, as well as a range of virtual sessions. This process provided invaluable input that shaped the findings and recommendations in this report.

Key findings and recommendations for improving Kazakhstan's skills performance

In recent years, Kazakhstan has made progress in strengthening its skills and economic performance. The inclusivity of Kazakhstan's skills system is strong across all levels of education, for example. Kazakhstan is improving rapidly in the use of skills at work, particularly in the application of digital skills. Its economic output has been steadily increasing, and other areas continue to see progress, such as health and accessibility to services.

However, the skills of youth in Kazakhstan remain substantially below the average across OECD countries. Adults also possess comparatively weak foundational and problem-solving skills, as the culture of adult learning is under-developed. Vulnerable populations face high barriers to the activation of their skills in the labour market, and inadequate skills information systems prevent more effective and targeted policies. Many of these skills challenges are rooted in poor governance arrangements, including weak intragovernmental co-ordination and co-operation and insufficient stakeholder engagement.

The coronavirus (COVID-19) pandemic poses a unique challenge to Kazakhstan's economy and society. Kazakhstan acted quickly to contain the spread of COVID-19 and limit its adverse economic impact, but the virus has brought human suffering and is having a substantial negative effect on Kazakhstan's current and future growth prospects. Evidence-based skills policies can play a vital role in mitigating the adverse impacts of the COVID-19 crisis and supporting the ensuing recovery.

Kazakhstan has already implemented a range of strategies and reforms to address the above-mentioned challenges. The OECD and the Government of Kazakhstan have identified four priority areas to further improve Kazakhstan's skills performance, which are the focus of this report. The key findings and main recommendations are summarised below.

Improving the activation of skills of vulnerable populations

Skills activation policies play a crucial role in supporting the employment of vulnerable populations and ensuring inclusive growth. In Kazakhstan, activating the skills of those most exposed to the risk of falling into long-term unemployment, particularly youth, older workers and people with disabilities, is a key priority.

During economic downturns, such as the one caused by the COVID-19 pandemic, policies to support activation are particularly important to ensure that individuals working in non-standard jobs, who face a higher risk of economic dislocation, are not left behind.

Main recommendations

- Adopt and utilise digital communication tools to ensure the continuation of services during and following the COVID-19 crisis.
- Improve jobseeker profiling tools to enable upfront intervention by allowing caseworkers to set up individual action plans.
- Scale up expenditure on activation programmes with a proven track record and capacity to secure the achievement of stated objectives.

Fostering participation in adult learning of all forms

Across all countries, participation in adult learning has significant benefits for individuals, employers and society as a whole, including higher wages, higher productivity and higher levels of social trust. Throughout the project, the OECD provided support for identifying how to adapt the supply of adult learning to help companies and individuals cope better with the social distancing measures made necessary by the COVID-19 pandemic. In the longer term, fostering participation in adult learning of all forms can help Kazakhstan move away from a low-skill equilibrium towards high-productivity and high-skill activities.

Main recommendations

- Introduce a strong certification and monitoring system to certify the quality of non-formal adult learning opportunities.
- Develop a shared vision on the importance of adult learning, based on extensive consultations with stakeholders.
- Review training plans in state-owned enterprises to ensure that they enable all employees to develop a broad set of technical, foundational and soft skills.

Building an effective skills information system

An effective skills information system plays a key role in reducing skills shortages and mismatches, by providing information on current and future skills needs and career and learning opportunities. This can be used to inform a broad range of policies, from employment, to education and training, along with policies targeted at the most vulnerable. Timely skills information is particularly important during economic downturns, such as the one caused by the COVID-19 pandemic, which is characterised by rapidly changing labour markets.

Main recommendations

- Adopt an integrated approach by combining qualitative and quantitative methods to achieve robust skills analysis results.
- Improve the frequency and coverage of quality data on skills and labour markets, by strengthening statistical surveys and expanding administrative data collection.
- Introduce a consolidated portal to provide all individuals with access to information on skills needs, labour market trends and the availability of study/work opportunities.

Strengthening the governance of the skills system

Effective governance arrangements are central to supporting skills policies and developing policy responses to the COVID-19 pandemic, as well as other cross-cutting policy challenges. Better co-operation and collaboration arrangements are crucial to ensure that Kazakhstan develops and implements policies

that are coherent and mutually reinforcing. Stronger mechanisms to engage stakeholders can enable policy makers to gain information regarding the real-world effects of policies and regulations. Aligned and co-ordinated financing arrangements can also help ensure that Kazakhstan provides adequate resources for skills policies, which are then distributed efficiently and equitably.

Main recommendations

- Strengthen the remit of the National Council for Development of Social and Labour Sector by specifying a clearly defined mandate and introducing a combination of inter-ministerial working groups and technical bodies.
- Introduce a technical body to co-ordinate the development of the National Qualifications System.
- Introduce a training levy to increase the financial contribution of employers to vocational education and training, adult learning and active labour market programmes, following extensive consultations with employers.

1 Key insights and recommendations for Kazakhstan

This chapter summarises the context, key insights and policy recommendations of the OECD Skills Strategy Assessment and Recommendations project in Kazakhstan. It applies the OECD Skills Strategy Framework to assess the performance of Kazakhstan's skills system. On the basis of this assessment, four priority areas for action were identified by the OECD in collaboration with the Kazakhstan National Project Team. For each priority area, the chapter provides an overview of the performance, the policy context and a summary of the key findings and recommendations. Subsequent chapters provide more details on the opportunities for improvement, good practices and policy recommendations for Kazakhstan in each priority area.

Skills matter for Kazakhstan

Skills are vital for enabling individuals and countries to thrive in an increasingly complex, interconnected and rapidly changing world. Countries in which people develop strong skills, learn throughout their lives, and use their skills fully and effectively at work and in society are more productive and innovative, and enjoy higher levels of trust, better health outcomes and a higher quality of life. As new technologies and megatrends, such as globalisation, digitalisation and demographic change, increasingly shape our societies and economies, getting skills policies right becomes even more critical for ensuring societal well-being and promoting growth that is inclusive and sustainable.

Since its independence, Kazakhstan has achieved significant economic and social progress. Driven by a boom in natural resource extraction that started in the early 2000s, Kazakhstan has succeeded in raising living standards, decreasing poverty and increasing employment levels. Since 2002, gross domestic product (GDP) per capita has risen six-fold and is now at levels similar to that of some OECD countries, such as Chile, Greece and Turkey, at purchasing power parity (PPP) (OECD, 2019[1]). The percentage of the population living below the national poverty line has fallen from 46.7% in 2001 to just 2.5% in 2017, and life expectancy at birth has risen from 65 years in 2000 to 73 in 2018 (World Bank, 2020[2]).

Evidence-based skills policies are crucial to ensure that Kazakhstan can continue on this trajectory. In the shorter term, developing appropriate policy responses to the coronavirus (COVID-19) crisis, by supporting vulnerable groups and fostering the ensuing recovery, remains the overarching policy priority. In the medium to long term, better skills policies remain fundamental to helping Kazakhstan achieve a higher level of prosperity. Megatrends will continue to transform jobs, the way society functions and how people interact. Better skills policies will allow Kazakhstan to benefit from these transformations, achieving higher levels of economic growth and well-being in the process.

The COVID-19 pandemic is an unprecedented economic shock for Kazakhstan

The COVID-19 pandemic is a global health crisis without precedent in living memory. It has strained healthcare systems and resulted in hundreds of thousands of deaths globally. It has also caused the most severe economic recession since the 1920s. Vaccination campaigns, concerted health policies and government financial support are expected to lift global GDP by 4.2% in 2021 after a fall of 4.2% in 2020. While this outcome is better than predicted in mid-2020, the pandemic's effects will be long-lasting (OECD, 2020[3]).

Kazakhstan acted quickly to contain the spread of the coronavirus in 2020, creating a state commission to co-ordinate the effort to fight the pandemic, and declaring a state of emergency between March and May 2020. The state of emergency saw quarantine procedures implemented in all regions, with selected quarantine and social distancing policies remaining in force beyond mid-May 2020. Kazakhstan also implemented an extensive series of measures to mitigate the economic impact, designing an anti-crisis package of USD 10 billion (KZT 4.4 trillion or about 9% of GDP) (OECD, 2020[4]). According to official statistics, support programmes so far have provided employment to over 750 000 people, and direct income support to about 4.6 million people (OECD, 2020[4]). In September 2020, additional measures to foster economic development, reduce regional imbalances, strengthen the healthcare system, improve digitalisation and increase accessibility and quality of education were announced (President of the Republic of Kazakhstan, 2020[5]).

Nonetheless, COVID-19 has still brought human suffering to Kazakhstan and is having a significant negative effect on current and future growth prospects. The economy contracted by 3% in January-August of 2020, down from an annual GDP growth rate of 4.5% in 2019 (World Bank, 2020[6]; Asian Development Bank, 2020[7]), and is expected to only moderately recover in 2021 (World Bank, 2020[8]). Over the January-August 2020 period, retail trade fell by 11.7%, investment dropped by 5.2%, and exports fell amid weak global demand. In line with other countries around the world, lockdowns led to the closures of

education and training institutions, with most learning opportunities moving on line. In Kazakhstan, the four months of school closures between March and June 2020, and the disruption to education caused more generally throughout 2020 and early 2021 could have a decades-long impact on the economy and society. The World Bank estimates that student cohorts affected by COVID-19 in Kazakhstan could have their future earnings reduced by an estimated 2.9%, amounting to an overall yearly economic loss of up to USD 1.9 billion (2011 PPP) (World Bank, 2020[9]).

These dynamics have affected more vulnerable groups most intensely, both in Kazakhstan and worldwide. Children, young people and adults with lower access to information and communication technology (ICT), for example in rural areas, and weaker ICT skills, often face a more difficult socio-economic situation and are less likely to be able to learn in an online environment. For instance, it is estimated that the pandemic has led to a widening of the reading achievement gap by 18% between children from poor and rich households, although the full-scale impact is not yet known (Marteau, 2020[10]). The crisis has made it more difficult for young people to complete their school-to-work transition, generating long-term losses in earnings and well-being through "scarring effects" (OECD, 2020[11]). The crisis also had a stronger effect on sectors, such as personal services, which have a higher proportion of lower-skilled workers and women (Workforce Development Center, 2020[12]; OECD, 2020[11]).

Investing in skills remains essential as the world slowly adjusts to a new normal. In the shorter term, measures to strengthen skills activation, for instance through carefully designed active labour market programmes (ALMPs) and targeted investments in public employment services (PES), will be crucial to ensure that vulnerable groups are not left behind (see Chapter 2). Including vulnerable groups in the policy responses to the COVID-19 crisis is key to reducing inequality and poverty. As a new normal emerges, Kazakhstan's prosperity will then depend on its capacity to respond to the transformations induced by megatrends.

Integration in global value chains can help diversify Kazakhstan's economy in the long term

The first of the megatrends is globalisation. Most countries are now integrated to some degree in global value chains (GVCs), with products designed, manufactured and assembled across different locations (OECD, 2019[13]). Over the last three decades, Kazakhstan has developed an open economy with the export of goods and services contributing to 37.5% of GDP (World Bank, 2018[14]), compared to an OECD average of 30% (OECD, 2018[15]). However, exports are heavily dependent on natural resources. In 2018, crude petroleum oils made up 43.5% of gross exports, and Kazakhstan's exports of all minerals and metals combined formed 73.4% of gross exports (Atlas of Economic Complexity, 2020[16]). This reliance on fossil fuels and natural resources might become problematic in light of climate change action. The worldwide transition to renewable energies and carbon-friendly production processes will lead to decreased revenue and employment losses in coal mining, oil and gas mining, oil refining and natural gas utilities, which are crucial sectors for Kazakhstan's economy (ILO, 2017[17]; Martinez-Fernandez, Hinojosa and Miranda, 2010[18]).

Further integration in GVCs can help Kazakhstan build a more diversified and dynamic economy. Kazakhstan is ideally placed to become integrated into GVCs as it occupies a key geographical position at the crossroads of Western Europe, South Asia, the Russian Federation (hereafter "Russia") and the People's Republic of China (hereafter "China"). While trade with Central Asian partners accounted for just 5% of total exports in 2015, Central Asian markets are vital for Kazakhstan's non-extractive industries. Kazakhstan is already actively pursuing trade integration through the Eurasian Economic Commission (EEC), the Central Asia Regional Economic Cooperation (CAREC) Programme, and other regional bodies, as well as recently joining the World Trade Organization (WTO) in 2015 (World Bank, 2018[19]).

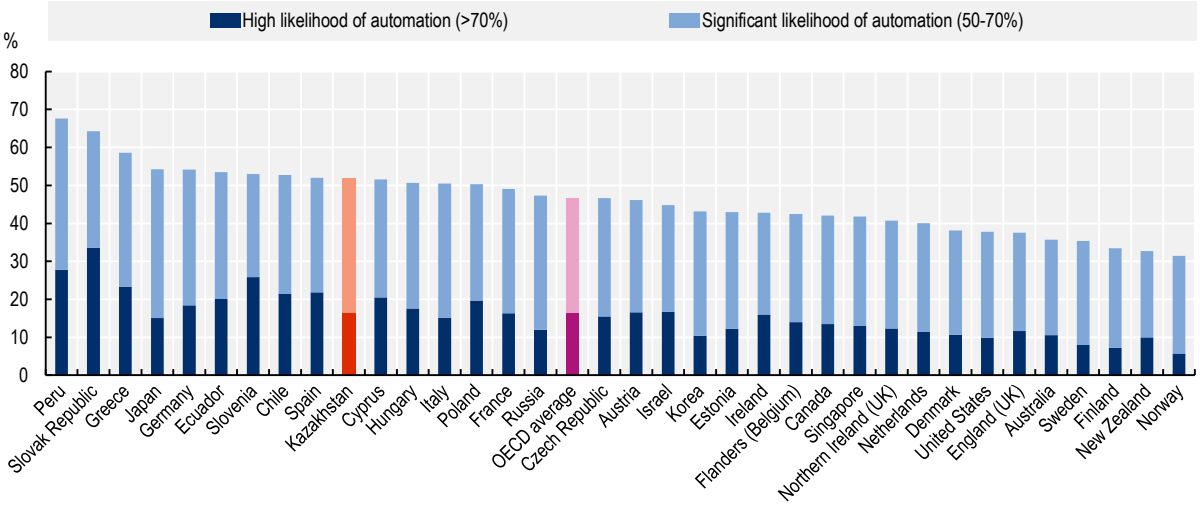
Strengthening the skills system, by expanding access to adult learning opportunities and improving governance of skills policies, will help Kazakhstan better integrate into these GVCs. For example, a strengthened skills system will help ensure that Kazakhstan is able to take advantage of foreign direct investment channelled through The Belt and Road overland route that China has planned (World Bank, 2018[19]).

Digitalisation can increase productivity and create high-skilled jobs but may lead to some employment losses in lower-skilled occupations

The second megatrend that will contribute to transforming the economy and society is digitalisation. Rapid advances in technology are transforming how people live and work. Innovations in artificial intelligence, big data and other ICTs present an opportunity to improve productivity and create high-skilled jobs (OECD, 2019[20]). However, these technological innovations could also lead to employment losses in occupations that have a high proportion of routine tasks, such as controlling or operating machines, which are often performed by lower-skilled individuals. Jobs in Kazakhstan have a comparatively high risk of automation. According to OECD estimates, 52% of jobs are at high or significant risk of being automated, compared to an OECD average of 47% (see Figure 1.1). Jobs most resilient to automation are characterised by the frequent use of complex problem solving on the job and involvement in complex social interactions, such as teaching, influencing or advising others.

Figure 1.1. Likelihood of job automation in Kazakhstan and selected countries

Percentage of jobs that have a high or significant likelihood of automation



Note: Selected countries refer to countries that participated in the Survey of Adult Skills, a product of the Programme for the International Assessment of Adult Competencies Survey of Adult Skills (PIAAC). Jobs are at high risk of automation if their likelihood to be automated is at least 70%. Jobs at risk of significant change are those with the likelihood of being automated at between 50% and 70%.
For PIAAC data from Russia: The sample for the Russian Federation does not include the population of the Moscow municipal area. The data published, therefore, do not represent the entire resident population aged 16-65 in the Russian Federation but rather the population of the Russian Federation excluding the population residing in the Moscow municipal area.
Source: OECD (2019[21]), *Skills Matter: Additional Results from the Survey of Adult Skills*, https://dx.doi.org/10.1787/1f029d8f-en. Estimates based on Nedelkoska, L. and G. Quintini (2018[22]), "Automation, skills use and training", https://pmb.cereq.fr/doc_num.php?explnum_id=4268.

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Workers in Kazakhstan are less engaged in frequent use of complex problem solving and complex social interactions than their peers in OECD countries and other economies. For instance, 12.6% of workers in Kazakhstan report never solving simple or complex problems at work, a result lower than only Ecuador and Mexico, but well above the OECD average of 6.9% (OECD, 2019[21]). Similarly, workers in Kazakhstan

report the second-to-lowest level of engagement in social interactions at work across countries that participated in the Survey of Adult Skills (PIAAC).

To reduce employment losses and realise the productivity benefits of automation, Kazakhstan will need to encourage the development of higher value-added sectors and provide lower-skilled workers with upskilling and reskilling opportunities, for instance, to help them develop digital and soft skills. Going forward, the COVID-19 pandemic will likely further reinforce the urgency of this challenge, by accelerating the pace of digitalisation, as individuals increasingly find themselves making their purchases on line and working remotely.

Kazakhstan benefits from a demographic dividend but will be exposed to population ageing in the long run

Lastly, demographic change will transform the economy and society. In the upcoming decades, OECD countries will be generally exposed to population ageing, which might increase skills pressure and cause changes in the patterns of consumption, with demand shifting from durable goods towards services, such as healthcare and leisure (OECD, 2019[13]).

Kazakhstan is less exposed to population ageing than most OECD countries and neighbouring countries, such as Russia, and continues to benefit from a demographic dividend. The dependency ratio (i.e. the number of pensioners per working population) should peak around 2020 and then remain relatively stable in the upcoming decade, as the result of a "baby boom" in the last decade (OECD, 2016[23]). After a serious decline in the 1990s, fertility rates in Kazakhstan rose from 1.7 in 1999 to 2.8 in 2018 (World Bank, 2020[24]). This increase in fertility rates means that over one-quarter of the population is currently under 15 years old, compared with the OECD average of less than one-fifth. Consequently, Kazakhstan's school-age population is predicted to grow 20% between 2015 and 2030 and labour force growth will also accelerate, peaking around 2030, as the baby boom generation enters the labour market.

To take full advantage of these trends, Kazakhstan will need to expand schooling opportunities while also increasing the quality and relevance of skills that its youth will develop. It will also need to ensure that high-skilled, productive jobs are available to those entering the workforce.

Nonetheless, Kazakhstan will eventually need to address population ageing in the longer term up to 2050 and ensure that a system for lifelong learning is in place to enable adults to upskill and reskill. This is especially important considering the changes automation and climate change will bring to Kazakhstan's job market.

Skills should be at the core of the policy response

The COVID-19 crisis and these megatrends reinforce the need for Kazakhstan to have a forward-looking, dynamic skills strategy. Strengthening the activation of skills, especially of vulnerable individuals, such as youth and low-skilled individuals, through carefully designed ALMPs and targeted investments in PES, will enable individuals to re-join the labour market as the economy recovers from the pandemic. In the long term, people will need a stronger and more comprehensive set of skills. Strong foundational skills will make people more adaptable and resilient to changing skills demands, with digital, transversal, social and emotional, and job-specific skills (see Box 1.1) becoming increasingly essential for adults to succeed in both work and life.

Box 1.1. The OECD Skills Strategy definition of skills

The *OECD Skills Strategy 2019* identifies a broad range of skills that matter for economic and social outcomes, including:

- **foundational skills**, including literacy, numeracy and digital literacy
- **transversal cognitive and meta-cognitive skills**, including critical thinking, complex problem solving, creative thinking, learning to learn and self-regulation
- **social and emotional skills**, including conscientiousness, responsibility, empathy, self-efficacy and collaboration
- **professional, technical and specialised skills**, as needed to fulfil specific occupational tasks.

Source: OECD (2019[13]), *OECD Skills Strategy 2019: Skills to Shape a Better Future*, https://dx.doi.org/10.1787/9789264313835-en.

The OECD Skills Strategy project in Kazakhstan

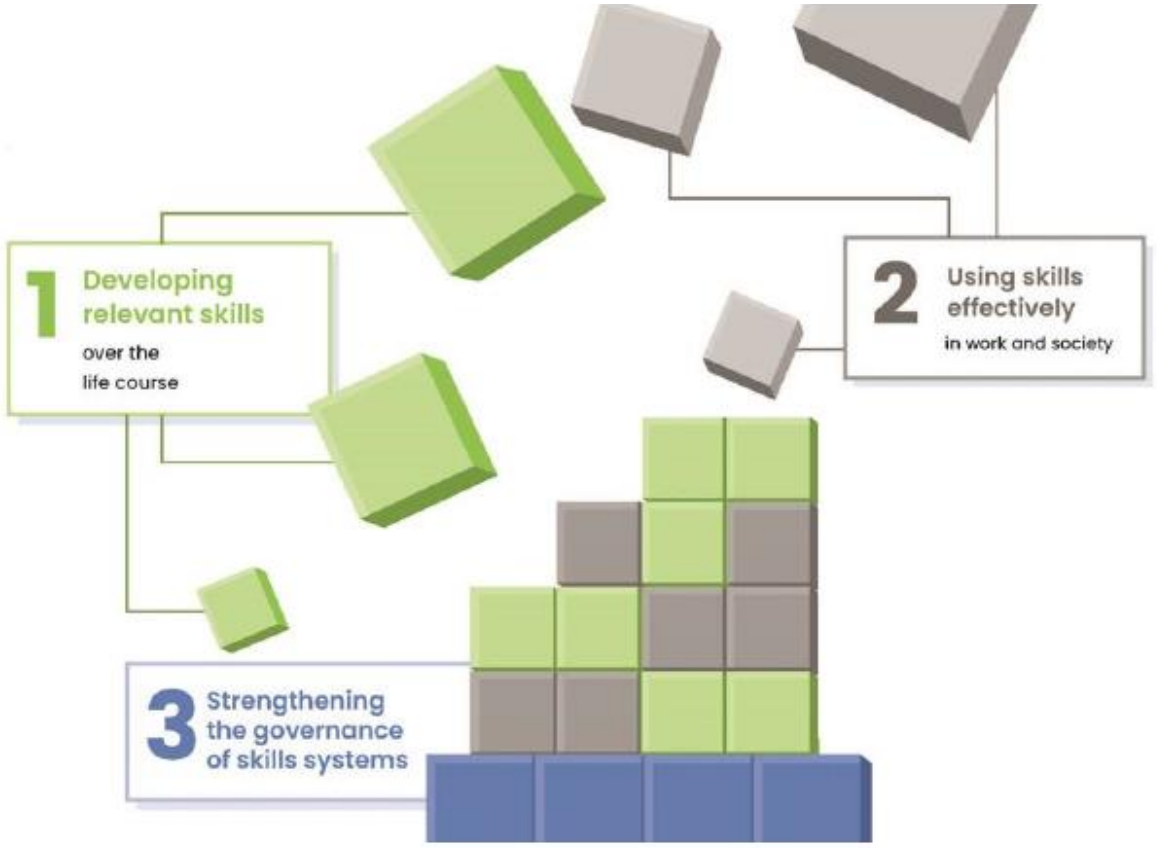
OECD Skills Strategy projects provide a strategic and comprehensive approach to assess countries' skills challenges and opportunities and build more effective skills systems. The OECD collaborates with countries to develop policy responses tailored to each country's specific skills challenges and needs. The foundation of this approach is the OECD Skills Strategy Framework (see Figure 1.2), the components of which are:

- **Developing relevant skills over the life course**: To ensure that countries are able to adapt and thrive in a rapidly changing world, all people need access to opportunities to develop and maintain strong proficiency in a broad set of skills. This process is lifelong, starting in childhood and youth and continuing throughout adulthood. It is also "life-wide", occurring both formally in schools and higher education, and non-formally and informally in the home, community and workplaces.
- **Using skills effectively in work and society**: Developing a strong and broad set of skills is just the first step. To ensure that countries and people gain the full economic and social value from investments in developing skills, people also need opportunities, encouragement and incentives to use their skills fully and effectively at work and in society.
- **Strengthening the governance of skills systems:** Success in developing and using relevant skills requires strong governance arrangements to promote co-ordination, co-operation and collaboration across the whole of government; engage stakeholders throughout the policy cycle; build integrated information systems; and align and co-ordinate financing arrangements.

The OECD Skills Strategy project for Kazakhstan adopted this approach using an inter-departmental project team to support the whole-of-government approach to skills policies, and by engaging a broad variety of stakeholders.

The project officially started with a Skills Strategy Policy Seminar in October 2019. As part of the project, the OECD team organised two main consultations to develop a constructive dialogue between government actors and stakeholders in order to generate a shared understanding of skills challenges and opportunities as a basis for action.

Figure 1.2. The OECD Skills Strategy Framework



Source: OECD (2019[13]), *OECD Skills Strategy 2019: Skills to Shape a Better Future*, https://dx.doi.org/10.1787/9789264313835-en.

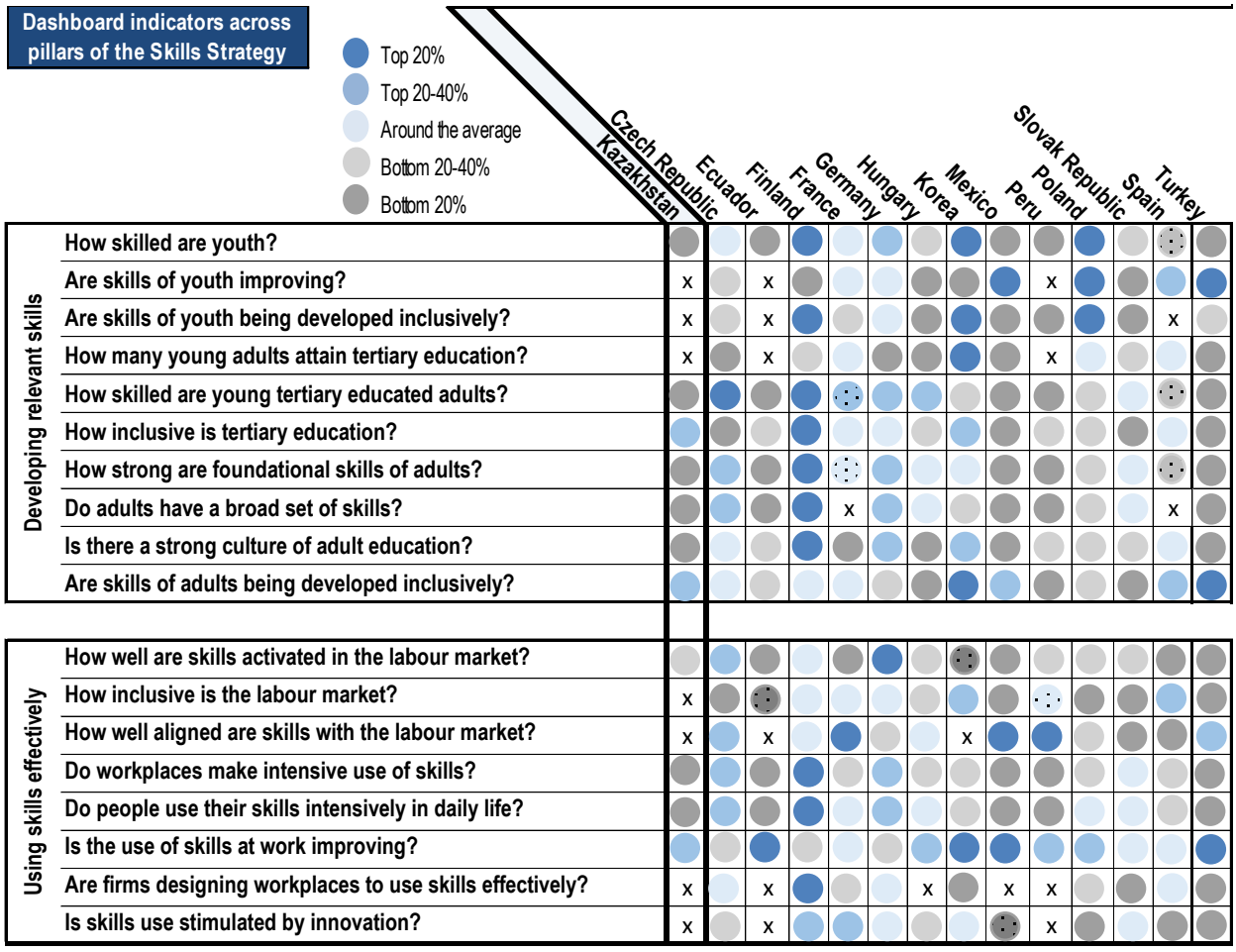
The OECD team travelled to Kazakhstan for an Assessment Mission (February 2020) to discuss Kazakhstan's performance in four priority areas, to identify potential opportunities to improve performance and to start the discussion on areas for potential recommendations. This Assessment Mission included two large workshops in Nur-Sultan and Almaty, as well as bilateral meetings and focus groups. Due to the outbreak of the pandemic, the OECD then delivered Recommendations Consultations (June 2020) virtually, in order to test and refine a list of draft recommendations and to identify specific actions that needed to be undertaken. Following this process, the report was written between June 2020 and January 2021, despite a rapidly evolving socio-economic situation.

The performance of Kazakhstan's skills system

The OECD Skills Strategy Dashboard provides an overview of the relative performance of countries across the first two dimensions of the OECD Skills Strategy: developing relevant skills over the life course and using skills effectively in work and society (as presented in Figure 1.3). For each dimension, there are a number of indicators, some of which are composite indicators, which provide a snapshot of each country's performance (see Annex 1.A for the indicators). The dashboard covers all OECD countries plus Ecuador, Kazakhstan and Peru.

Figure 1.3 shows the performance of Kazakhstan in comparison with a selection of eastern European, western European, and upper middle income countries.

Figure 1.3. OECD Skills Strategy Dashboard: Kazakhstan and selected countries



Note: These summary indicators are calculated as a simple average of a range of underlying indicators (see Annex 1.A). All underlying indicators have been normalised in a way that implies that a higher value and being among the "top 20%" reflects better performance. An "x" indicates insufficient or unavailable data, and dotted circles indicate missing data for at least one underlying indicator. The dashboard includes OECD countries, plus Ecuador, Kazakhstan and Peru.
Source: The dashboard relies on comparable cross-country data from OECD surveys such as the Programme for International Student Assessment (PISA) and the Survey of Adult Skills (PIAAC).

Developing relevant skills

Youth's skills are being developed inclusively, but overall performance could improve

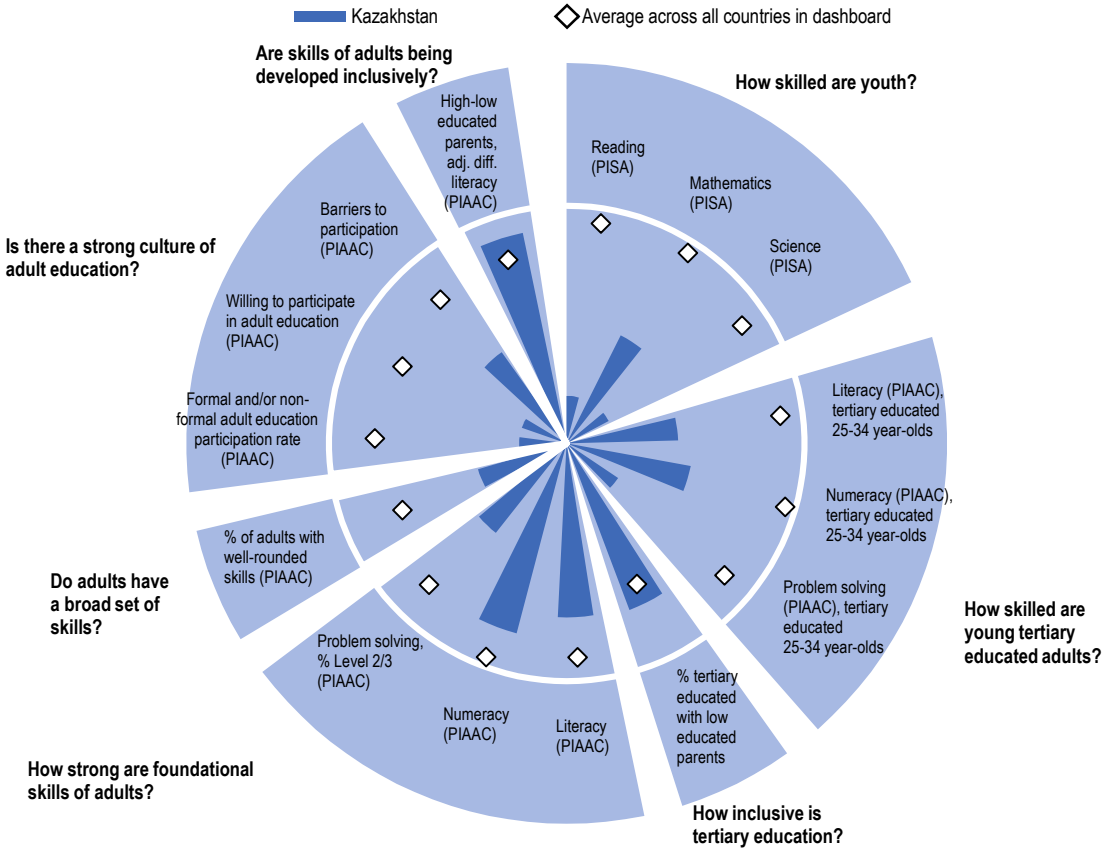
According to the Programme for International Student Assessment (PISA), the skills of youth in Kazakhstan are being developed inclusively, with a comparatively small gap in performance between students from different socio-economic backgrounds. Socio-economically advantaged students outperformed disadvantaged students in reading by 40 points in PISA 2018, compared to a difference of 89 points across OECD countries. Socio-economic difference explained just 2% of the variation in mathematics performance and 3% of the variation in science performance, compared to 14% and 13%, respectively, in OECD countries (OECD, 2019[25]).

However, the skills of youth in reading, mathematics and science in Kazakhstan are substantially below average, when compared to the countries presented in the OECD Skills Strategy Dashboard (see

Figure 1.4), with a low share of high performers in all three subjects. Nonetheless, youth in Kazakhstan perform in line with their peers in other upper middle income countries, such as Mexico and Turkey (OECD, 2019[26]).

Figure 1.4. Kazakhstan's performance on key indicators for developing relevant skills

Relative position in country ranking (based on normalised scores), where higher value reflects better performance



How to read this figure: The normalised scores indicate the relative performance across countries in the dashboard: the further away from the core of the chart, the better the performance. For example, the indicator "Willing to participate in adult education (PIAAC)" has a low score compared to the average, indicating a share of employees willing to participate near the bottom of the ranking.
Note: The average is based on the sample of countries/regions featured in the OECD Skills Strategy Dashboard.
Source: See Annex 1.A for an explanation of the sources and methodology.

StatLink https://doi.org/10.1787/888934233416

Kazakhstan has an inclusive tertiary education system, but the skills of young tertiary graduates could improve

Kazakhstan also has one of the most inclusive tertiary education systems across countries considered in the OECD Skills Strategy Dashboard (see Figure 1.4). A comparatively large share of young tertiary graduates come from households where parents did not attend university. However, there is much room to improve the quality of tertiary education in Kazakhstan. Young tertiary graduates in Kazakhstan score more than 30 points below the OECD average in numeracy and literacy (see the "How skilled are young tertiary-educated adults?" indicator in Figure 1.4). This reflects relatively small differences in the skills

proficiency of tertiary-educated adults and adults with less than upper secondary education. The gap in proficiency is just 22 points in literacy and 19 points in numeracy, compared to an OECD gap of 61 score points in literacy and 70 score points in numeracy (OECD, 2019[27]). However, these levels of literacy and numeracy skills are similar to those of other upper middle income countries, such as Mexico and Peru.

Kazakhstan has a weak culture of adult learning

According to the PIAAC data, Kazakhstan's participation rate in formal and/or non-formal education is below all OECD countries and below every other country surveyed, such as Peru and Russia (see Figure 1.4). Similarly, the proportion of adults not wanting to engage in training is also the highest of all countries surveyed. Adults have fewer opportunities to develop foundational skills and a broad set of skills later in life. This is reflected in the results of the OECD Skills Strategy Dashboard. Foundational skills of adults in Kazakhstan are weaker than the average across countries in the dashboard, and adults tend not to develop a broad skillset (see Figure 1.4). For instance, 30% of adults across all countries covered in the OECD Skills Strategy Dashboard have high problem-solving skills, compared to just 14% in Kazakhstan. Nonetheless, Kazakhstan does perform better than other upper middle income countries with respect to the strength of its adults' foundational skills, and Kazakhstan has recently made efforts to strengthen the culture of adult learning through initiatives such as the State Programme of Productive Employment and Mass Entrepreneurship Development 2017-2021 (*Enbek*) (see "The policy context in Kazakhstan" below).

Using skills effectively

The activation of skills in the formal labour market could improve

Kazakhstan seems to fare better in activating the skills of its labour force than the OECD average, major emerging economies and neighbouring countries (see Figure 1.5). In 2018, the employment rate of the population (aged 15-64 years) in Kazakhstan was much higher than the OECD average (65.7% versus 55.9%), while unemployment (4.8% versus 6.8%) and inactivity rates (30.9% versus 40%) were significantly lower.

However, evidence suggests that youth, older workers, low-skilled individuals and people with disabilities are considerably more likely than other population groups to work informally or be self-employed. In 2019, about 7.4% of young people were not in employment, education or training (NEET). In addition, older people in Kazakhstan (conventionally defined as workers in the 55-64 age bracket) show inactivity rates higher than the OECD average (42.4% versus 38.9%), while at the same time employment rates are lower (54.8% vs. 58.1%). As in many OECD countries, in Kazakhstan, low-skilled people struggle more to enter the labour market. People with primary education or below generally have much higher inactivity (92% versus 20%) and lower employment (8% versus 76%) rates than people with higher education, for example, but lower unemployment rates (reflecting very low participation rates). The employment rate of people with disabilities is comparatively low in Kazakhstan, despite the fact that most of them have some capacity to work. At 22%, in Kazakhstan, the employment rate of people with disabilities compares poorly to the OECD-European average of 46.9%, despite the fact that roughly 61% of disabled people are of working age and only 8.9% are fully disabled (defined as between 80% and 100% loss of work capacity) (OECD, 2017[28]). Women in Kazakhstan have significantly lower employment rates than men (60.6% versus 73.2%), resulting primarily from much higher inactivity rates (34% versus 23.1%), and their unemployment rates are also higher (5.6% versus 4.4%).

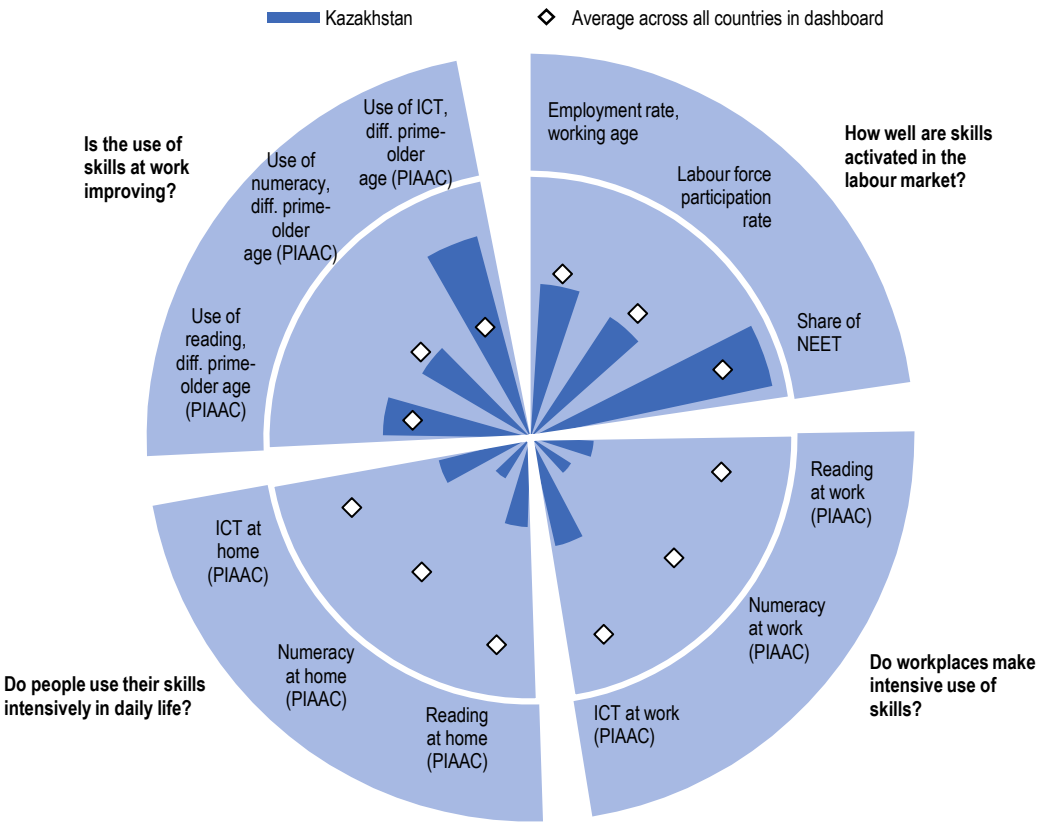
The severe consequences of the coronavirus (COVID-19) pandemic on the labour market and its negative impacts on employment, has made ensuring skills activation an even more urgent policy priority. As mentioned earlier, while the virus respects no borders or socio-economic groups, its spread has disproportionally affected the most vulnerable, either directly because of greater difficulty in protecting

themselves, or indirectly via the impact of the lockdown on their jobs (e.g. low-skilled, temporary jobs) (OECD, 2020[11]).

Despite some signs of improvement, skills are not used intensively in the workplace or in daily lives

Figure 1.5. Kazakhstan's performance on key indicators for using skills effectively

Relative position in country ranking (based on normalised scores), where higher value reflects better performance.



How to read this figure: The normalised scores indicate the relative performance across countries in the dashboard: the further away from the core of the chart, the better the performance. For example, indicator "Numeracy at work (PIAAC)" indicates a low score compared to the average, indicating a share of workers using numeracy skills in the workplace near the bottom of the ranking.
Note: The average is based on the sample of countries/regions featured in the OECD Skills Strategy Dashboard.
Source: See Annex 1.A for an explanation of the sources and methodology.

StatLink https://doi.org/10.1787/888934233435

Regular use of ICT, numeracy and literacy skills are important for maintaining and developing skills. The intensity of skills use both in everyday life and at home is considerably lower in Kazakhstan than the average across countries considered in the OECD Skills Strategy Dashboard (see Figure 1.5). Indeed, Kazakhstan is at the bottom of the index of intensity of engagement in numeracy practices in everyday life and work (OECD, 2019[21]). Over 20% of adults report using no numeracy skills in everyday life, and 26% say they do not engage in numeracy practices at work, compared to OECD averages of 4% and 15%, respectively. However, the use of skills at work has been improving rapidly, in particular with regard to ICT skills use.

Strengthening the governance of skills systems

The OECD Skills Strategy (2019[13]) identifies four pillars on which well-functioning governance arrangements are built: integrated information systems, strong co-ordination across the whole of government, effective stakeholder engagement, and aligned and co-ordinated financing arrangements. These four pillars can be considered as enabling conditions to ensure the development and use of skills.

- **Integrated information systems** that collect and disseminate relevant information are critical to ensuring that governments and stakeholders are able to make informed choices about skills policies.
- **Co-ordination across the whole of government** includes both "vertical" co-ordination between different levels of government as well as "horizontal" co-ordination between different departments of government that are either directly responsible for skills policy or influence skills policies. The presence of effective co-ordination mechanisms helps ensure that skills initiatives are coherent and mutually reinforcing.
- **Engaging stakeholders** emerges from the complexity of policy actions that need to be undertaken to achieve a strong skills system. Policy makers dealing with complex policy choices can benefit from the expertise and knowledge of stakeholders, allowing for more effective forms of policy making. Engaging stakeholders can also enhance the political legitimacy of policy-making decisions.
- **Aligning and co-ordinating financing arrangements** is crucial to ensure countries provide adequate resources for skills policies as well as for steering those investments in ways that better match skills supply with demand.

Kazakhstan can build a more effective skills information system

A skills information system (SIS) can be defined as the set of fundamental arrangements, facilities and procedures supporting the collection, process and dissemination of skills and labour market information. It includes information on current and future labour market needs gathered by skills assessment and anticipation (SAA) exercises, as well as information on current vacancies, study and training opportunities for individuals. An effective SIS can provide useful input to inform decision making by a broad range of actors, including policy makers, students, training institutions and jobseekers. In turn, such informed decision making can contribute to reducing skills shortages and skills mismatches, which can exert a negative impact on overall economic growth, on firms and on individuals.

The development of a strong SIS requires the combination of many constituting elements, which can be challenging in many countries. At the technical level, these involve access to detailed skills and labour market data, as well as of sophisticated analytical tools to elaborate basic statistical information. At the communication and policy level, they include the capacity to disseminate the skills information to a wide range of interested stakeholders, which is essential to nurturing the policy debate and informing stakeholders' choices. According to the evidence gathered throughout the OECD Skills Strategy project, Kazakhstan has struggled so far to bring together these constituting elements. Kazakhstan does not have a robust set of SAA tools to identify current and future labour market and skills needs. To a significant extent, this might depend on limitations in the availability and accessibility of primary data. Kazakhstan has also had difficulties in disseminating results from the existing SAA tools and the available information on current vacancies, study and training opportunities among stakeholders and individuals.

Kazakhstan needs to adopt a whole-of-government approach to skills policies

In the last few years, Kazakhstan has transitioned to a more inclusive governance model with increasing opportunities for exchange and dialogue among government ministries, and between central and local

government (UNESCO, 2020[29]). However, according to the evidence gathered throughout the OECD Skills Strategy project, there are no systemic institutional arrangements to guide horizontal co-operation and collaboration on skills policies. Co-operation and collaboration seem to take place on an ad hoc basis through formal mechanisms such as memorandums, based on synergies created by some projects or in the context of ambitious policy goals. Similarly, there are no strong mechanisms for vertical co-ordination and co-operation between central and local government. Furthermore, even if effective collaboration and co-operation arrangements are in place, countries need to put in place effective monitoring and evaluation mechanisms to assess the functioning of the skills system. Kazakhstan has still substantial room for improvement in this direction. According to the evidence gathered throughout the project, there are limited resources for the assessment and monitoring of government policies, and very few evaluations are carried out across the different areas of the skills system. For example, evaluations on the impact of active labour market programmes are not common in Kazakhstan, making it difficult to understand which programmes deliver the best value for money.

Kazakhstan needs to continue improving stakeholder engagement

Kazakhstan has made progress in strengthening stakeholder engagement in policy development in recent years. For instance, Kazakhstan has made increasing use of dialogue and stakeholder co-operation practices, engaging civil society and citizens in public consultations (UNESCO, 2020[29]). Employers and trade unions have also been increasingly active in trying to shape the direction and implementation of skills policies. However, according to information gathered throughout the OECD Skills Strategy project, the approach to stakeholder engagement to inform policy development needs to more unified and systematic. In particular, discussions with employers and trade unions seem to happen on an ad hoc basis, rather than following a structured process. Better co-ordination of stakeholder engagement is particularly important to make further progress on the development of the National Qualifications System (NQS), which has been a policy priority for Kazakhstan but has stalled over the last few years.

Kazakhstan should strengthen financing arrangements

Kazakhstan can also strengthen financing arrangements for skills policies. Currently, Kazakhstan seems to under-invest in skills policies, compared to other countries (World Bank, 2020[30]). According to World Bank data, Kazakhstan spends approximately 3.4% of GDP on primary, secondary and tertiary education. This is below the OECD average (4.6%), neighbouring countries such as Uzbekistan (5.7%) and Tajikistan (5.2%) and upper middle income countries such as Mexico (6.2%) and Peru (6.9%). Evidence gathered throughout the project also suggests that Kazakhstan seems to under-invest in ALMPs and adult learning. To some extent, improving the funding for skills policies will depend on increasing financial contributions from employers, by strengthening the use of financial incentive schemes. The evidence gathered during the OECD Skills Strategy project suggests that Kazakhstan is making limited use of financial incentives, such as tax deductions, subsidies and levies, which can help increase investment from employers on skills development.

The policy context in Kazakhstan

Kazakhstan has already implemented a range of strategies and reforms to create a skills architecture capable of addressing many of the aforementioned challenges (see Annex Table 1.B.1 and Annex Table 1.B.2).

In 2012, Kazakhstan launched its overarching strategy for the development of the country, Kazakhstan 2050, setting the long-run objective of transforming the country into one of the top 30 most developed economies in the world by 2050. The three key aims of the strategy are to define new areas where Kazakhstan can form productive partnerships and create new sources of economic growth, create

a favourable investment climate, and to effectively develop and modernise the public and private sectors. To achieve these aims, the strategy outlines seven long-term priorities, one of which is "Knowledge and Professional Skills" to create a modern, relevant system of lifelong learning (Strategy 2050, 2020[31]). To deliver the Kazakhstan 2050 strategy in the medium term, the Strategic Development Plan 2025 was developed in 2017 with input from a variety of stakeholders. The development of human capital through high-quality and relevant skills training forms one of the priority tasks for this plan. The aim is to improve availability and inclusiveness of education, develop a national forecasting and qualifications system and improve short-term vocational training for the unemployed and self-employed (Government of Kazakhstan, 2017[32]).

To supplement the long-term Kazakhstan 2050 strategy, and medium-term Strategic Development Plan 2025, Kazakhstan has designed an array of state programmes that outline specific measures for high-priority areas of the economy. The State Programme of Productive Employment and Mass Entrepreneurship Development 2017-2021 (*Enbek*) focuses on promoting productive employment and engaging citizens in entrepreneurship. It aims to support the development of entrepreneurship skills and provide micro loans and grants for entrepreneurs, while also increasing vocational education to less-skilled and unemployed individuals. The State Programme of Education and Science Development 2020-2025 also focuses on measures to improve Kazakhstan's skills system. Some of the aims articulated here are to increase the prestige of teaching (in part through wage increases), to reduce the gap in educational achievement between urban and rural schools, and to improve lifelong learning through developing an integrated system to recognise the learning outcomes of formal and non-formal education (Press Service of the Prime Minister of Kazakhstan, 2019[33]).

Skills development also forms a pillar of other state programmes. For example, skills are an important part of the Digital Kazakhstan State Programme 2018-2022. Improving the basic digital skills of the population is one of the initiatives listed alongside creating a digital ecosystem for businesses and the state, and encouraging businesses to adapt new technologies to increase labour productivity (Government of Kazakhstan, 2017[34]). Skills policies are also embedded in the State Programme of Industrial-Innovation Development 2020-2025 whose goal is to facilitate increasing the export of manufacturing products, and The Roadmap for Development of National Qualifications System 2019-2025, which focuses on developing a step-by-step plan to implement a National Qualifications System (Government of Kazakhstan, 2019[35]; 2018[36]).

Recent reforms have started making progress towards the objectives laid out in these strategies and state programmes. Mobile employment centres were launched in 2019 to help skills activation policies reach more vulnerable individuals. Also, in 2019, the concept of non-formal education was officially recognised in legislation and in 2020, moves were made to increase the accessibility of educational institutions to people with disabilities. To improve Kazakhstan's skills information system, the employment centres' vacancy database has been integrated into the Electronic Labor Exchange, a central web portal for job search and recruitment. In terms of governance of the skills system, two new bodies were established in 2019 to improve co-operation on skills policy: the National Council for Development of the Social and Labour Sector (NCDSLS) and the National Council of Public Trust. The latter body ensures that representatives from local communities, non-governmental organisations (NGOs) and other stakeholders can express their views on skills issues.

Priority areas and recommendations

The OECD has established a fruitful collaboration with Kazakhstan over the past few years. A number of projects have already provided recommendations and insights on how to strengthen different areas of Kazakhstan's skills system, including higher education (HE) policies, labour market policies and initiatives to foster skills use, especially in small and medium-sized enterprises (SMEs). A recent OECD project has

also looked in detail at measures to strengthen education evaluation and assessment policies (see Annex Table 1.B.3). Considering this existing body of work, the assessment of the performance of Kazakhstan's skills system and feedback from the Government of Kazakhstan, four priority areas have been identified for the Skills Strategy project in Kazakhstan:

- Improving the activation of skills of vulnerable populations (Chapter 2)
- Fostering participation in adult learning of all forms (Chapter 3)
- Building an effective skills information system (Chapter 4)
- Strengthening the governance of the skills system (Chapter 5).

Based on in-depth desk analysis, stakeholder workshops, pre-workshop surveys, discussion groups and several bilateral meetings in Kazakhstan, the OECD has selected opportunities and developed recommendations for Kazakhstan in each of the priority areas. The summaries below highlight the key findings and recommendations for each priority area. The chapters themselves present the complete findings and describe the recommendations in more detail, in addition to providing international best practices.

Improving the activation of skills of vulnerable populations

Skills activation policies play a crucial role in supporting the employment of vulnerable populations and ensuring inclusive growth. In Kazakhstan, activating the skills of those most exposed to the risk of falling into long-term unemployment, particularly youth, older workers and people with disabilities, is a key priority. During economic downturns, such as the one caused by COVID-19, policies to support activation are particularly important. Those working in non-standard jobs, often at a low income (e.g. self-employed workers, temporary or part-time workers), are most at risk of economic dislocation since these jobs are over-represented in the sectors most affected by the pandemic. Strengthening skills activation in the short term will be crucial to ensuring that these vulnerable groups are not left behind.

Opportunity 1: Improving the accessibility and quality of public employment centres

Accessible and responsive employment centres are key to disseminating information on available active labour market programmes and delivering job-matching services to activate vulnerable populations who frequently need greater support to find work. This is even more important in light of the short-term priorities imposed by the COVID-19 crisis, which require public employment services to show responsiveness by quickly and flexibly adapting to the situation. However, stakeholders consulted throughout the OECD Skills Strategy project reported that jobseekers in Kazakhstan are not, or little, motivated to register with the PES. The main reasons include low quality of services provided, cumbersome registration procedures, and lack of focus on vulnerable groups who are most in need. Building on these insights, this opportunity explores how Kazakhstan can ensure that PES continue to function during and following the COVID-19 crisis. It goes on to consider how to improve the quality of employment services and how to better reach out to vulnerable populations.

Table 1.1. Opportunity 1: Improving the accessibility and quality of public employment centres

Policy directions	Recommendations	Responsible parties
Ensuring that public employment services provide adapted responses to the circumstances imposed by the COVID-19 crisis	1.1. Adopt and utilise digital communication tools to ensure the continuation of services during and following the COVID-19 crisis.	• Ministry of Labour and Social Protection of Population (MLSPP) • Public employment services (PES)
Continuing efforts to build institutions that effectively reach vulnerable populations	1.2. Improve jobseeker profiling tools to enable upfront intervention by allowing caseworkers to set up individual action plans.	• PES
	1.3. Reinforce collaboration with private employment agencies and local NGOs as a way to alleviate the capacity constraints of public employment services.	• PES • MLSPP

Policy directions	Recommendations	Responsible parties
Improving the quality of services provided by employment centres	1.4. Increase the number of caseworkers and improve their working conditions so as to improve motivation and the quality of services provided.	• MLSPP
	1.5. Monitor and upgrade the quality of the job postings available in the vacancy bank.	• MLSPP • National Chamber of Entrepreneurs (NCE)
	1.6. Adopt proactive approaches to promote efficient job-matching services.	• PES

Opportunity 2: Strengthening the effectiveness of active labour market programmes for vulnerable populations

ALMPs could support skills activation in the labour market and improve skills use, by facilitating access to the labour market and good quality jobs, particularly among the most vulnerable populations. Effective ALMPs typically help enhance motivation and incentives to seek employment; improve job readiness and support in finding suitable employment; and expand employment opportunities. However, several stakeholders consulted throughout the OECD Skills Strategy project reported that very limited evaluations of the impact of ALMPs are carried out in Kazakhstan. Even when this happens, results are unlikely to be used to inform relevant policies and support progress towards good practices. In Kazakhstan's context, developing rigorous impact evaluation systems could be particularly important. In Kazakhstan, ALMPs generally have very broad eligibility criteria, and poor targeting represents an issue, implying that the system is prone to generating deadweight and substitution effects. This could reflect the over-representation of highly skilled participants, leaving little room available for the vulnerable populations who can benefit most from ALMPs. Building on these insights, this opportunity explores how Kazakhstan can improve the financing and effectiveness of ALMPs.

Table 1.2. Opportunity 2: Strengthening the effectiveness of active labour market programmes for vulnerable populations

Policy directions	Recommendations	Responsible parties
Developing rigorous impact evaluation systems on the impact of active labour market policies	1.7. Carry out a rigorous impact evaluation to assess the effectiveness of ALMPs to inform policy.	• Ministry of Labour and Social Protection of Population (MLSPP) • Workforce Development Centre (WDC)
Increasing expenditure on active labour market policies and their targeting	1.8. Scale up expenditure on activation programmes with a proven track record and capacity to secure the achievement of stated objectives.	• MLSPP • Local government
	1.9. Improve the eligibility criteria for participating in activation programmes to ensure that people most in need can access and benefit from them.	• MLSPP

Opportunity 3: Promoting family policies for a more equitable sharing of unpaid and paid work

Women with young children in Kazakhstan frequently face higher barriers to participating in the labour market. Stakeholders consulted throughout the protect identified a range of barriers that prevent young mothers from returning to work, including lack of quality and affordable childcare facilities, traditional social norms and gender stereotypes. Family-friendly policies that allow a more equitable sharing of unpaid and paid work have an essential role to play in facilitating female labour market participation and the use of their skills. Building on these insights, this opportunity explores how Kazakhstan can activate young women's skills by promoting affordable and quality childcare services, flexible leave and work options, and by tackling gender stereotypes.

Table 1.3. Opportunity 3: Promoting family policies for a more equitable sharing of unpaid and paid work

Policy directions	Recommendations	Responsible parties
Improving access to quality childcare services	1.10. Increase the supply of affordable, high-quality childcare facilities.	• Government of Kazakhstan • Ministry of Labour and Social Protection of Population (MLSPP) • Committee on Youth and Family Affairs under the Ministry of Information and Public Development (MIPD)
	1.11. Strengthen financial incentives for young parents to access childcare using child-related cash transfers and subsidies.	• Government of Kazakhstan
Promoting flexible leave and work options	1.12. Facilitate the uptake of flexible leave options and encourage their use among employers.	• Committee on Youth and Family Affairs under MIPD • MLSPP • National Chamber of Entrepreneurs (NCE)
	1.13. Facilitate the uptake of flexible work options (e.g. part-time work, flexible working hours) for young parents.	• Committee on Youth and Family Affairs under MIPD • MLSPP • NCE
	1.14. Promote social awareness campaigns to address gender stereotypes.	• Committee on Youth and Family Affairs under MIPD • MLSPP • NCE • Local government • NGOs

Fostering participation in adult learning of all forms

Across all countries, participation in adult learning has significant benefits for individuals, employers and society as a whole, including higher wages, higher productivity for enterprises and higher levels of social trust. Throughout this project, the OECD has provided support for identifying how to adapt the supply of adult learning opportunities to help companies and individuals cope better with the social distancing measures made necessary by the COVID-19 crisis. In the longer term, fostering participation in adult learning of all forms can help Kazakhstan move away from a low-skill equilibrium towards high-productivity and high-skill activities. This shift will increase the adaptability of Kazakhstan's workforce and support current efforts to diversify the economy away from natural resources exploitation, making Kazakhstan's economy and society more resilient and responsive to the impact of megatrends.

Opportunity 1: Strengthening the supply and quality of adult learning opportunities

High levels of participation in adult learning require a supply of opportunities tailored to the needs of individuals and employers. Adult learning also needs to be of high quality to ensure that it results in real skills gain for individuals. However, stakeholders consulted throughout the OECD Skills Strategy project considered that there are gaps in the supply of adult learning in Kazakhstan and that there is no well-developed system of quality assurance for non-formal learning. Building on these insights, this opportunity explores how Kazakhstan can strengthen the supply of adult learning opportunities and improve the quality assurance of non-formal adult learning opportunities.

Table 1.4. Opportunity 1: Strengthening the supply and quality of adult learning opportunities

Policy directions	Recommendations	Responsible parties
Strengthening the supply of adult learning	2.1. Strengthen the provision of courses to improve foundational skills, especially in rural areas, by integrating them into existing programmes and introducing new delivery models.	• Ministry of Labour and Social Protection of Population (MLSPP) • Ministry of Education and Science (MOES)
	2.2. Extend access to higher education opportunities for adults, by expanding part-time, modular and online delivery models.	• MOES • Higher education institutions
Improving the quality assurance system for non-formal adult learning opportunities	2.3. Introduce a strong certification and monitoring system to certify the quality of non-formal adult learning opportunities.	• MOES
	2.4. Provide guidance and training opportunities to training providers on how to implement the quality standards.	• MOES

Opportunity 2: Increasing motivation to engage in adult learning

Strengthening the supply and quality of adult learning opportunities is insufficient on its own to raise participation. Individuals and employers need to be strongly motivated to engage in adult learning. Stakeholders involved in consultations throughout the project reported that adults and employers in Kazakhstan typically have low levels of motivation to engage in learning. This opportunity describes two policy directions to make progress in this respect. First, it explores how Kazakhstan can create a consensus among stakeholders and individuals about the importance of adult learning. Then, it considers how Kazakhstan can increase large employers' commitment to adult learning.

Table 1.5. Opportunity 2: Increasing motivation to engage in adult learning

Policy directions	Recommendations	Responsible parties
Creating a consensus about the importance of adult learning	2.5. Develop a shared vision on the importance of adult learning based on extensive consultations with stakeholders.	• Government of Kazakhstan • Ministry of Education and Science (MOES) • Ministry of Labour and Social Protection of Population (MLSPP) • Adult learning inter-ministerial working group (see Chapter 5) • Employers • Trade unions • Educational institutions • Local government
	2.6. Consider launching a specific strategy for adult learning to foster better co-operation and co-ordination among ministries and stakeholders.	• Government of Kazakhstan
	2.7. Raise awareness about adult learning opportunities among individuals through a series of targeted campaigns and events.	• Adult learning inter-ministerial working group (see Chapter 5) • MOES • MLSPP
Increasing large employers' commitment to adult learning	2.8. Review training plans in state-owned enterprises to ensure that they enable all employees to develop a broad set of technical, foundational and soft skills.	• Government of Kazakhstan • State-owned enterprises
	2.9. Legislate the introduction of works councils in order to foster social dialogue about job-related training and adult learning.	• Government of Kazakhstan • Trade unions

Opportunity 3: Removing barriers to participation in adult learning

Even when individuals and employers are motivated to participate in adult learning, they often continue to face barriers that prevent them from transitioning from an interest to active participation. Minimising these barriers is crucial to raising participation in adult learning. For adults, the key barriers are generally related

to cost and time. People with disabilities, however, might also face physical and psychological barriers that prevent them from accessing education and training facilities. Among employers, SMEs might lack sufficient knowledge, time and financial resources to provide training opportunities. Stakeholders consulted throughout the OECD Skills Strategy project stressed the importance of minimising barriers both for individuals and for SMEs. Building on their feedback and international evidence, this opportunity discusses how Kazakhstan can remove physical, financial and time-related barriers for individuals. Then, it considers how Kazakhstan can minimise information and financial barriers for SMEs.

Table 1.6. Opportunity 3: Removing barriers to participation in adult learning

Policy directions	Recommendations	Responsible parties
Removing barriers to adult learning for individuals	2.10. Increase incentives and support offered to adults with disabilities to minimise barriers that prevent them from accessing learning opportunities.	• Government of Kazakhstan • Adult learning inter-ministerial working group (see Chapter 5)
	2.11. Extend financial incentives beyond vulnerable groups to minimise cost-related barriers to participating in education and training.	• Ministry of Labour and Social Protection of Population (MLSPP) • Ministry of Education and Science (MOES) • Ministry of National Economy (MNE)
	2.12. Consider introducing training leave legislation and compensatory mechanisms to increase take-up of learning among adults who currently report being too busy at work.	• Government of Kazakhstan
Reducing informational and financial barriers for SMEs	2.13. Establish local training networks to reduce financial barriers for SMEs, especially in under-performing rural regions.	• MNE • National Chamber of Entrepreneurs (NCE)
	2.14. Introduce training facilitators to help SMEs assess their training needs and develop their training plans.	• MNE • NCE
	2.15. Introduce loans or grants to enable SMEs to upskill and reskill their workforce in the context of the Industry 4.0 transformation.	• MNE • NCE

Building an effective skills information system

An effective SIS plays a key role in reducing skills shortages and mismatches by providing information on current and future skills needs and career and learning opportunities. This can be used to inform a broad range of policies, from employment to education and training, along with policies targeted at the most vulnerable. Timely skills information is particularly important during economic downturns, which is characterised by rapidly changing labour markets. This includes the COVID-19 crisis, which had led to varying skills demand across sectors, with demand increasing rapidly in some “essential” services and decreasing in others.

Opportunity 1: Strengthening skills assessment and anticipation tools

SAA exercises are a crucial component of a skills information system because they are the main tools needed to generate information on current and future labour market and skills needs. Information on current and future skills needs, in combination with strong policies and impactful programmes, can help policy makers and stakeholders minimise skills imbalances. Rigorous analytical methodologies and instruments underpinning SAA tools are key to producing reliable, informative and relevant information on current and future skills needs. To maximise the utilisation of skills analysis, it is important to ensure that skills assessment and anticipation results are not only reliable and up to date but also relevant to the needs of different users. Building on these insights, this opportunity provides recommendations on how Kazakhstan can strengthen skills assessment and anticipation methodologies to better identify and support skills and job-matching needs. Then, it explores how Kazakhstan can produce skills analysis results that are more relevant to end users.

Table 1.7. Opportunity 1: Strengthening skills assessment and anticipation tools

Policy directions	Recommendations	Responsible parties
Strengthening skills assessment and anticipation methodologies to better identify and support skills and job-matching needs	3.1. Carry out a stocktaking analysis of existing SAA tools.	• Ministry of Labour and Social Protection of Population (MLSPP) • Workforce Development Center (WDC)
	3.2. Adopt an integrated approach by combining qualitative and quantitative methods to achieve robust skills analysis results.	• MLSPP • WDC
Producing skills assessment and anticipation results that are more relevant to end users	3.3. Promote dialogue among relevant ministries, sectoral and regional experts throughout the process of production of SAA tools.	• MLSPP • Inter-ministerial working group on skills and labour market information (see Chapter 5)

Opportunity 2: Creating an enabling environment for an effective skills information system

Creating an enabling environment is crucial to establishing and operating an effective SIS. This enabling environment requires, first of all, access to timely and high-quality labour market and skills data. Without prompt and secure access to such data, it becomes difficult for researchers and policy makers to evaluate the impact of skills policies, generate new evidence to inform policy development or carry out skills assessment and anticipation exercises. However, data also need to be processed and analysed to generate meaningful insights. This requires human resources with knowledge and skills in both qualitative and quantitative data analysis. According to stakeholders consulted during the OECD Skills Strategy project, Kazakhstan has so far struggled across both dimensions. Building on these findings, this opportunity first explores how Kazakhstan can improve the quality and accessibility of data on skills and the labour market. Then, it considers how Kazakhstan can develop the human resources it needs to build an effective SIS.

Table 1.8. Opportunity 2: Creating an enabling environment for an effective skills information system

Policy directions	Recommendations	Responsible parties
Improving the quality and accessibility of data on skills and the labour market	3.4. Improve the frequency and coverage of quality data on skills and labour markets by strengthening statistical surveys and expanding administrative data collection.	• Bureau of National Statistics
	3.5. Strengthen access to microdata in a secure way, for instance, by gathering anonymised datasets in a centralised digital portal.	• Bureau of National Statistics
Developing the human resources needed to build an effective skills information system	3.6. Provide adequate training opportunities to key actors, including policy makers and researchers involved in processing and analysing data on skills and the labour market.	• Government of Kazakhstan
	3.7. Raise the attractiveness of careers related to the analysis of labour market and skills data, by improving the quality of the learning environment and offering financial incentives to prospective tertiary students.	• Ministry of Education and Science (MOES) • Ministry of Labour and Social Protection of Population (MLSPP)

Opportunity 3: Enhancing the use of skills analysis exercises to inform policy making and stakeholders' choices

The information generated by a skills information system should be effectively disseminated among a variety of users, including policy makers, social partners and individuals. However, reaching this broad audience successfully requires choosing relevant communication channels (e.g. online portals and/or seminars) and tailoring information to the target audience. Career guidance could also play an important role in providing information on skills demands as well as on training and learning opportunities to help individuals make informed career decisions. This opportunity provides recommendations on how

Kazakhstan can enhance the use of skills information in decision making. First, it considers how Kazakhstan can promote sufficient dissemination of skills and labour market information among all relevant audiences. Then, it explores how Kazakhstan can use skills information to improve career guidance services.

Table 1.9. Opportunity 3: Enhancing the use of skills analysis exercises to inform policy making and stakeholders' choices

Policy directions	Recommendations	Responsible parties
Promoting sufficient dissemination of skills and labour market information among all relevant audiences	3.8. Develop diverse communication and awareness mechanisms to reach out to all relevant users.	• Ministry of Labour and Social Protection of Population (MLSPP) • Work Development Center (WDC) • Inter-ministerial working group on skills and labour market information (see Chapter 5)
	3.9. Tailor the presentation of the information to the needs of a diverse audience in order to ensure relevance.	• MLSPP • WDC • Inter-ministerial working group on skills and labour market information (see Chapter 5)
Using skills information to support career guidance services	3.10. Introduce a consolidated portal to provide all individuals with access to information on skills needs, labour market trends and the availability of study/work opportunities.	• Inter-ministerial working group on skills and labour market information (see Chapter 5) • MLSPP
	3.11. Organise career guidance forum to gather various stakeholders to ensure career guidance is provided in a co-operative manner, based on skills analysis of current and future skills needs.	• Inter-ministerial working group on skills and labour market information (see Chapter 5) • Ministry of Education and Science (MOES) • MLSPP

Strengthening the governance of the skills system

Effective governance arrangements are central to supporting skills policies. Effective horizontal and vertical co-operation and collaboration arrangements are crucial to ensuring that countries develop and implement policies that are coherent and mutually reinforcing. Strong mechanisms to engage stakeholders enable policy makers to gain information regarding the real-world effects of policies and regulations. Aligned and co-ordinated financing arrangements help ensure that countries provide adequate resources for skills policies, which are then distributed efficiently and equitably. Effective co-operation and collaboration, strong stakeholder engagement mechanisms and co-ordinated financing arrangements are also important to develop policy responses to the economic crisis resulting from the COVID-19 pandemic, as well as many other cross-cutting policy challenges.

Opportunity 1: Strengthening co-ordination and co-operation across the whole of government

Horizontal co-ordination and co-operation on skills policies at the central government level are fragmented in Kazakhstan and tend to rely on formal mechanisms, such as memorandums or formal bodies. Kazakhstan has also faced difficulties in adopting effective monitoring and evaluation mechanisms to assess the functioning of its skills system. Building on these findings, this opportunity first explores how to improve horizontal and vertical co-ordination and co-operation on skills policies. It then considers how Kazakhstan can implement better monitoring and assessment practices with regard to evaluating the effectiveness of skills policies and monitoring the quality of education and training institutions.

Table 1.10. Opportunity 1: Strengthening co-ordination and co-operation across the whole of government

Policy directions	Recommendations	Responsible parties
Improving co-operation and collaboration on skills policies	4.1. Strengthen the remit of the National Council for Development of Social and Labour Sector by specifying a clearly defined mandate and introducing a combination of inter-ministerial working groups and technical bodies.	• Government of Kazakhstan • National Council for Development of Social and Labour Sector (NCDSLS) • All ministries involved in skills policies (Ministry of Labour and Social Protection of Population [MLSPP], Ministry of Education and Science [MOES], Ministry of Finance [MF], Ministry of National Economy [MNE])
	4.2. Gradually increase the responsibilities and capacities of local government in delivering skills policies, starting with the launch of regional skills strategies.	• Government of Kazakhstan • Local government • Local branches of the MLSPP and MOES • National Chamber of Entrepreneurs (NCE) • Representatives of educational institutions
Implementing better monitoring and evaluation mechanisms	4.3. Establish a common evaluation and assessment framework for skills policies to help inform future strategies, through an inter-ministerial working group.	• Government of Kazakhstan • All ministries involved in skills policies (MLSPP, MOES, MF, MNE)
	4.4. Develop common principles for the quality assurance of educational institutions and training providers via an intra-ministerial working group within the Ministry of Education and Science.	• MOES

Opportunity 2: Strengthening stakeholder engagement in skills policies

Improving co-ordination and co-operation across governmental actors is not all that is required for strong governance of skills policies. Kazakhstan also needs to better co-ordinate stakeholder engagement to make further progress in the development of the National Qualifications System, which is considered a policy priority by the government. More broadly, Kazakhstan can more systematically involve employers and trade unions in policy development and implementation, while making further progress in engaging representatives from civic society in the debate on skills policies. In light of these insights, this opportunity first explores how to strengthen stakeholder engagement in the development of the NQS. Then, it considers how to improve stakeholder engagement throughout the policy cycle.

Table 1.11. Opportunity 2: Strengthening stakeholder engagement in skills policies

Policy directions	Recommendations	Responsible parties
Strengthening stakeholder engagement in the development of the National Qualifications System (NQS)	4.5. Introduce a technical body to co-ordinate the development of the NQS.	• Government of Kazakhstan • National Council for Development of Social and Labour Sector (NCDSLS)
	4.6. Review the functioning of the sector skills councils to ensure that they have sufficient resources and capacities to support the development of the NQS.	• NCDSLS • Technical body to co-ordinate the NQS development (if introduced)
Improving stakeholder engagement throughout the policy cycle	4.7. Strengthen mechanisms to engage stakeholders in policy development, for instance, by improving stakeholder participation in the National Council for Development of the Social and Labour Sector.	• Government of Kazakhstan • NCDSLS • Tripartite Republican Commission • Inter-ministerial working groups (if introduced) • All ministries involved in skills policies (Ministry of Labour and Social Protection of Population [MLSPP], Ministry of Education and Science [MOES], Ministry of Finance [MF], Ministry of National Economy [MNE])

Policy directions	Recommendations	Responsible parties
	4.8. Develop a single digital platform to promote exchange on skills policies between the central government and external stakeholders.	• All ministries involved in skills policies (MLSPP, MOES, MF, MNE) • NCDSLS
	4.9. Strengthen the adoption of public-private partnerships to improve employer involvement in the provision of education and training by improving the legislative framework and disseminating good practices.	• Government of Kazakhstan • MNE • MLSPP • MOES

Opportunity 3: Better aligning and co-ordinating financing arrangements

Effective co-ordination and co-operation across government and with stakeholders need the support of strong financing arrangements. Kazakhstan does not seem to provide sufficient public funding to education when compared to neighbouring countries, other upper middle income countries and top-performing OECD countries. In addition, Kazakhstan makes limited use of financial incentives, such as tax deductions, subsidies and levies, which can help increase investment from employers on skills development. Building on these findings, this opportunity explores how to strengthen public funding arrangements for skills policies. Then, it discusses how to better use incentives for engaging the private sector in skills development.

Table 1.12. Opportunity 3: Better aligning and co-ordinating financing arrangements

Policy directions	Recommendations	Responsible parties
Strengthening public funding arrangements for skills policies	4.10. Increase public funding in primary, secondary and tertiary education to improve skills outcomes of youth, by reallocating funding from other policy areas, raising additional tax revenue and increasing contribution from employers.	• Government of Kazakhstan • Ministry of Finance (MF)
Better using incentives to engage the private sector in skills development	4.11. Introduce a training levy to increase the financial contribution of employers to vocational education and training (VET), adult learning and ALMPs, following extensive consultations with employers.	• Government of Kazakhstan • Employer representatives (e.g. via the National Chamber of Entrepreneurs [NCE])
	4.12. Introduce subsidies to encourage employers to hire apprentices within the dual VET system.	• Government of Kazakhstan • Employer representatives (e.g. via the NCE)

Overview of main recommendations

Box 1.2. Main recommendations to strengthen Kazakhstan's skills system

Based on feedback from stakeholders and from the national project team, three recommendations have been selected for each priority area that could be considered to have the highest priority based on an assessment of potential impact, relevance in the current Kazakhstan context, as well as overall support from stakeholders for implementation.

Improving the activation of skills of vulnerable populations (Chapter 2)

- Adopt and utilise digital communication tools to ensure the continuation of services during and following the COVID-19 crisis (Recommendation 1.1).
- Improve jobseeker profiling tools to enable upfront intervention by allowing caseworkers to set up individual action plans (Recommendation 1.2).
- Scale up expenditure on activation programmes with a proven track record and capacity to secure the achievement of stated objectives (Recommendation 1.8).

Fostering participation in adult learning of all forms (Chapter 3)

- Introduce a strong certification and monitoring system to certify the quality of non-formal adult learning opportunities (Recommendation 2.3).
- Develop a shared vision on the importance of adult learning based on extensive consultations with stakeholders (Recommendation 2.5).
- Review training plans in state-owned enterprises to ensure that they enable all employees to develop a broad set of technical, foundational and soft skills (Recommendation 2.8).

Building an effective skills information system (Chapter 4)

- Adopt an integrated approach by combining qualitative and quantitative methods to achieve robust skills analysis results (Recommendation 3.2).
- Improve the frequency and coverage of quality data on skills and labour markets, by strengthening statistical surveys and expanding administrative data collection (Recommendation 3.4).
- Introduce a consolidated portal to provide all individuals with access to information on skills needs, labour market trends and the availability of study/work opportunities (Recommendation 3.10).

Strengthening the governance of skills system (Chapter 5)

- Strengthen the remit of the National Council for Development of Social and Labour Sector by specifying a clearly defined mandate and introducing a combination of inter-ministerial working groups and technical bodies (Recommendation 4.1).
- Introduce a technical body to co-ordinate the development of the National Qualifications System (Recommendation 4.5).
- Introduce a training levy to increase the financial contribution of employers to vocational education and training, adult learning and active labour market programmes, following extensive consultations with employers (Recommendation 4.11).

References

Asian Development Bank (2020), *Asian Development Outlook Update, September 2020 Economic Forecasts*, https://www.adb.org/what-we-do/economic-forecasts/september-2020 (accessed on 8 October 2020). [7]

Atlas of Economic Complexity (2020), *What did Kazakhstan export in 2018?*, https://atlas.cid.harvard.edu/explore?country=115&product=undefined&year=2018&productClass=HS&target=Product&partner=undefined&startYear=undefined (accessed on 8 September 2020). [16]

Government of Kazakhstan (2019), *Road Map on the Development of the National Qualifications System for 2019-2025*, https://old.enbek.gov.kz/en/node/363246. [35]

Government of Kazakhstan (2018), *State Programme of Industrial-Innovation Development 2020-2025*, https://www.zakon.kz/5002426-utverzhdena-gosudarstvennaya-programma.html. [36]

Government of Kazakhstan (2017), *State Programme "Digital Kazakhstan"*, https://digitalkz.kz/en/about-the-program/. [34]

Government of Kazakhstan (2017), *Strategic Plan 2025*, https://primeminister.kz/ru/documents/gosprograms/stratplan-2025. [32]

ILO (2017), *Addressing the Impact of Climate Change on Labour*, International Labour Office, Geneva, https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---relconf/documents/meetingdocument/wcms_543701.pdf. [17]

Marteau, J. (2020), "Post-COVID education in Kazakhstan: Heavy losses and deepening inequality", *World Bank Blogs: Eurasian Perspectives*, https://blogs.worldbank.org/europeandcentralasia/post-covid-education-kazakhstan-heavy-losses-and-deepening-inequality. [10]

Martinez-Fernandez, C., C. Hinojosa and G. Miranda (2010), "Greening Jobs and Skills: Labour Market Implications of Addressing Climate Change", *OECD Local Economic and Employment Development (LEED) Working Paper Series*, OECD Publishing, Paris, https://www.oecd.org/cfe/leed/45484420.pdf. [18]

Nedelkoska, L. and G. Quintini (2018), "Automation, skills use and training", *OECD Social, Employment and Migration Working Papers*, No. 202, OECD Publishing, Paris, https://doi.org/10.1787/2e2f4eea-en. [22]

OECD (2020), "COVID-19 crisis response in Central Asia", *OECD Policy Responses to Coronavirus (COVID-19)* OECD Publishing, Paris, https://doi.org/10.1787/5305f172-en. [4]

OECD (2020), *OECD Economic Outlook, Volume 2020 Issue 2*, OECD Publishing, Paris, https://dx.doi.org/10.1787/39a88ab1-en. [3]

OECD (2020), *OECD Employment Outlook 2020: Worker Security and the COVID-19 Crisis*, OECD Publishing, Paris, https://dx.doi.org/10.1787/1686c758-en. [11]

OECD (2019), "Country Note: Kazakhstan", in *Skills Matter: Additional Results from the Survey of Adult Skills*, OECD Publishing, Paris, https://www.oecd.org/skills/piaac/publications/countryspecificmaterial/PIAAC_Country_Note_Kazakhstan.pdf. [27]

OECD (2019), "Kazakhstan", in *Economic Policy Reforms 2019: Going for Growth*, OECD Publishing, Paris, https://www.oecd.org/countries/kazakhstan/kazakstan-economic-policy-reforms-2019.pdf. [1]

OECD (2019), *OECD Skills Outlook 2019 : Thriving in a Digital World*, OECD Publishing, Paris, https://dx.doi.org/10.1787/df80bc12-en. [20]

OECD (2019), *OECD Skills Strategy 2019: Skills to Shape a Better Future*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264313835-en. [13]

OECD (2019), "PISA 2018 Country Note: Kazakhstan", in *PISA 2018 Results (Volume I): What Students Know and Can Do*, OECD Publishing, Paris, http://www.oecd.org/pisa/publications/PISA2018_CN_KAZ.pdf. [25]

OECD (2019), *PISA 2018 Results (Volume I): What Students Know and Can Do*, PISA, OECD Publishing, Paris, https://dx.doi.org/10.1787/5f07c754-en. [26]

OECD (2019), *Skills Matter: Additional Results from the Survey of Adult Skills*, OECD Skills Studies, OECD Publishing, Paris, https://dx.doi.org/10.1787/1f029d8f-en. [21]

OECD (2018), "Trade in goods and services", *OECD Data*, https://data.oecd.org/trade/trade-in-goods-and-services.htm. [15]

OECD (2017), *Building Inclusive Labour Markets in Kazakhstan: A Focus on Youth, Older Workers and People with Disabilities*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264273023-en. [28]

OECD (2016), *Multi-dimensional Review of Kazakhstan: Volume 1. Initial Assessment*, OECD Development Pathways, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264246768-en. [23]

President of the Republic of Kazakhstan (2020), *Message from the Head of State Kasym-Jomart Tokayev to the people of Kazakhstan. September 1, 2020*, http://www.akorda.kz/ru/addresses/addresses_of_president/poslanie-glavy-gosudarstva-kasym-zhomarta-tokaeva-narodu-kazahstana-1-sentyabrya-2020-g (accessed on 8 October 2020). [5]

Press Service of the Prime Minister of Kazakhstan (2019), *State Programme of Education Development until 2025: Updating curricula, supporting science and electronic UNT*, http://government.kz/en/news/gosprogramma-razvitiya-obrazovaniya-do-2025-goda-obnovlenie-uchebnyh-programm-podderzhka-nauki-i-elektronnoe-ent (accessed on 9 September 2020). [33]

Strategy 2050 (2020), *Kazakhstan 2050*, https://strategy2050.kz/en/ (accessed on 8 September 2020). [31]

UNESCO (2020), *Ensuring Lifelong Learning for All in Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan: Country Evidence and Policy Recommendations*, UNESCO Almaty Office, https://unesdoc.unesco.org/ark:/48223/pf0000372898?posInSet=1&queryId=69cc8c8e-9c3a-470d-8995-3fd1f3b0cd60&fbclid=IwAR1Yc2tONlcJA6OLnV64DeIkQM6LHDqrPPnHwiZE6otBbjeH6n1PIjNE6U8. [29]

Workforce Development Center (2020), *Labour Market of the Republic of Kazakhstan in the Background of the COVID-19 Pandemic*, https://iac.enbek.kz/ru/node/930. [12]

World Bank (2020), *COVID-19 and Human Capital: Europe and Central Asia Economic Update*, https://openknowledge.worldbank.org/bitstream/handle/10986/34518/9781464816437.pdf. [8]

World Bank (2020), *Education Statistics - All Indicators*, https://databank.worldbank.org/source/education-statistics-%5e-all-indicators (accessed on 13 October 2020). [30]

World Bank (2020), *Fertility rate, total (births per woman) - Kazakhstan*, https://data.worldbank.org/indicator/SP.DYN.TFRT.IN?locations=KZ (accessed on 8 September 2020). [24]

World Bank (2020), *GDP growth (annual %) - Kazakhstan*, https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=KZ-OE (accessed on 9 September 2020). [6]

World Bank (2020), *Kazakhstan: Estimate of COVID-19 Impact on Learning Loss*, http://pubdocs.worldbank.org/en/307511594086679993/Kazakhstan-COVID-19-Impact-on-Learning-Loss.pdf. [9]

World Bank (2020), *World Bank Database - All Indicators*, https://data.worldbank.org/indicator (accessed on 13 October 2020). [2]

World Bank (2018), *A New Growth Model for Building a Secure Middle Class*, https://elibrary.worldbank.org/doi/abs/10.1596/29792. [19]

World Bank (2018), “Kazakhstan trade statistics”, *World Integrated Trade Solution*, https://wits.worldbank.org/CountryProfile/en/KAZ. [14]

Annex 1.A. OECD Skills Strategy Dashboard

This annex presents the OECD Skills Strategy Dashboard. The objective of the Dashboard is to present an overview of the performance of skills systems in OECD countries. It is the starting point for analysis in the diagnostic phase of OECD Skills Strategy projects and allows the OECD and the national project team to identify the priority skills policy themes to be covered in greater detail in the report. Presenting the relative position of countries on key skills outcomes, the Dashboard provides a general overview of the strengths and weaknesses of a given country or region's skills system. This annex describes the characteristics, presents the indicators and describes the underlying methods for calculating indicators.

Characteristics

The OECD Skills Strategy Dashboard is the result of internal consultation and analysis of core indicators used in OECD Skills Strategy projects. It presents a simple, intuitive overview of the outcomes of skills systems that is easy to interpret, and provides a quick overview of a country's skills performance across the dimensions of the OECD Skills Strategy ("developing relevant skills" and "putting skills to effective use"). The Dashboard applies a broad definition of skills by presenting foundational skills, problem-solving skills and breadth of skillsets, and considers both economic and social outcomes. A total of 33 key outcome indicators were selected and grouped into 16 aggregated indicators.

Indicator selection

The selection of indicators followed a process whereby a longlist of the most commonly used indicators in OECD Skills Strategy reports was gradually reduced to a shortlist of core indicators. This process built on the principle that the indicators describe the core outcomes of the different dimensions of the skills system. In addition, these indicators express outcomes in terms of level, trend, distribution and equity. The indicators need to be comparatively easy to interpret and based on OECD sources, using the most recently available.

Method for the calculation of aggregate indicators

To develop aggregate indicators that represent the relative position of countries on key outcomes of the skills system, a number of calculations were made on the collected data. To describe the relative position across countries, a score for each indicator was calculated ranging from 0 to 10, with 0 for the weakest performance and 10 for the strongest performance. This resulted in an indicator that allows comparisons between different types of indicators (e.g. averaging performance of literacy scores and educational attainment rates). The resulting scores were normalised in such a way that better performance results in a higher score. Subsequently, an unweighted average of the indicators was calculated for each of the aggregates, and these scores were then ranked. The final ranking was separated into five groups of equal size, ranging from top 20% performer to bottom 20% performer. Aggregate indicators are only presented in the Dashboard when more than half of the underlying indicators have data available.

Annex Table 1.A.1. The OECD Skills Strategy Dashboard: Dimensions, aggregates and underlying indicators

Pillar and aggregates	Indicator
Developing relevant skills	
How skilled are youth?	Reading (PISA), mean score, 2018
	Mathematics (PISA), mean score, 2018
	Science (PISA), mean score, 2018
Are the skills of youth improving?	PISA average three-year trend (reading, mathematics, science)[1]
Are the skills of youth being developed inclusively?	PISA ESCS parity index, science performance, 2018
How many young adults attain tertiary education?	Tertiary education attainment rate, 25-34 year-olds, 2018
How skilled are young tertiary-educated adults?	Literacy (PIAAC), mean score, tertiary educated 25-34 year-olds, 2012/15/18
	Numeracy (PIAAC), mean score, tertiary educated 25-34 year-olds, 2012/15/18
	Problem solving (PIAAC), % Level 2/3, tertiary-educated 25-34 year-olds, 2012/15/18
How inclusive is tertiary education?	Share tertiary-educated with both parents less than tertiary, 2012/15/18
How strong are foundational skills of adults?	Literacy (PIAAC), mean score, 2012/15/18
	Numeracy (PIAAC), mean score, 2012/15/18
	Problem solving (PIAAC), % Level 2/3, 2012/15/18
Do adults have a broad set of skills?	Percentage of adults with a broad set of skills (PIAAC) (Level 3-5 in literacy and numeracy and Level 2/3 in problem solving), 2012/15/18
Is there a strong culture of adult education?	Formal and/or non-formal adult education participation rate (PIAAC), last 12 months, 2012/15/18
	Willing to participate in adult education (PIAAC), percentage of the population, 2012/15/18
	Barriers to participation (PIAAC),percentage of people wanting to participate who didn't, 2012/15/18
Are the skills of adults being developed inclusively?	High-low educated parents, adjusted literacy difference (PIAAC), 2012/15/18
Putting skills to effective use	
How well are skills activated in the labour market?	Employment rate, working age, 2018
	Labour force participation rate, 2018
	Youth not in employment, education or training (NEET), % of 15-24 year-olds, 2017
How inclusive is the labour market?	Gender (male-female), employment rate difference, 2018
	High-low educated, employment rate difference, 2018
Do workplaces make intensive use of skills?	Reading at work (PIAAC), score, 2012/15/18
	Numeracy at work (PIAAC), score, 2012/15/18
	Information and communication technology (ICT) at work (PIAAC), score, 2012/15/18
Do people use their skills intensively in daily life?	Reading at home (PIAAC), score, 2012/15/18
	Numeracy at home (PIAAC), score, 2012/15/18
	ICT at home (PIAAC), score, 2012/15/18
Is the use of skills at work improving?	Reading skills use at work adjusted difference young (16-25) – prime age (26-54) (PIAAC), 2012/15/18
	Numeracy skills use at work adjusted difference young (16-25) – prime age (26-54) (PIAAC), 2012/15/18
	ICT skills use at work adjusted difference young (16-25) – prime age (26-54) (PIAAC), 2012/15/18
Are firms designing workplaces to use skills effectively?	High-performance workplace practices, % of jobs, 2012/15/18 (PIAAC)
Is skills use stimulated by innovation?	Researchers, per 1 000 employed, 2017
	Triadic patent families, performance index (STI Outlook), 2016
	International co-authorship, performance index (STI Outlook), 2016
	International co-invention, performance index (STI Outlook), 2016

Note: Indicators without a specific source between brackets are OECD indicators from OECD Data (https://data.oecd.org/). PISA stands for the Programme for International Student Assessment; ESCS is PISA's economic, social and cultural status index; PIAAC refers to the Survey of Adult Skills, a product of the Programme for the International Assessment of Adult Competencies Survey of Adult Skills (PIAAC); STI stands for Science, Technology and Innovation.
1. The average trend is reported for the longest available period since PISA 2006 for science, PISA 2009 for reading, and PISA 2003 for mathematics.

Annex 1.B. Strategies, recent reforms and OECD reports related to skills and education in Kazakhstan

Annex Table 1.B.1. Strategies related to skills and education in Kazakhstan

Strategies	Year	Skills area	Overview
Kazakhstan 2050 Strategy	2012	Multiple areas	This is Kazakhstan's overarching vision, setting the long-run objective of transforming the country into one of the top 30 developed economies by 2050. To help reach this objective, the vision identifies various policy aims, such as modernising the economy, supporting entrepreneurship, supporting vulnerable groups and promoting adult learning.
Strategic Development Plan 2025	2018	Multiple areas, with an important focus on adult learning, labour market policies, labour market intelligence systems and governance	This is a medium-term development plan to help deliver the Kazakhstan 2050 Strategy up to 2025. The plan includes specific initiatives related to adult learning, labour market policies, integrated information systems and governance. To foster adult learning, the plan aims to provide free technical vocational education and open courses in universities. To promote the activation of skills, the plan aims to encourage labour mobility and strengthen entrepreneurship. The plan also aims to make further progress in developing national forecasting systems and updating professional standards.
State Programme of Productive Employment and Mass Entrepreneurship Development (*Enbek*) 2017-2021	2016	Adult learning and active labour market programmes	The *Enbek* programme aims to promote the development of the labour market in Kazakhstan through initiatives across three main pillars: 1. providing technical and vocational education and short-term vocational training for: youth without vocational education; the unproductive self-employed; the unemployed; members of low-income families; and workers who are at risk of displacement 2. developing entrepreneurship skills and providing micro loans/grants for entrepreneurs 3. providing assistance to inactive workers in finding employment and supporting labour mobility.
State Programme of Education and Science Development 2020-2025	2019	Education and adult learning	This is a programme to help implement the Kazakhstan 2050 Strategy. It aims to create a unified system of education, where pre-primary education will be the first step in human capital development, and adult learning will be a continuation of higher education. A separate section is dedicated to teachers' education, which is one of the programme's cross-cutting priorities.
"Digital Kazakhstan" State Programme 2018-2022	2017	Development and use of digital skills	This is a multi-faceted programme that aims to improve living standards by promoting the development and use of digital technology. The programme aims to digitalise different sectors of society and improve citizens' basic digital skills.
Roadmap for Development of National Qualifications System 2019-2025	2019	Governance	The roadmap presents a step-by-step plan to implement a National Qualifications System. The roadmap includes a set of measures for the development of the qualification system, the development of industry-specific qualifications frameworks and professional standards, and the introduction of a system for confirming compliance and assigning qualifications to employees.
State Programme of Industrial-Innovation Development 2020-2025	2019	Skills use	The main goal of this programme is to create conditions for the development and formation of the manufacturing industry as the main driver of the country's economy by promoting exports, especially in high-tech products and services.

Source: Desk research carried out by the OECD team, leveraging information gathered during the second Assessment Mission in 2020.

Annex Table 1.B.2. Recent reforms related to skills and education in Kazakhstan

Reforms	Year	Skills area	Overview
Updated regulations for vocational education and training (VET) and higher education (HE) institutions to improve physical infrastructure	2020	Adult learning	According to the new regulations, approximately 70% of VET and HE institutions should have a barrier-free environment for people with disabilities, up from the previous threshold of 40%.
Memorandum signed between the MOES, the MLSPP and the NCE	2020	Governance	The memorandum commits the three parties to develop and implement a joint list of educational programmes and standard curricula based on approved occupational standards.
Establishment of the National Council for Development of the Social and Labour Sector (NCDSLS)	2019	Governance	The NCDSLS co-ordinates the development of the NQS and is responsible for co-ordination in the spheres of social protection of the population and in the development of the labour market. It is chaired by the Deputy Prime Minister and includes vice ministers from all ministries.
Amendments to Kazakhstan's Law on Education	2019	Adult learning	The amendments introduced the concept of non-formal education into Kazakhstan's education system.
Mobile employment centres	2019	Skills activation	Thirty mobiles centres were launched in 2019. The mobile centres tend to stop in busy public places with high pedestrian traffic, such as markets, railway stations and shopping centres. They target rural areas and the peripheries of large cities where informal jobs are more highly concentrated.
Establishment of the National Council of Public Trust	2019	Governance	Representatives from local communities, non-governmental organisations (NGOs) and media meet in the National Council of Public Trust to voice public opinion or to provide recommendations on ongoing reforms related to skills policy development, as well as other policy areas.
Reforms to the Electronic Labor Exchange	2018	Skills information system	Since 2018, the Electronic Labor Exchange, a central web portal for job search and recruitment, has been fully integrated with the employment centres' vacancy database.

Source: Desk research carried out by the OECD team, leveraging information gathered during the second Assessment Mission in 2020.

Annex Table 1.B.3. Recent OECD reports related to skills and education in Kazakhstan

OECD reports	Year	Skills area	Overview
OECD Education Policy Perspectives	2020	Education evaluation and assessment policies	This is a series of four Education Policy Perspectives on Kazakhstan. Each Policy Perspective examines an area of educational policy that Kazakhstan can focus on in order to improve the outcomes of all students. The four Policy Perspectives are on the following areas: – Strengthening national examinations in Kazakhstan to achieve national goals – Raising the quality of initial teacher education and support for early-career teachers in Kazakhstan – Developing a school evaluation framework to drive school improvement – Developing a national assessment that supports Kazakhstan's education goals.
SME and Entrepreneurship Policy in Kazakhstan 2018	2018	Developing entrepreneurship skills; supporting SME skills development	This report analyses the role of SMEs within Kazakhstan's economy concluding that while Kazakhstan has made major progress on improving the business environment for SMEs, numbers of participants and budgets are low in many areas of SME training. Skills-based recommendations include: – Introducing publicly financed SME training facilitators to support local networks of SMEs – Extending training, consultancy and mentoring schemes aimed specifically at developing innovation skills and capabilities among SME managers (including non-technological innovation) – Expanding and strengthening entrepreneurship education in schools and universities – As part of regular surveys of SMEs, identifying SME skills needs in the Business Road Map 2020 priority sectors.

OECD reports	Year	Skills area	Overview
Building Inclusive Labour Markets in Kazakhstan: A Focus on Youth, Older Workers and People with Disabilities	2017	ALMPs and PES with a focus on inclusivity	This report analyses the effectiveness of labour markets, finding that while Kazakhstan has lower unemployment and economic inactivity rates than most OECD countries, spending on active labour market programmes is substantially lower, few youths engage with the public employment services, and employment rates are worse for women. Skills-based recommendations include: – Conducting rigorous impact evaluation studies on the impact of ALMPs on the employment outcomes of participants of PES programmes – Eliminating persistent geographic and socio-economic inequalities in access to good quality schooling – Providing targeted incentives to both firms and older workers to invest in skills – Investing proportionally more resources in skills-enhancing programmes with the PES.
Higher Education in Kazakhstan 2017	2017	Higher education	This report focuses on an in-depth analysis of higher education in Kazakhstan. It finds that spending on higher education is well below international levels, that public spending on state subsidies is poorly targeted, and that there is a need for greater decentralisation as many decisions in higher education remain too centralised with institutional autonomy curtailed. Skills-based recommendations include: – Reinforcing linkages between higher education institutions and employers – Expanding the use of technology-enabled learning and distance education methods (in particular e-learning) – Developing a strong, reliable and well-disseminated system of labour market information that reports on the outcomes of higher education graduates – Further developing mechanisms that recognise and provide credit for VET qualifications.

2 Improving the activation of skills of vulnerable populations in Kazakhstan

Skills activation policies are key to supporting the employment opportunities of those most at risk of falling behind, particularly youth, older workers and people with disabilities. The role played by these policies is heightened during economic downturns, such as the current crisis caused by the coronavirus (COVID-19), as they can reduce the risk that laid-off workers become trapped in long-term unemployment, and can support an incipient recovery. This chapter explains the importance of improving the activation of skills of vulnerable groups in Kazakhstan and provides an overview of current practices and performance. It then explores three opportunities to kickstart skills activation of vulnerable groups in Kazakhstan: improving the accessibility and quality of public employment centres; strengthening the effectiveness of active labour market programmes for vulnerable populations; and promoting family policies for a more equitable sharing of paid and unpaid work.

The importance of improving the activation of skills of vulnerable populations

In a matter of months, the coronavirus (COVID-19) pandemic turned from a public health crisis into a major economic and jobs crisis; it is expected to cast a long shadow over the world's economies. Before the pandemic, previous OECD work underscored the importance for policy makers in Kazakhstan to factor in the challenge of skills activation as a tool to support the development of solid career paths and to strengthen job quality. Labour informality is widespread in Kazakhstan, and the labour market remains unequal, with sizeable regional disparities, and a very large share of low-paid jobs (OECD, 2017[1]). The benefits of skills activation can be particularly important for vulnerable populations: by helping youth find their way in the world of work, for example; by creating the conditions for fostering the labour market participation of older workers; and by supporting the inclusion of people with disabilities in the labour market and society.

There are reasons to expect that the gains of well-performing skills activation are potentially sizeable. Vulnerable workers are often low-skilled, which implies that they face a higher risk of being employed in the informal sector with few labour rights, limited social protection and poor working conditions. In addition, the important social and economic costs of them remaining trapped in long-term unemployment include the permanent loss of human capital, increased financial hardship, the erosion of self-confidence and ill-health conditions. Finely tuned activation policies can play an important role in limiting these costs.

The severe consequences of the COVID-19 pandemic on employment have made implementing effective and well-targeted skills activation policies an even more urgent priority. Many firms around the world are struggling to stay afloat, and large numbers of workers are being laid off. Those working in non-standard jobs, often at a low-income (e.g. self-employed workers, temporary or part-time workers), are paying the highest price, since these jobs are over-represented in the sectors most affected by the pandemic (OECD, 2020[2]). Public employment services (PES) have played a critical role in implementing skills activation policies which reduce the risk that laid-off workers fall into long-term unemployment and support, in turn, an incipient recovery.

This chapter starts with an overview of skills activation policies and programmes in Kazakhstan. The next section describes how PES, active labour market programmes (ALMPs) and family policies are organised and delivered; identifies the key actors and their responsibilities; and assesses the performance of PES and ALMPs. The subsequent section presents a detailed assessment of the identified opportunities and sets out tailor-made policy recommendations to support the employability of vulnerable populations in Kazakhstan.

Kazakhstan's current arrangements and performance in the activation of skills of its vulnerable populations

Current arrangements for the activation of skills of vulnerable populations

The responsibilities of public employment services in skills activation

In Kazakhstan, the PES system was created in April 1991 and has since undergone several reforms. The employment units, originally funded and co-ordinated by the regional districts (*akimats*), have been suppressed. Their activities have been transferred to the employment centres, which respond to the central government and now play a central role in the delivery of employment services.

The employment centres play a pivotal role in the activation of skills by involving jobseekers in productive employment and enabling rapid job placements. Their functions include providing career guidance and job-matching services, delivering short-term vocational training and organising public work and job fairs. The priority objective of the centres is the activation of jobseekers from vulnerable populations, particularly

youth, the low-skilled and people with disabilities, which are the groups at the highest risk of poverty and exclusion from the labour market in Kazakhstan. In addition, the employment centres support young women re-accessing the labour market after several years of absence from the labour market due to childcare responsibilities. The centres also provide targeted social assistance to the unemployed and low-income-level citizens, refugees and foreigners permanently residing in Kazakhstan.

Currently, there are about 203 employment centres in Kazakhstan, covering most of the country. In addition, since September 2019, 30 mobile employment centres have been launched to reach out to people more proactively. The mobile centres tend to stop in busy public places with high pedestrian traffic, such as markets, railway stations and shopping centres. They target rural areas and the peripheries of large cities, where informal jobs are more highly concentrated.

The job vacancy bank within Kazakhstan's PES has improved substantially in recent years. This reflects the launch of the *Enbek* digital platform, which includes the Electronic Labor Exchange, an integrated database to monitor and disseminate job vacancies at the local level. The Electronic Labor Exchange has benefited from collaboration with other popular online job platforms and private employment agencies. As of April 2020, there were 23 773 vacancies and 152 458 registered jobseeker resumés (CVs) available in the Electronic Labor Exchange.

Active labour market programmes to improve the activation of skills of vulnerable populations

ALMPs encourage greater labour market participation and better employment among all groups in society, with a special focus on the most disadvantaged. Kazakhstan's history of ALMPs is relatively short. The first large-scale programmes were introduced in 2011 with the implementation of the Employment Roadmap 2020, which aims to help vulnerable groups access quality, more secure and productive employment (OECD, 2017[1]). Recently, the roadmap has been integrated into the new State Programme of Productive Employment and Mass Entrepreneurship Development 2017-2021 (*Enbek)*.

The Ministry of Labour and Social Protection of Populations (MLSPP) and the Workforce Development Center (WDC) are responsible for policy design, for setting priorities and overseeing the implementation of ALMPs by the local authorities. Local implementation efforts are financed through a transfer from the national budget. The amount of the transfer is proportional to the size of the local active populations but is often adjusted to reflect specific regional development priorities. Direct job creation and start-up incentives programmes account for about 70% of ALMP expenditure. In 2019, employment incentives and training programmes had the largest number of participants, followed by direct job creation mainly using public works.

Family policies to support skills activation of young parents

Affordable and quality early childhood education and care (ECEC) provide an important complement to the role played by direct skills activation policies. This is due to their positive role in supporting young parents in their efforts to better balance family and work responsibilities and easing the return of mothers to employment after childbearing. Preschool education in Kazakhstan is provided by state kindergartens, private kindergartens and mini-centres. These three institutions are under the supervision of local education authorities, which follow guidance from the Ministry of Education and Science (MOES).

Parental leave systems also support skills activation policies, and usually consist of maternity leave, paternity leave, and parental leave. Maternity leave is employment-protected leave of absence for employed women directly around the time of childbirth, paternity leave is employment-protected leave of absence for employed fathers at or in the first few months after childbirth, and parental leave is employment-protected leave of absence for employed parents, which is often supplementary to specific

maternity and paternity leave periods, and frequently, but not in all countries, follows the period of maternity leave (OECD, 2019[3]).

In Kazakhstan, all employed mothers have access to maternity leave regardless of employment history. The time spent on maternity leave and childcare counts as work experience. Maternity leave is 126 days (70 days before and 56 days after the birth) and can be extended to up to 140 days (12 additional days after the birth) in cases of multiple births or for health reasons. Pay during maternity leave is equal to the average monthly wage for the past 12 months. For unemployed women, the maternity leave payment is based on the minimum wage and the number of children in the family.

There is no paternity leave in Kazakhstan, which significantly discourages parents from playing an equal role in work and family life. Accordingly, caring for children around childbirth remains primarily the responsibility of mothers, which discourages female participation in the labour market.

Parental leave lasts up to one year in Kazakhstan and can be taken by either mothers or fathers. The amount of the payment equals 40% of the average wage of the past 24 months but cannot exceed an amount equal to seven times the level of the minimum wage. It can be supplemented by a further period of up to three years of childcare leave, which is unpaid.

Performance in activating the skills of its vulnerable populations

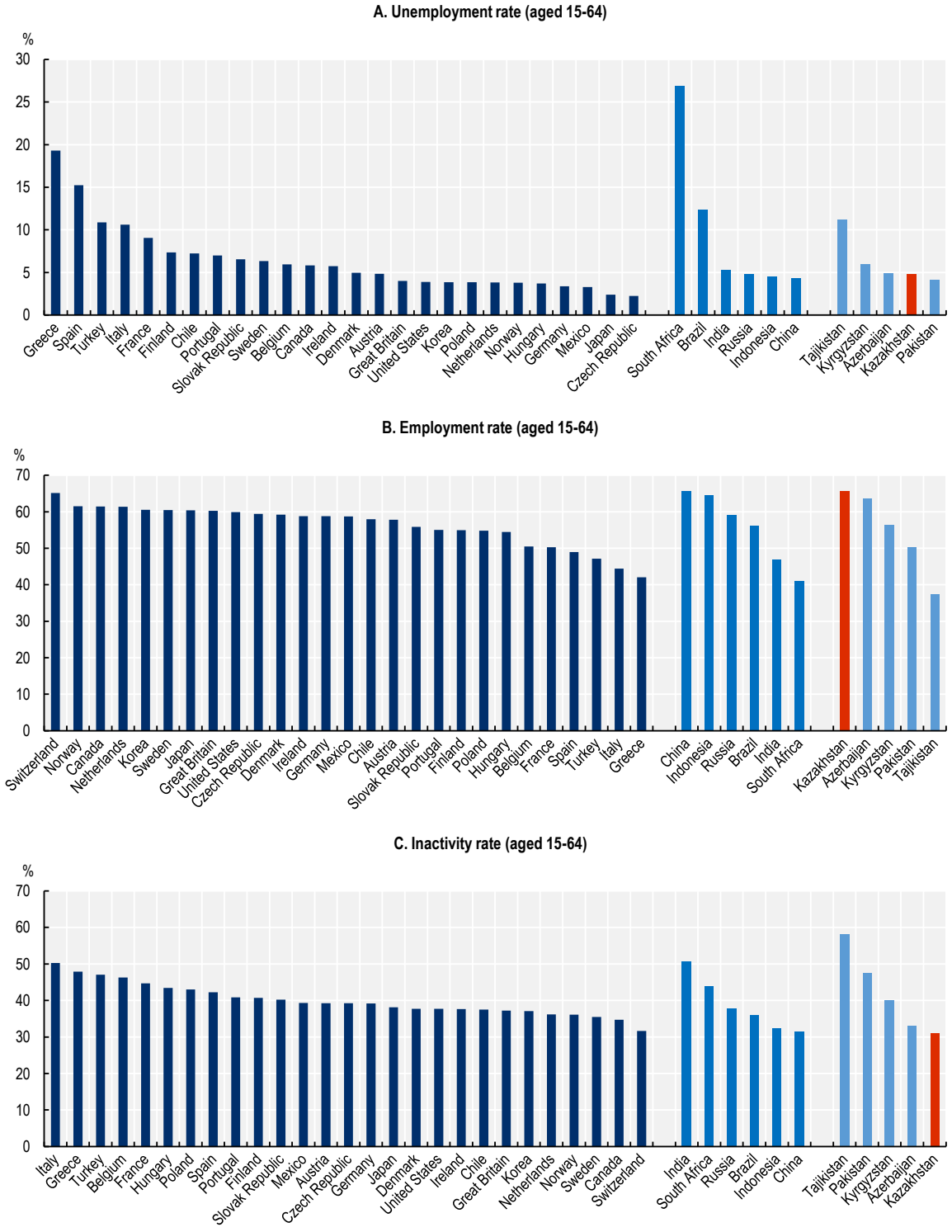
Prima facie evidence suggests that Kazakhstan fares better in activating the skills of its labour force than OECD countries, major emerging economies and its neighbouring countries (see Figure 2.1). In 2018, the employment rate of the population (aged between 15 and 64) in Kazakhstan was 65.7%, much higher than the sample of OECD countries shown by Figure 2.1. At the same time, the unemployment (4.8%) and inactivity rates (30.9%) were significantly lower.

However, similarly to many other emerging economies, the low level of unemployment in Kazakhstan largely reflects the absence or weakness of social insurance schemes, which makes unemployment unaffordable and pushes many workers into jobs with very low and uncertain earnings. Most of these jobs are a “last resort”, in which the worker spends a relatively small number of hours, often in combination with other activities in the informal sector.

The latest figures show that the share of informal workers, defined as the share of employees who do not pay social contributions and the self-employed whose businesses are not registered, is about 16.8% in Kazakhstan. By international standards, this level is not high, given the level of development of the country and the sector composition of the economy (OECD, 2016[4]; Rutkowski, 2011[5]). Evidence suggests that youth, older workers and the low-skilled are considerably more likely than other groups to work informally or be self-employed.

Concerning the challenges faced by specific groups, although the figures suggest that youth (aged 15-28) perform comparatively well in Kazakhstan, large differences exist across socio-demographic and geographic groups. One way to look at the issue is to focus on the youth who are not in employment, education or training (NEET), which captures those who face the highest risk of being permanently excluded from the labour market. Measured as a percentage of the total youth population, the NEET rate is higher among young women (9.9%) than young men (4.8%). Particularly large differences exist across regions, with NEET rates being highest in the Karagandy Province (12.3%) and Turkeminstanskai region (10.7%), and lowest in the Kostanay Province (4.7%) and West Kazakhstan (2.8%) (see Figure 2.2). Higher NEET rates are found among youth with no, or only, primary education than more educated youth (OECD, 2017[1]).

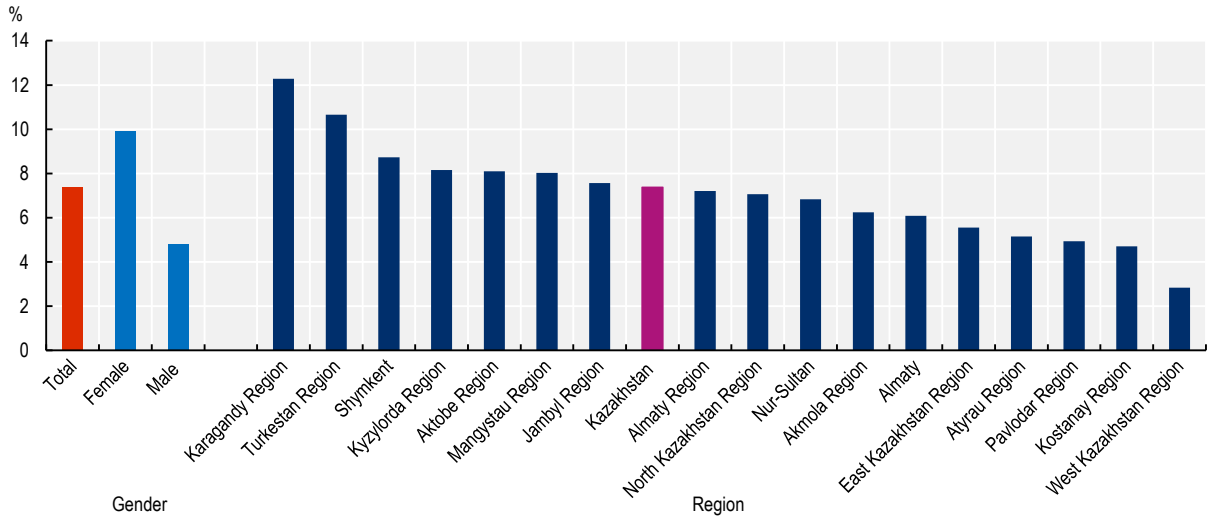
Figure 2.1. Key labour market indicators, 2018



Note: Great Britain (United Kingdom); the Russian Federation (hereafter "Russia"); People's Republic of China (hereafter "China").
Source: ILOSTAT (2020[6]), *ILOSTAT Database*, https://ilostat.ilo.org/data/.

StatLink https://doi.org/10.1787/888934233454

Figure 2.2. Youth (aged 15-28) NEET rates by gender and region, Kazakhstan, 2019



Note: Youth NEET is young people aged between 15 and 28 who are not in employment, education or training. Data for South Kazakhstan are not available.
Source: Data provided by the Bureau of National Statistics.

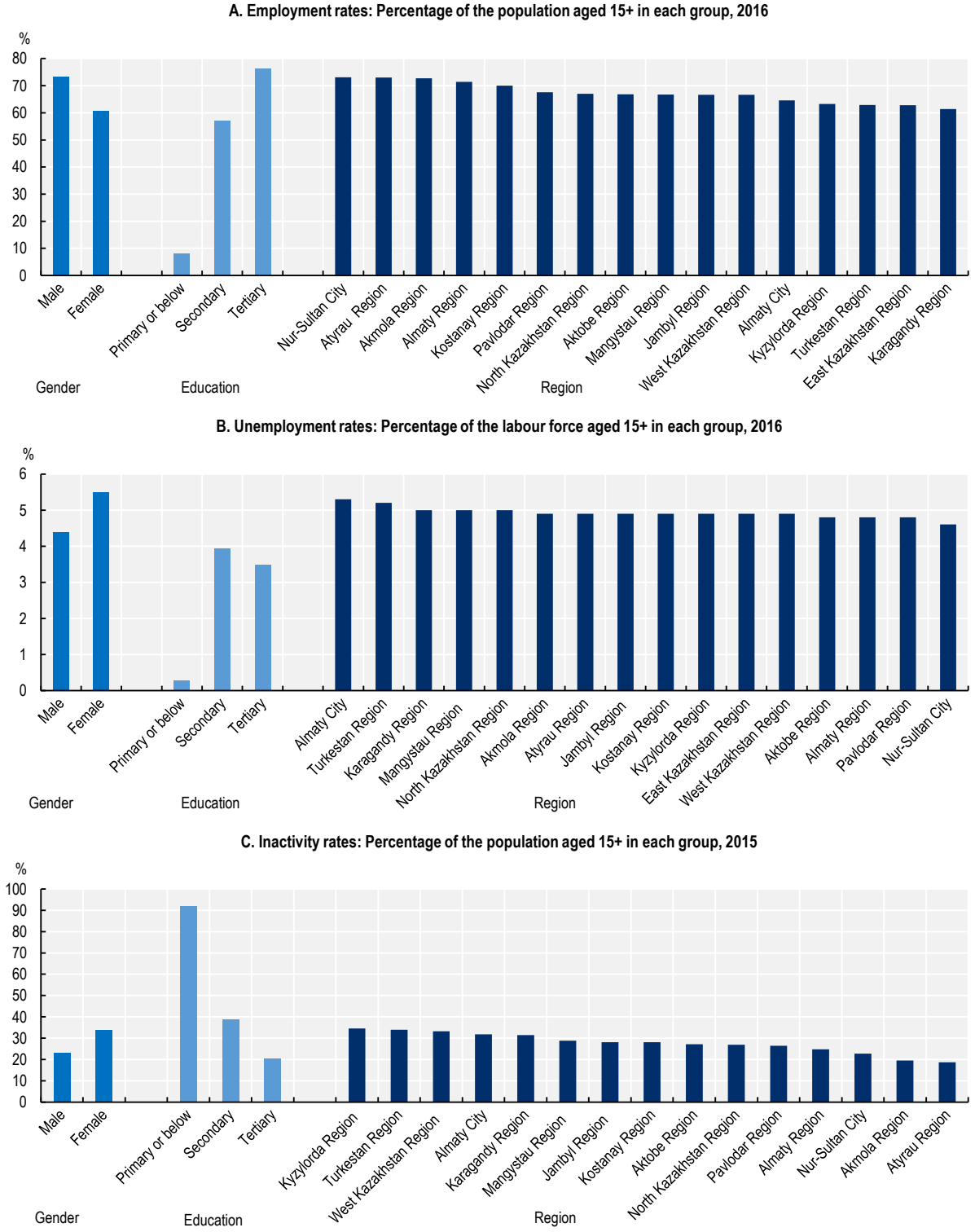
StatLink https://doi.org/10.1787/888934233473

Older people in Kazakhstan (conventionally defined as workers aged 55-64 years old) show inactivity rates higher than the OECD average (42.4% versus 38.9%), while employment rates are lower (54.8% versus 58.1%). The labour market situation of older workers deteriorates with age. People aged 65-69 in Kazakhstan are twice less likely to be employed (the employment rate is 12%) and much more likely to be inactive (the inactivity rate is 87%) than the OECD average (where the two measures are 24.9% and 74.4%, respectively). On the other hand, unemployment rates are very low, reflecting low participation in the labour market (OECD, 2017[1]).

The employment rate of people with disabilities is relatively low in Kazakhstan by international comparison, despite the fact that most of them have some capacity to work. This represents a large unexploited potential supply of skills and reflects high barriers to the hiring and retention of people with disabilities. At 22%, in Kazakhstan, the employment rate of people with disabilities compares poorly to the OECD-European average of 46.9% and falls at the bottom of the ranking (OECD, 2017[1]).

As in many OECD countries, in Kazakhstan, low-skilled people struggle more to enter the labour market. People with primary education or below generally have much higher inactivity rates than people with higher education (92% versus 20%) and significantly lower employment rates (8% versus 76%). Women in Kazakhstan have significantly lower employment rates than men (60.6% versus 73.2%), resulting primarily from higher inactivity rates (34% versus 23.1%). Regional differences are also important, reflecting different levels of development and economic activity. People living in southern and western regions of the country – such as South Kazakhstan, Kyzylorda, and West Kazakhstan – generally show poorer labour market performance (see Figure 2.3).

Figure 2.3. Labour market outcomes, by gender, level of education and region, Kazakhstan



Note: Education data refer to 2014 for all panels.

Source: Region and gender data are provided by the Bureau of National Statistics; education data are OECD calculations based on Eurostat (2020[7]), *European Union Labour Force Survey (EU LFS)*, https://ec.europa.eu/eurostat/web/microdata/european-union-labour-force-survey.

StatLink https://doi.org/10.1787/888934233492

Opportunities to improve the activation of skills of vulnerable populations in Kazakhstan

This section describes three opportunity areas to improve the activation of skills of vulnerable populations in Kazakhstan. The selection is based on input from literature, desk research, discussions with Kazakhstan's national project team, discussions with stakeholders in workshops in Nur-Sultan and Almaty, as well as virtual meetings involving more than 100 stakeholders. In light of this evidence, the following opportunities are considered to be the most relevant for the specific context in Kazakhstan to improve the activation of skills of its vulnerable populations:

- Opportunity 1: Improving the accessibility and quality of public employment centres
- Opportunity 2: Strengthening the effectiveness of active labour market programmes for vulnerable populations
- Opportunity 3: Promoting family policies for a more equitable sharing of unpaid and paid work.

Opportunity 1: Improving the accessibility and quality of public employment centres

Approachable and responsive employment centres are pivotal to improve the activation of people's skills. Employment centres play important roles in disseminating information on job vacancies, organising active labour market programmes and delivering employment services to jobseekers. This is even more important in light of the COVID-19 crisis, which requires public employment services to show responsiveness by quickly and flexibly adapting to the new situation.

However, as stressed by many stakeholders during workshops and focus group discussions, jobseekers in Kazakhstan typically are not very motivated to register with PES. The main reasons include the low quality of services provided and cumbersome registration procedures, which necessitate the submission of numerous documents from different offices and the fulfilment of complex and time-consuming administrative requirements (OECD, 2017[1]).

To increase the willingness of the most vulnerable populations in Kazakhstan to register with and benefit from PES, three policy directions could be considered, as follows.

Ensuring that public employment services provide adapted responses to the circumstances imposed by the COVID-19 crisis

Recent OECD evidence suggests that the effects of the coronavirus and containment measures have differed across population groups, according to age, gender and socio-economic backgrounds. Women and youth have been impacted more severely by the shutdowns in a number of sectors where they are typically over-represented, such as restaurants, hotels, passenger transport, personal care services and leisure services. Reflecting the disproportionate representation of low-income and part-time workers, these groups have entered the current period of financial pain in a significantly more precarious state than regular, more protected, workers (Barbieri, Basso and Scicchitano, 2020[8]). Countries have substantially reduced internship and apprenticeship contracts for youth, raising concerns about the emergence of a "corona generation" of marginalised youth with little career prospects (OECD, 2020[2]).

With face-to-face meetings less likely, there has been scope for the PES to intensify the use of digital tools, direct phone services to ensure the continuation of their counselling and career guidance in these challenging times. Even before the COVID-19 crisis, for example, the Estonian PES provided remote career guidance and counselling via email, phone and Skype. The benefits of having these services in place appear to be accentuated by the pandemic: between January and March 2020, the demand for remote career counselling increased more than seven-fold in Estonia, with the most popular option remaining phone counselling (Holland and Mann, 2020[9]). Telephone-based solutions, in particular, are

easy to implement at little extra cost and have the advantage of being easily accessible by clients without digital skills or devices (OECD, 2020[10]).

More generally, the concomitance between soaring caseload numbers with the application of distancing requirements has tested the agility of the PES. For example, most OECD countries had explicit job search reporting procedures prior to the crisis (Immervoll and Knotz, 2018[11]), aiming to encourage jobseekers to look for work as speedily as possible. With the crisis, many countries have eased and adjusted these requirements for jobseekers with children at home, reflecting childcare facility or school closures (e.g. Austria, Brussels [Belgium], the Netherlands and the United Kingdom). In other countries, the PES have temporarily suspended job search requirements altogether and lifted sanctions (e.g. France, Germany, Portugal, Slovenia and Sweden). Others did not apply sanctions but encouraged jobseekers to continue actively searching for jobs (e.g. Australia, Denmark, Estonia and Latvia) (OECD, 2020[2]). In some OECD countries, PES offices have shifted to prioritising processing unemployment benefit applications (OECD, 2020[10]).

The advantages of increased digitalisation of PES services will likely extend beyond the COVID-19 crisis, resulting in more permanent gains. Improving information technology (IT) systems has the potential to reduce the time that case workers need to devote to routine tasks, allowing them to concentrate on more tailor-made services for individual clients (OECD, 2020[10]). Kazakhstan can draw inspiration from the experience of OECD countries that have recently taken steps to intensify PES e-services (see Box 2.1), bearing in mind that it is important to prioritise the safety of staff while ensuring the quality of services provided. According to stakeholders consulted throughout the mission, most employment centres in Kazakhstan rely on face-to-face meetings to provide services to clients. To better respond to the COVID-19 crisis, PES could also reorganise staff work routines via teleworking, allowing flexible shifts at the workplace, for example (OECD, 2020[12]).

Box 2.1. Relevant international examples: Ensuring that public employment services provide adapted responses to the circumstances imposed by the COVID-19 crisis

PES e-services: Examples from the Netherlands and Slovenia

In the **Netherlands**, most PES have been delivered on line since 2010. Registered jobseekers can manage all their activities through an online account and automatically receive action plans and matched vacancies, which they are required to respond to. If there is no activity recorded in their online accounts or required tasks remain unfulfilled (e.g. applying for a job vacancy), personal interviews are used to follow up with jobseekers. PES staff can access clients' accounts to review their job-search activities and CVs. A "CV quality card" helps staff to improve the quality of a jobseeker's CV and thus their chance of returning to work. The quality card is an automated report using datamining, which compares CVs and job-search activities of other jobseekers with similar characteristics. PES staff use this information during personal counselling interviews to advise jobseekers on job search. The aim of this approach is to privilege the establishment of interactive digital relations with clients so that only the most disadvantaged clients receive intensive support through personalised coaching. Recent figures show that 95% of unemployment benefit recipients were registered on line and 85% used ongoing e-services such as managing their benefit claims and automatic matching to vacancies.

In **Slovenia**, all registered jobseekers who create a customer account in the Employment Service of Slovenia (ESS), an online portal, have access to the online vacancy database and can create an online CV to advertise themselves to employers. Jobseekers have access to a number of online facilities, such as different self-assessment tools, tips on CV preparation and job interviews. Additional online functionalities are accessible by jobseekers who opt to sign an agreement during the first counselling interview. "E-clients" receive referrals to job vacancies from their ESS advisor through their account and manage all documentation on line (e.g. updates of the individual action plan, invitations to job fairs). Contacts with the employment counsellor take place on an e-coaching basis, i.e. via the online portal. This allows the ESS counsellors to have a good overview of a jobseeker's job-search efforts. The counsellors also have the option to change the relationship with clients back to in-person attendance when the jobseeker does not actively use the online account (e.g. the online portal is visited less than once in two weeks), does not respond to vacancy referrals or struggles with the online tool.

Source: OECD (2015[13]), *OECD Employment Outlook 2015,* http://dx.doi.org/10.1787/empl_outlook-2015-en; OECD (2016[14]), *Connecting People with Jobs: The Labour Market Activation Policies and Disadvantaged Workers in Slovenia,* http://dx.doi.org/10.1787/9789264265349-en.

Recommendation for ensuring that public employment services provide adapted responses to the circumstances imposed by the COVID-19 crisis

1.1. **Adopt and utilise digital communication tools to ensure the continuation of services during and following the COVID-19 crisis.** To move toward more diversified services, the MLSPP could reinforce the move to digital platform tools and direct phone contacts. More online job fairs, online training and online communication through video conferencing could be used when face-to-face events/ interviews are not possible. Counselling interviews over the phone are important to engage individuals who do not have access to, or are less familiar with, digital devices.

Continuing efforts to build institutions that effectively reach vulnerable populations

Jobseekers have different characteristics and skills profiles (OECD, 2015[13]). Several stakeholders in the assessment mission stressed that there are unexploited opportunities in Kazakhstan for increasing the capacity of the PES to provide personalised services tailored to the skills and work expectations of each individual. For example, they have a role to play in orienting older workers, young parents and individuals with health problems towards jobs that are particularly suitable for them, for example, because they make stronger use of part-time arrangements, flexible start and finishing time arrangments or teleworking.

One way to better tailor services to vulnerable populations is to strengthen job profiling. OECD countries have various jobseeker profiling procedures in place to deliver services that appropriately reflect the needs of specific groups, taking into account their skills characteristics and probability of becoming long-term unemployed. Typically, profiling is used by caseworkers to set out an individual action plan (IAP) with implementation often facilitated by recourse to information technology (see Box 2.2) (OECD, 2015[13]).

Successful activation of jobseekers requires competent and motivated employment counsellors. Counsellors have to combine a broad range of competencies, involving "hard" skills (e.g. performing administrative tasks and using IT systems) and "soft" skills such as job broking, profiling and counselling. The ability to work in a multi-disciplinary team is also important to address social exclusion, in particular,

to address individuals and families who need assistance in several areas of life. This includes through the support of co-ordinated responses with health specialists, psychologists, social insurance workers and other professionals.

Various non-governmental organisations (NGOs) operate in Kazakhstan, playing a positive role in facilitating the activation of vulnerable populations and their skills. Feedback from stakeholders during the assessment mission has revealed that their substantial knowledge of the most disadvantaged groups and the social and employment barriers they face is largely under-utilised. There seems to be in particular a lack of co-operation between the government, local employment centres and NGOs, which prevents the sharing of knowledge and experiences about practices to provide tailored ALMPs to those facing the highest risks of social and labour market exclusion.

Stakeholders also reported that the performance of public employment centres, as evidenced by their capacity to support clients in their search for suitable jobs, is relatively low, compared to private employment agencies in Kazakhstan. This suggests that giving the two types of agencies more opportunities to explore synergies and collaborate more closely could be an appropriate avenue to explore, particularly in the urban areas and for more readily employable workers who are less in need of basic training. This seems to be in line with international practice (OECD, 2019[15]; OECD, 2017[1]). Many PES in OECD countries outsource some employment services to private providers. The most notable example is Australia, where the PES outsources all employment services to private providers (OECD, 2015[13]).

In Kazakhstan, employment services started to be outsourced to private employment agencies in 2018. Although the legal framework has been adapted to accompany the expansion of these new services, the collaboration between public and private centres remains limited. Kazakhstan can benefit from promoting public-private partnerships (PPPs) to facilitate co-operation between public and private employment agencies (Scoppetta, 2013[16]; Barbier, Hansen and Samorodov, 2003[17]), which are discussed in Chapter 5. Currently, there are about 98 private agencies operating in Kazakhstan, of which 54 are connected to the Electronic Labor Exchange, the government-run online platform for job search and recruitment, which operates under the *Enbek* website.

Box 2.2. Relevant international examples: Continuing efforts to build institutions that effectively reach vulnerable populations

Jobseeker profiling: Examples from Australia, Germany and the Netherlands

In **Australia**, the Job Seeker Classification Instrument (JSCI) takes into account 18 dimensions – such as access to transport, age, gender and income support history – as provided by the questionnaire that all jobseekers complete when they first register. When required by particular social and health care conditions, specialist assessments are undertaken to supplement jobseeker answers. Tailored support is also provided to people with disabilities. Based on their JSCI score, jobseekers are allocated to one of four streams of intervention regimes, each associated to a particular schedule of payments to providers for their services.

In **Germany**, clients are organised and treated according to six different profiles using a software-guided assessment of their "distance from the labour market". Each profile is linked to a specific service strategy that the caseworker follows.

In the **Netherlands**, the profiling tool called "work explorer" determines the probability that a jobseeker will resume work within a year. Each jobseeker fills in the questionnaire electronically before three months of unemployment. The outcome of the questionnaire determines whether or not the jobseeker is entitled to intensive support to increase the chances of finding a job.

Source: Konle-Seidl, R. (2012[18]), *Monitoring and Follow-up of IAPs and their Outcomes in Selected EU Countries*, https://ec.europa.eu/social/BlobServlet?docId=7530&langId=en; OECD (2012[19]), *Activating Jobseekers: How Australia Does It*, http://dx.doi.org/10.1787/9789264185920-en.

Recommendations for continuing efforts to build institutions that effectively reach vulnerable populations

1.2. **Improve jobseeker profiling tools to enable upfront intervention, by allowing caseworkers to set up individual action plans**. PES in Kazakhstan need to collect sufficient information from jobseekers based on interviews and profiling upon registration to assess their competencies, socio-demographic characteristics, family status (e.g. single parents), household income and risks of falling into long-term or repeated unemployment. This is important to allow the PES to better prioritise and decide which kinds of support (e.g. re-skilling training solutions, career guidance, employment incentives) would best match clients' needs. PES in Kazakhstan could adopt profiling tools that have proved effective by international practice (e.g. as in Australia and Germany).

1.3. **Reinforce collaboration with private employment agencies and local NGOs as a way to alleviate the capacity constraints of public employment services**. The MLSPP should improve the regulatory and monitoring framework to ensure that the market of private employment agencies delivers quality services under conditions of fair competition. PES should consider building closer collaboration with private employment agencies in providing counselling services, for example by promoting PPPs (see Chapter 5), to build on the knowledge and network capacity of existing NGOs and private agencies.

Improving the quality of services provided by employment centres

Although recent data show that registration with PES among the unemployed has increased in the past few years, registration rates remain low compared to European OECD countries. In 2019, about 22% (97 500 people) of all unemployed people were registered with the PES in Kazakhstan, versus an average of 60% in European OECD countries (see Figure 2.4). More recent data shows that, as of April 2020, 149 783 unemployed people aged 15-64 were registered with the PES in Kazakhstan, which is a significant jump compared to 2019. This largely reflects the increased unemployment caused by the COVID-19 crisis in the first quarter of 2020.

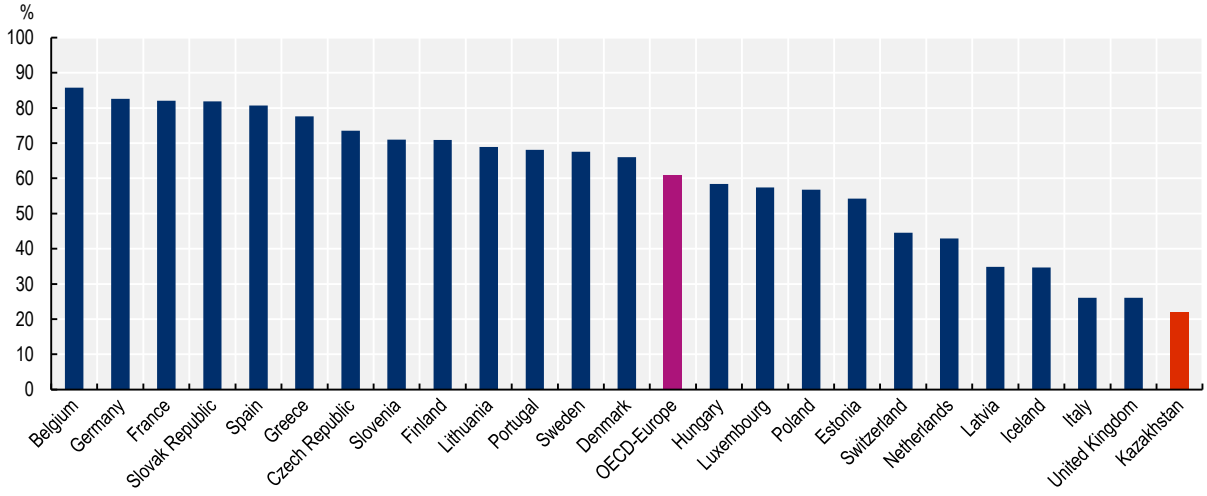
In addition, a majority of caseworkers face irregular working hours and relatively low pay, which undermines their motivations and contributes to high turnover rates. High turnover of caseworkers is a source of inefficient delivery of employment services and substantially lowers the quality of services due to losses of skills and lack of continuity. Moreover, many caseworkers are low skilled and lack the experience and competencies needed to respond to the need of clients, including by using available tools and information and communication technologies (ICTs) (OECD, 2017[1]). Evidence suggests that the skill levels and attitudes of caseworkers toward their clients may play an important role in the quality and

effectiveness of PES. As mentioned above, counsellors need a broad range of competencies, ranging from "hard" skills (e.g. performing administrative tasks and using IT systems) to "soft" skills, such as job brokering, counselling and social work, so as to be able to improve outcomes for the unemployed (OECD, 2015[13]). It is of critical importance to provide sufficient training to caseworkers on digital skills as well as interpersonal skills (see Box 2.3).

As discussed above, Kazakhstan has recently improved its online vacancy bank. Since 2018, the Electronic Labor Exchange, a central web portal for job search and recruitment, has been fully integrated with the employment centres' vacancy database. However, as mentioned by several stakeholders, including representatives from the National Chamber of Entrepreneurs (NCE or *Atameken*), during the OECD Skills Strategy project missions, the limited attractiveness of the positions advertised in the job vacancy bank is a source of concern. Particularly, many of the positions are mainly for low-quality and temporary jobs. In addition, some posted job positions have already been filled, whereas others are still at the level of intention. These problems reflect the need for regular screening to verify the quality of the information and to keep the system up to date. Keeping the vacancy database up to date will be even more important during and following the coronavirus pandemic, which can be expected to entail shifts in labour demand across sectors and regions.

Figure 2.4. Registration with public employment services: Kazakhstan (2019) and European OECD countries (2018)

Percentage of unemployed (aged 15-64)



Source: For data on Kazakhstan, OECD calculations based on information provided by the Bureau of National Statistics and MLSPP. For data concerning OECD-Europe, OECD calculations based on Eurostat (2020[7]), *European Union Labour Force* Survey *(EU LFS)*, https://ec.europa.eu/eurostat/web/microdata/european-union-labour-force-survey.

StatLink https://doi.org/10.1787/888934233511

Box 2.3. Relevant international examples: Improving the quality of services provided by employment centres

Improving job matching services: Examples from Australia, the United Kingdom, Japan and Sweden

In **Australia**, a proactive approach has been adopted whereby a jobseeker is referred to a potential employer who may be willing to fill a particular position, despite the fact that he/she has not created a formal vacancy. For instance, contracted employment service providers use this technique for hard-to-place jobseekers who are job-ready or close to job readiness.

Some countries provide special support to small and medium-sized enterprises (SMEs), which usually lack human resource departments and do not have the capacity to register or manage vacancies effectively. Outreach to SMEs can also be achieved through collaboration with small business federations, chambers of commerce and trade associations. For example, the PES in the **United Kingdom** runs a small business recruitment service to serve the needs of small businesses with fewer than 50 employees. This can involve the creation of a specialist employer helpline, advice on the local labour market, support on how to advertise vacancies (e.g. wording and design) and post-recruitment support.

Another good practice is to hold job fairs on PES premises, where jobseekers can meet prospective employers. In **Japan**, such offers are targeted in particular at jobseekers who experience difficulties in finding a job independently and need more support. Recruitment meetings in **Swedish** local PES offices function like "speed-dating" events for employers and jobseekers – essentially three-to-four-minute interviews to facilitate matching.

Source: OECD (2012[20]), *Sick on the Job? Myths and Realities About Mental Health and Work*, http://dx.doi.org/10.1787/9789264124523-en; OECD (2014[21]), *Connecting People with Jobs: Activation Policies in the United Kingdom*, http://dx.doi.org/10.1787/9789264217188-en; Duell (2010[22]), "Activation Policies in Japan", http://dx.doi.org/10.1787/5km35m63qqvc-en.

Recommendations for improving the quality of services provided by employment centres

1.4. **Increase the number of caseworkers and improve their working conditions so as to improve motivation and the quality of services provided.** The MLSPP should increase the resources and capacity of PES, for example, by expanding the number of caseworkers and offering higher salaries commensurate with their physical and psychological work burdens. The MLSPP should also ensure that caseworkers receive regular training to keep them abreast of newly developed digitally supported services. It is important to allocate a sufficient budget to expand training opportunities for PES staff to improve their competencies and to equip them with the knowledge and skills required to efficiently support clients.

1.5. **Monitor and upgrade the quality of the job postings available in the vacancy bank.** The MLSPP and NCE should simplify the procedures for employers to advertise a vacancy, and extend digital platform services targeted to the unemployed. PES staff may actively solicit employers for new job offers, rather than confining their role to the registration of vacancies, which is too passive in light of international experience. More proactive approaches could be considered to refer jobseekers to potential employers who have yet to issue a formal vacancy but may be willing to hire under the right conditions (e.g. as in Australia). In addition, the PES in Kazakhstan should consider establishing a small business recruitment service for SMEs to provide them with additional support in advertising vacancies (e.g. wording and design) and post-recruitment support (e.g. as in the United Kingdom).

1.6. **Adopt proactive approaches to promote efficient job-matching services.** The PES in Kazakhstan should hold job fairs and recruitment meetings on a regular basis, where jobseekers can meet prospective employers. Such events could particularly target jobseekers who experience difficulties in finding a job independently and need more support (e.g. as in Japan). Local PES offices could, for example, organise "speed-dating" events to facilitate the matching process, while allowing employers to meet as many candidates as possible (e.g. as in Sweden).

Opportunity 2: Strengthening the effectiveness of active labour market policies for vulnerable populations

Active labour market policies could support skills activation by enhancing people's motivation and incentives to seek employment; improving job readiness and support in finding suitable employment; and expanding employment opportunities. For this to happen, it is crucial that ALMPs are evaluated and that, following these evaluations, funding is allocated to the programmes that delivered the best value for money. However, several stakeholders consulted throughout the OECD Skills Strategy project reported that limited evaluations of the impact of ALMPs is carried out in Kazakhstan. Even when this happens, results are unlikely to be used to inform relevant policies and support progress towards good practices. Based on this feedback, Kazakhstan should strengthen its active labour market policies, particularly with regard to vulnerable populations. Two pathways to doing so are presented below.

Developing rigorous impact evaluation systems on the impact of active labour market policies

Several stakeholders consulted during the OECD Skills Strategy project reported that very few evaluations of the impact of ALMPs are carried out in Kazakhstan. Even when this happens, results are unlikely to be used to inform relevant policies and support progress towards good practices. International experience suggests that an assessment of existing ALMPs is important to improve the cost-effectiveness of interventions. It could help policy makers gain valuable information on whether programmes should be continued and eventually improved, or terminated because they are not effective (OECD, 2015[13]).

Developing rigorous impact evaluation systems could be particularly important in the context of Kazakhstan, where ALMPs generally have very broad eligibility criteria and are characterised by poor targeting. This implies that the system is prone to generating deadweight and substitution effects, which could reflect the over-representation of highly skilled participants, leaving little room for the vulnerable populations who need the ALMPs the most to find productive employment (OECD, 2017[1]).

A number of OECD countries have taken steps to build a stronger impact evaluation culture for ALMPs (see Box 2.4). In Germany, for example, the implementation of the 2003-05 reforms of both active and passive labour market policies was explicitly tied to an evaluation mandate. In Australia, the Try, Test and Learn Fund – set up in 2016 to identify new approaches to move at-risk income support recipients onto a pathway towards employment – uses a range of impact evaluation methods to test effectiveness and learn from results (OECD, 2019[23]). These efforts should be co-ordinated with initiatives in other skills policy areas (see Chapter 5). Chapter 5 finds that Kazakhstan has so far struggled in building a strong evaluation culture across the skills system, and recommends establishing a common evaluation and assessment framework for skills policies by forming an inter-ministerial working group. The development of the impact evaluation systems for ALMPs should be consistent with the common evaluation and assessment framework.

Box 2.4. Relevant international examples: Developing rigorous impact evaluation systems on the impact of ALMPs

Measuring the impact of ALMPs: Examples from Switzerland, Australia and the United States

The impact of ALMPs on labour market outcomes can be assessed in various ways. In some cases, there is a clear correlation between the introduction of new activation strategies and changes in aggregate labour market outcomes. Impacts can also be evaluated by comparing labour market outcomes between participants (i.e. individuals who participated in active programmes) and non-participants. This includes, for example, the comparison between labour market developments in areas where new measures are implemented (on a "pilot" basis) and developments in other areas.

In **Switzerland**, evaluation results are produced based on matching participants in each programme with comparable participants in other programmes and non-participants (using a common starting date, as defined by the programme under assessment). The assessment relates outcomes for the period 1998-99, using longitudinal data to capture individual labour market histories. They find varying degrees of impact by programme type. Some bring strongly positive impacts to labour market outcomes while others have nearly zero or even negative impacts in some cases.

In **Australia**, the Post Programme Monitoring (PPM) Survey was set up in the late 1980s to provide insights into the participant structure of some of the ALMPs. It records full-time and part-time employment, education and training outcomes achieved by jobseekers around three months after they exit labour market assistance. Results are published in quarterly Labour Market Assistance Outcomes reports.

In the **United States**, pooled regression is used to find which activation programmes bring the most positive impacts. They present the findings from random-assignment evaluations of different service strategies implemented by 59 employment offices for welfare recipients throughout the United States.

Source: Gerfin, M. and M. Lechner (2002[24]), "A Microeconometric Evaluation of the Active Labour Market Policy in Switzerland", https://doi.org/10.1111/1468-0297.00072; OECD (2012[19]), *Activating Jobseekers: How Australia Does It*, http://dx.doi.org/10.1787/9789264185920-en; Bloom, H., C. Hill and J. Riccio (2003[25]), "Linking Program Implementation and Effectiveness: Lessons from a Pooled Sample of Welfare-to-Work Experiments", https://doi.org/10.1002/pam.10154.

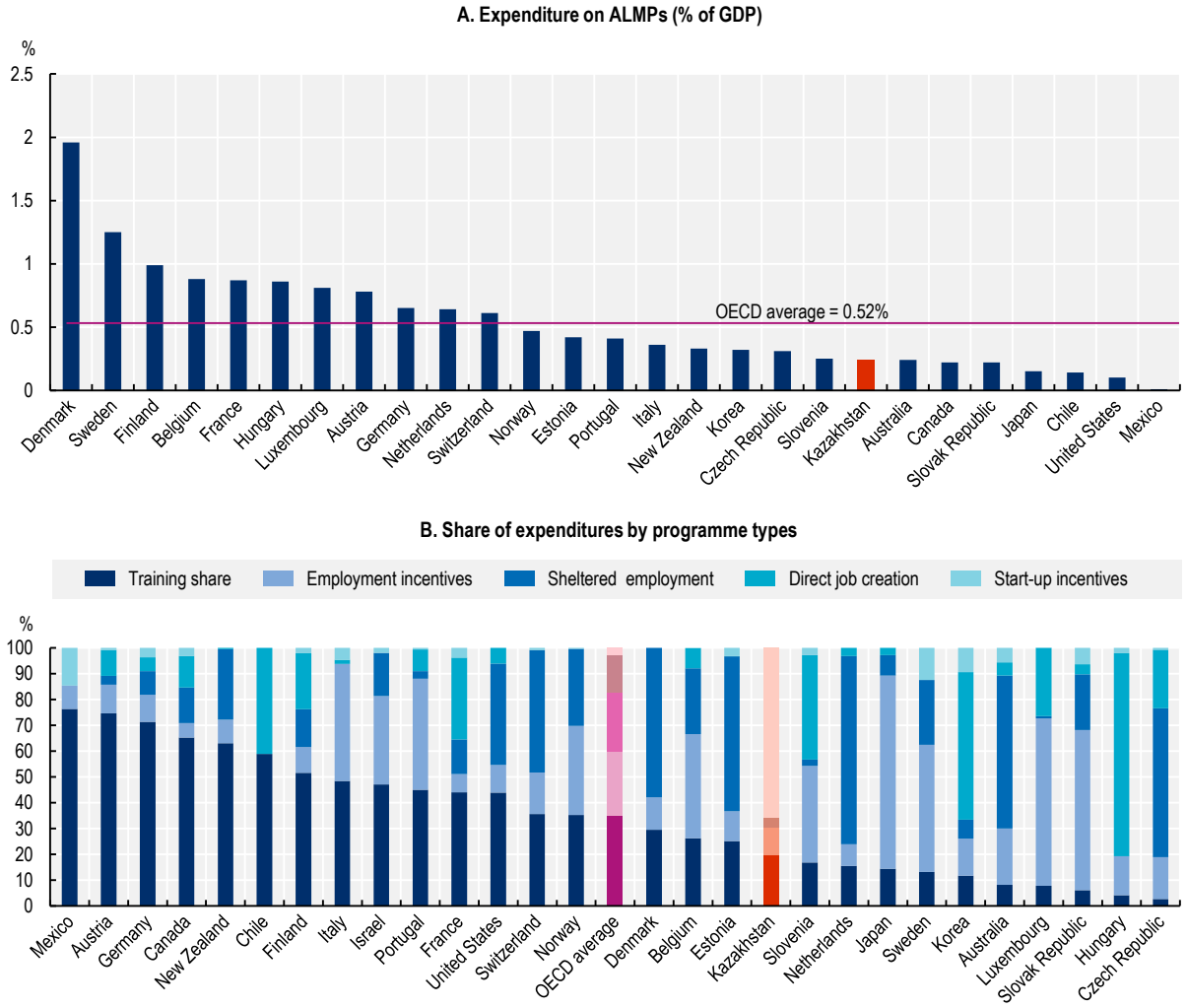
Recommendations for developing rigorous impact evaluation systems on the impact of active labour market policies

1.7. **Carry out a rigorous impact evaluation to assess the effectiveness of ALMPs to inform policy.** The MLSPP and WDC should assess the cost-effectiveness of interventions and use the gathered evidence to determine which ALMPs should be continued, expanded or terminated. Currently, in Kazakhstan, impact evaluations of ALMPs are rare and should be extended to cover all major programmes for longer post-programme periods. It is advisable to test new programmes locally first, starting from a limited number of pilots, rather than creating larger-scale programmes whose impacts remain dubious. Evaluating the benefits accruing to participants to the pilots could involve formulating an expectation about their future earnings. The MLSPP and WDC should ensure that the principles and methods used are consistent with the common framework developed by the proposed inter-ministerial working group for the evaluation of skill policies (see Chapter 5).

Increasing expenditure on active labour market policies and reinforcing their targeting

Recent data provided by the MLSPP suggest that expenditures on ALMPs as a percentage of gross domestic product (GDP) have increased in the past few years. In 2019, spending on ALMPs had almost recovered to the level of 2013, following a dramatic reduction in 2014 (by as much as 60%). However, the expenditure on ALMPs remains relatively low by international comparison. Kazakhstan spends about 0.24% of GDP on ALMPs, versus the OECD average of 0.52% (see Figure 2.5, Panel A).

Figure 2.5. Expenditure on active labour market policies, Kazakhstan (2019) and selected OECD countries (2017)



Note: Data for Kazakhstan refer to 2019. Data for OECD countries refer to 2017, or the most recent year available). Expenditure on employment incentives includes recruitment, employment maintenance and job rotation incentives; expenditure on direct job creation usually involves the creation of works that are of community benefit or are socially useful, and usually, in the public or non-profit sector; expenditure on start-up incentives include programmes to promote entrepreneurship by supporting the start of new businesses. For Kazakhstan, expenditures on employment incentives include youth practice (e.g. internship programmes) and social works and job-mobility programmes (less expenditure on housing construction). There are no supported employment and rehabilitation programmes in Kazakhstan.
Source: OECD (2020[26]), *OECD Labour Database*, http://dotstat.oecd.org/?lang=en; for Kazakhstan, information was provided by the MLSPP.

StatLink https://doi.org/10.1787/888934233530

Limited budgets may hinder the capacity to provide quality and sufficient ALMPs. Experiences from the past economic crisis show that OECD countries that scaled up expenditures on ALMPs achieved better labour market outcomes for youth (OECD, 2012[27]). In addition, past evidence shows that the positive impacts of ALMPs tend to be larger during periods of slow growth and higher unemployment (Card, Kluve and Weber, 2018[28]). This suggests that increased expenditure on ALMPs could be particularly important to support the recovery of the employment losses induced by the economic recession triggered by COVID-19.

Expenditures on ALMPs in Kazakhstan are skewed towards start-up incentive programmes, whereas the programmes geared at training and employment incentives account for a relatively small part of activation, despite training and employment promotion being an important part of the Enbek programme for productive employment and mass entrepreneurship development (see Box 2.5). OECD countries put more emphasis on training and employment incentives than Kazakhstan (see Figure 2.5, Panel B).

Evidence from previous OECD research (OECD, 2017[1]), as well as feedback from several stakeholders consulted during the assessment mission, suggest that the eligibility requirements for participating in ALMPs are often too broadly defined, without specific targeting at vulnerable populations most in need. To achieve effective interventions and inclusive growth, where quality employment opportunities reach the most disadvantaged groups, it is critical to improve the targeting of ALMPs.

International experience suggests that vulnerable populations may face particularly higher barriers and may need additional and tailored support to find quality employment. People from rural areas may find it relatively more difficult to participate in ALMPs, due to additional transportation costs or lack of time due to unpaid work burdens (OECD, 2017[29]; OECD, 2019[15]). Programmes should be designed in such a way that they take into account these dimensions.

Box 2.5. Relevant national example: Increasing expenditure on ALMPs and reinforcing their targeting

The State Programme for Productive Employment and Mass Entrepreneurship Development 2017-2021 (*Enbek*)

Launched in 2017 and managed by the MLSPP, *Enbek* is a government programme that aims to help vulnerable populations find productive employment. The programme is part of the Strategic Development Plan of the Republic of Kazakhstan until 2025 and includes the following directions:

- First, **strengthening technical and vocational education and short-term vocational training** (Обеспечение участников программы техническим и профессиональным образованием и краткосрочным профессиональным обучением). This involves the provision of free vocational training, both long-term (with a duration of two to three years) and short-term (with a duration of one to six months), giving priority to youth who are not in employment, education or training (under the age of 29), laid-off workers, low-skilled workers, people with disabilities and low-income families. Participants from remote regions are entitled to a subsidy to cover transportation costs.
- Second, **strengthening mass entrepreneurship development** (Развитие массового предпринимательства) through access to training programmes focussed on entrepreneurship and/or to micro loans or grants for entrepreneurs and start-ups. For example, the Bastau Business project provides training on entrepreneurial skills (e.g. principles of forming agricultural co-operatives), communication skills, as well as individual guidance on business modelling. Upon completion, participants receive a certificate. Unemployed, self-employed and low-skilled workers are eligible to participate in the programmes. People who participate in Bastau Business from rural areas, small towns or cities specialising in a single industry are given preferential access to micro loans.

- Third, **supporting employment promotion and labour force mobility** (Развитие рынка труда через содействие занятости населения и мобильность трудовых ресурсов). The objective is to improve the employability of people by reinforcing career guidance and counselling, job-matching services and other employment assistance. Another objective is to create social jobs by promoting public works and internship opportunities for youth. In addition, this direction aims to facilitate job mobility by covering accommodation and travel costs of participants who accept jobs in regions with labour shortages (as defined by the government).
- Fourth, **preparing a skilled workforce for occupations most in demand** (principle of 100 occupations/200 educational institutions) through the programme called Zhas Maman, and **supporting development of youth entrepreneurship** through the Zhas Kasipker programme. Zhas Maman is managed by the MOES and helps modernise educational institutions through equipment and content upgrades. Zhas Kasipker helps develop entrepreneurship skills among young people, students in vocational education and training (VET) and students attending higher education (HE), and provides financial support to young entrepreneurs. Zhas Kasipker also provides training support, loans and grants for selected entrepreneurship ideas to young entrepreneurs and families.

Source: Government of Kazakhstan (2018[30]), *State Programme of Productive Employment and Mass Entrepreneurship Development 2017-2021 ("Enbek")*, http://adilet.zan.kz/kaz/docs/P1800000746.

Recommendations for increasing expenditure on active labour market policies and reinforcing their targeting

1.8. **Scale up expenditure on activation programmes with a proven track record and capacity to secure the achievement of stated objectives.** The MLSPP and local governments should increase expenditures on those programmes that have proven to be effective, particularly during economic recessions. For example, funding to promote effective training programmes could potentially come from the training levy that Kazakhstan could consider introducing based on the recommendations in Chapter 5. It is advisable to prioritise programmes that support a fast return to the labour market, such as job-search support and counselling. Job creation can be supported by temporarily scaling up easy-to-expand, time-limited hiring subsidies, as many OECD countries did during the global financial crisis of 2007-08.

1.9. **Improve the eligibility criteria for participating in activation programmes to ensure that people most in need can access and benefit from them.** The MLSPP should manage each ALMP separately and set appropriate targeting criteria to prioritise those who need and could benefit from certain activation programmes the most. For example, employment incentives could strengthen efforts to target the most vulnerable jobseekers by using profiling tools that allow for the prediction of an individual's probability of long-term unemployment. In order to limit deadweight and substitution effects, the MLSPP should closely monitor the targeting of the programmes.

Opportunity 3: Promoting family policies for a more equitable sharing of unpaid and paid work

Women with young children in Kazakhstan face high barriers to activate their skills in the labour market. Stakeholders in the assessment mission identified a range of barriers that prevent young mothers from returning to work, including lack of quality and affordable childcare facilities, traditional social norms and gender stereotypes. Formal childcare is often too expensive or too distant from home, while widespread, traditional social norms discourage the use of childcare facilities with the belief that babies should be taken care of by their own mothers. Family-friendly policies have an essential role to play in strengthening female labour market participation, along with fostering the recognition and use of their skills (Thévenon, 2013[31]; Thévenon, 2015[32]). Building on the feedback and evidence gathered throughout the OECD Skills Strategy project, this opportunity addresses two policy avenues, as follows.

Improving access to quality childcare services

The supply of quality and affordable early childhood education and care facilities is limited in Kazakhstan, particularly for children below the age of three (OECD, 2017[29]). According to OECD Programme for International Student Assessment (PISA) data, the percentage of students who do not attend pre-primary education in Kazakhstan is one of the highest among PISA-participating countries and economies (65%, rank 2/64), pointing to difficulties of access. Similarly, gross enrolment rates in pre-primary schools (for children aged 1-6 years) remain very low compared to a number of OECD and developing countries (OECD, 2016[33]).

Several stakeholders consulted during the OECD Skills Strategy project reported that affordable childcare for children aged 0-2 is lacking in Kazakhstan. In 2014, nurseries enrolled roughly 8.5% of children aged 0-2 in Kazakhstan, compared to an OECD average of 32.9% in 2013 (OECD, 2020[34]). Although significant progress has been made in the coverage of children aged 1-3 in preschool education over the past few years, public nurseries remain concentrated in only 9 of 14 regions in Kazakhstan. The cost of hiring a nanny is affordable only to families in the highest earnings group (ILO, 2012[35]).

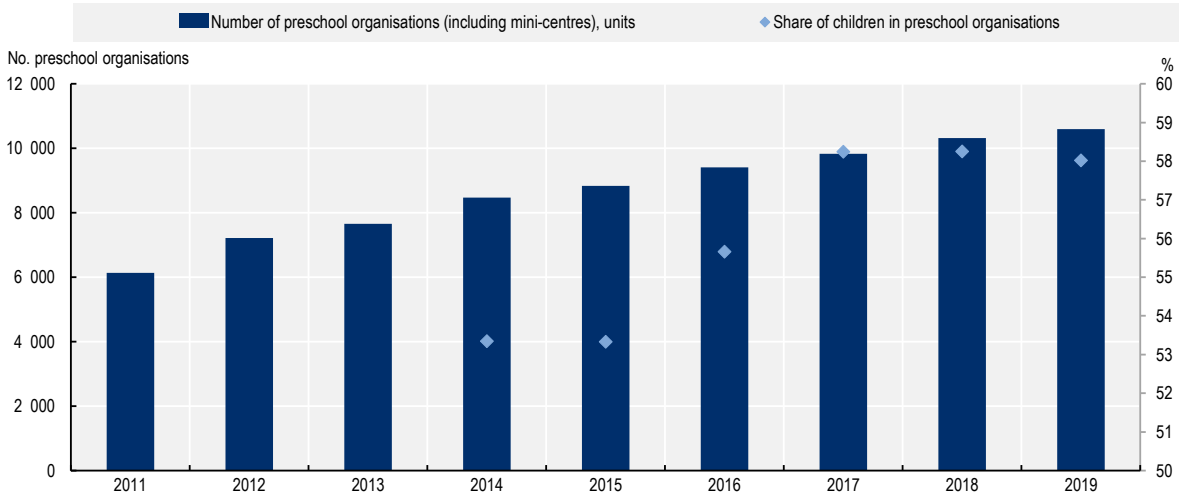
Access to childcare facilities varies considerably across socio-economic groups and between rural and urban areas. It is particularly limited for women from vulnerable households, who work in the informal sector or are self-employed. Even within the largest cities, access can be limited in the most populated neighbourhoods, where demand is stronger (ILO, 2014[36]; Habibov, 2014[37]). This situation translates into long waiting lists. Although the number of childcare facilities has increased steadily since the early 2000s (see Figure 2.6), they are unequally distributed across areas

As a part of the Kazakhstan 2050 strategy, the Balapan programme aims to provide pre-primary education to all children aged 3-6 in Kazakhstan by expanding the supply of childcare facilities and easing the financial burden of childcare on parents. The programme involves the construction of new state kindergartens, as well as subsidies for parents to utilise private childcare facilities (such as kindergartens and mini-centres). For children in private kindergartens, the state covers most expenses, with parents just covering the fees for meals. While the programme concerns expanding the coverage of childcare services, quality standards remain to be defined.

Research using national data from 18 OECD countries reveals that expansions in childcare service provisions significantly boost women's labour market participation as such expansions allow mothers to reconcile work and family commitments (Thévenon, 2013[31]; Thévenon, 2015[32]). Many OECD countries made progress in developing policies aimed at improving access to ECEC following the introduction of the *2013 OECD Recommendation of the Council on Gender Equality in Education, Employment and Entrepreneurship*. OECD countries are increasingly aware of the importance of accessible childcare services, as illustrated by responses to the 2016 OECD Gender Equality Questionnaire (GEQ), for example, which reveal that almost two-thirds of countries think "making childcare more accessible" is one

of the three “most effective ways to tackle barriers to female employment” (OECD, 2017[29]). Many OECD members have introduced or extended measures aimed at increasing the accessibility and affordability of ECEC, in one form or another (see Box 2.6).

Figure 2.6. Provision of childcare facilities for children aged 3-6 in Kazakhstan



Source: OECD calculations based on information provided by the Bureau of National Statistics.

StatLink https://doi.org/10.1787/888934233549

Many OECD countries have concentrated on the costs of childcare, and have taken steps to improve affordability for parents (OECD, 2017[29]). In most cases these measures take the form of increases in subsidies or benefits/rebates for parents using childcare (e.g. Canada, Japan, Korea, New Zealand, the Slovak Republic and Poland). In New Zealand, for example, the level of both the Childcare Subsidy and the Out of School Care and Recreation subsidy – fee subsidies paid directly to providers on behalf of low-income families using registered ECEC and out of school hours services, respectively – were increased by 25% in 2016. Some countries have also looked to reduce the overall cost of childcare through the introduction or expansion of free childcare hours (Norway and the United Kingdom). Norway, for instance, has phased-in 20 weekly hours of free childcare for 3-5 year-olds from low-income families.

Box 2.6. Relevant international examples: Improving access to quality childcare services

Provision of early childhood education and care: Examples from Sweden, Germany, Korea and France

In **Sweden**, the expansion of the ECEC infrastructure has largely been financed through public subsidies. For the most part, services are publicly run and delivered by the network of centre-based facilities for collective care. Home-based family daycare services are also available. ECEC in Sweden is an integral part of the education system, with its own curriculum and educational targets. In 2013, public expenditure on ECEC services was 1.64% of GDP, the second-highest level of spending on ECEC among OECD countries, after Iceland.

In **Germany**, major reforms to increase the availability of publicly provided childcare for preschool children have been introduced in the past two decades, with the aim to encourage mothers with young children to take up employment. The first important reform was the introduction of a legal claim to a place in kindergarten for all preschool children aged 3-6 years. Prior to the reform, public childcare coverage for 3 and 4 year-olds was severely rationed. An evaluation of this reform found that it increased employment by mothers with children aged 3-4 years by 4-6 percentage points. The reform resulted in some increase in full-time employment, but the effect was larger for part-time employment. Since 2005, several laws aimed at increasing subsidised childcare slots for children aged 1-3 years, and since August 2013, parents have a legal right to subsidised childcare for a child aged one year or above, regardless of the employment status or income of the parents.

In **Korea**, where the development of ECEC provision is relatively recent, childcare and preschool facilities have grown rapidly in the 2000s and early 2010s. The share of children (aged 0-6 years) in childcare or preschool facilities increased from 30% in 2002 to above 66% in 2014. The rapid growth of ECEC provision in Korea reflects the expansion of the centre-based infrastructure for collective care, which parents can access thanks to public financial support. In 2013, Korea scrapped the means test to qualify for the subsidy, effectively creating a universal programme of public assistance for centre-based care, regardless of income level.

France has a long tradition of extensive ECEC provision, particularly for children aged 3-5 years. Provision for this age group is dominated by the comprehensive, centre-based system of *école maternelle* (preschool), which provides public services. Much like the Swedish preschools, ECEC is considered a core part of France's national education system. Already in the early 1960s, the system catered for almost two-thirds of children aged 3-5 years, and since 1989, all 3-5 year-olds are entitled to a place in the local *école maternelle*.

Source: S. and M. Schlotter (2015[38]), "Public child care and mothers' labor supply: Evidence from two quasi-experiments", http://dx.doi.org/10.1016/j.jpubeco.2014.12.013; Geyer, J., P. Haan and K. Wrohlich (2015[39]), "The effects of family policy on maternal labor supply: Combining evidence from a structural model and a quasi-experimental approach", http://dx.doi.org/10.1016/j.labeco.2015.07.001; Givord, P. and C. Marbot (2015[40]), "Does the cost of child care affect female labor market participation? An evaluation of a french reform of childcare subsidies", http://dx.doi.org/10.1016/j.labeco.2015.07.003 ; Müller, K.-U. and K. Wrohlich (2016[41]), "Two steps forward—one step back? Evaluating contradicting child care policies in Germany", http://dx.doi.org/10.1093/cesifo/ifv020; OECD (2015[42]), *Starting Strong IV: Monitoring Quality in Early Childhood Education and Care*, http://dx.doi.org/10.1787/9789264233515-en; OECD (2017[43]), *Dare to Share: Germany's Experience Promoting Equal Partnership in Families*, http://dx.doi.org/10.1787/9789264259157-en.

Recommendations for improving access to quality childcare services

1.10. **Increase the supply of affordable, high-quality childcare facilities.** The Government of Kazakhstan, the MLSPP and the Committee on Youth and Family Affairs under the Ministry of Information and Public Development (MIPD) should increase the supply of public childcare facilities. Many OECD countries have made progress in developing policies aimed at improving access to ECEC (e.g. as in Sweden, Germany, Korea and France), including following the introduction of the *2013 OECD Recommendation of the Council on Gender Equality in Education, Employment and Entrepreneurship*.

1.11. Strengthen financial incentives for young parents to access childcare using child-related cash transfers and subsidies. The Government of Kazakhstan could increase subsidies or benefits/rebates for parents using childcare (e.g. as in Canada, Japan, Korea, New Zealand, Poland and the Slovak Republic). For example, the Government of Kazakhstan could make recourse to direct childcare subsidies or build a system whereby the subsidies are paid to care providers on behalf of low-income families. Further financial support could be provided to families through the tax-benefit system.

Promoting flexible leave and work options

As mentioned in the arrangements section, maternity leave is well developed, while paternity leave is not in place in Kazakhstan. Parental leave and childcare leave, on the other hand, are available for both mothers and fathers, but fathers do not typically take leave. This reflects stereotypes and entrenched cultural attitudes, according to which childcare responsibilities are considered women's duty. Such an environment discourages women from returning to productive employment after childbirth (OECD, 2017[1]).

In addition, evidence suggests that flexible work options are normally not very common in Kazakhstan. Most people either work full time or not at all. International experience shows, however, that the development of the services sector and the expansion of part-time work have been powerful factors in expanding female labour force participation in OECD countries (OECD, 2017[44]). Working time flexibility can help working parents reconcile their work schedules with the opening hours of childcare centres and schools (Cazesi, Hijzeni and Saint-Martini, 2016[45]). At the same time, working from home saves commuting time, although it also entails the risk of longer working hours, while blurring work and personal lives (Lott and Chung, 2016[46]).

Evidence from OECD countries also suggests that, in general, working parents find that flexible workplace measures improve their work-life balance. In Europe, 75% of employees, on average, have some work-schedule flexibility; in the Netherlands and Nordic countries, this percentage rises to 90% (OECD, 2016[47]). In addition, it shows that parents with a child of preschool age are most likely to use flexible working times or work from home, while women are three times more likely to work part-time than men (OECD, 2016[47]). From the employer perspective, flexible working practices can help recruit and retain staff while reducing absenteeism and turnover rates. Kazakhstan might be inspired in this regard by practices in the United Kingdom and the Netherlands (see Box 2.7).

Several stakeholders during the assessment missions reported that traditional social norms and gender stereotypes play an important role in preventing an equal distribution of housework responsibilities between men and women. Recently, OECD countries have introduced national public awareness campaigns to tackle gender stereotyping and norms, using both traditional and online media channels. In Australia, for example, the "Equilibrium Man Challenge" is a series of online micro-documentaries, which follow a group of men who have taken up flexible work arrangements, often to care for family members (OECD, 2017[29]). The campaign aims to help people recognise the benefits of a culture of gender equality, not only for women but for society as a whole.

Box 2.7. Relevant international examples: Promoting flexible leave and work options

Gradual extension of "right to request" flexible working arrangements: Examples from the United Kingdom and the Netherlands

In the **United Kingdom**, the Flexible Working Act, in effect since 2003, grants parents with children under the age of 6 years, or with disabled children under the age of 18 years, the right to request flexible working arrangements (including flexible or reduced working hours and teleworking) if they have been working for their current employer for at least six months. These provisions were expanded in 2007 to include employees with adult-caregiving responsibilities. They were further extended in 2014 to all employees with at least 26 weeks' service with the same employer.

In the **Netherlands**, the Working Hours Adjustment Act gives workers in companies with at least ten employees, the right to choose their working hours. Employers have to consent to employee requests unless they can provide compelling management or business reasons to deny the request. Since 2016, the Flexible Working Hours Act extends employees' rights by making it possible to also request a change to working times and workplace (e.g. teleworking). If one month prior to the requested date of the change, the employer has not responded to the employee's request, the working schedule proposed by the employee takes effect.

Source: OECD (2016[47]), "Be Flexible! Background Brief on How Workplace Flexibility Can Help European Employees to Balance Work and Family", https://www.oecd.org/els/family/Be-Flexible-Backgrounder-Workplace-Flexibility.pdf.

Recommendations for promoting flexible work and leave options

1.12. **Facilitate the uptake of flexible leave options and encourage their use among employers.** The Committee on Youth and Family Affairs under the MIPD, the MLSPP and NCE should consider promoting flexible leave options, such as part-time leave or shorter periods of leave with higher payment rates. The diversification of leave options would allow more fathers to take up parental leave.

1.13. **Facilitate the uptake of flexible work options (e.g. part-time work, flexible working hours) for young parents.** The Committee on Youth and Family Affairs under MIPD, the MLSPP and NCE could support and encourage companies to promote flexible work options through information campaigns that advertise their potential benefits from the employer perspective. They could further facilitate the emulation of positive role models by promoting the exchange of best practices with the application of flexible work options (e.g. with the use of digital technologies). In the long term, the Government of Kazakhstan should monitor the use of flexible working practices to ensure that workers using flexible working are not discriminated against and that its use does not impinge on workers' well-being, for example through long online working hours.

1.14. **Promote social awareness campaigns to address gender stereotypes.** The Committee on Youth and Family Affairs under the MIPD, the MLSPP and NCE could co-operate with regional governments and NGOs to promote gender awareness campaigns through online and offline channels. For example, media, such as TV programmes and radio, can easily reach the public in rural areas. By conveying positive messages about flexible work options, the benefits of fair distribution of unpaid care work for the whole family and society and the advantages of flexible parental leave, they could help challenge the traditional image that these activities are the sole prerogative of women. Mainstreaming gender equality in education also requires engaging educational institutions, which will need the support of adapted teacher training to raise teacher preparedness to apply gender equality in the classroom.

Summary of policy recommendations

Table 2.1 summarises the recommendations for this chapter. Based on feedback from stakeholders and from the national project team, three recommendations have been selected that could be considered to have the highest priority based on potential impact and relevance in the current Kazakhstan context. To improve the activation of skills of vulnerable populations, the OECD recommends that Kazakhstan should:

- Adopt and utilise digital communication tools to ensure the continuation of services during and following the COVID-19 crisis (Recommendation 1.1).
- Improve jobseeker profiling tools to enable upfront intervention, by allowing caseworkers to set up individual action plans (Recommendation 1.2).
- Scale up expenditure on activation programmes with a proven track record and capacity to secure the achievement of stated objectives (Recommendation 1.8).

Table 2.1. High-level overview of recommendations to improve the activation of skills of vulnerable populations in Kazakhstan

Policy directions	Recommendations	Responsible parties
Opportunity 1: Improving the accessibility and quality of public employment centres		
Ensuring that public employment services provide adapted responses to the circumstances imposed by the COVID-19 crisis	1.1. Adopt and utilise digital communication tools to ensure the continuation of services during and following the COVID-19 crisis.	• MLSPP • PES
Continuing efforts to build institutions that effectively reach vulnerable populations	1.2. Improve jobseeker profiling tools to enable upfront intervention, by allowing caseworkers to set up individual action plans.	• PES
	1.3. Reinforce collaboration with private employment agencies and local NGOs as a way to alleviate the capacity constraints of public employment services.	• PES • MLSPP
Improving the quality of services provided by employment centres	1.4. Increase the number of caseworkers and improve their working conditions so as to improve motivation and the quality of services provided.	• MLSPP
	1.5. Monitor and upgrade the quality of the job postings available in the vacancy bank.	• MLSPP • NCE
	1.6. Adopt proactive approaches to promote efficient job-matching services.	• PES

Policy directions	Recommendations	Responsible parties
Opportunity 2: Strengthening the effectiveness of active labour market programmes for vulnerable populations		
Developing rigorous impact evaluation systems on the impact of active labour market policies	1.7. Carry out a rigorous impact evaluation to assess the effectiveness of ALMPs to inform policy.	• MLSPP • WDC
Increasing expenditure on active labour market policies and their targeting	1.8. Scale up expenditure on activation programmes with a proven track record and capacity to secure the achievement of stated objectives.	• MLSPP • Local government
	1.9. Improve the eligibility criteria for participating in activation programmes to ensure that people most in need can access and benefit from them.	• MLSPP
Opportunity 3: Promoting family policies for a more equitable sharing of unpaid and paid work		
Improving access to quality childcare services	1.10. Increase the supply of affordable, high-quality childcare facilities.	• Government of Kazakhstan • MLSPP • Committee on Youth and Family Affairs under MIPD
	1.11. Strengthen financial incentives for young parents to access childcare using child-related cash transfers and subsidies	• Government of Kazakhstan
Promoting flexible leave and work options	1.12. Facilitate the uptake of flexible leave options and encourage their use among employers.	• Committee on Youth and Family Affairs under MIPD • MLSPP • NCE
	1.13. Facilitate the uptake of flexible work options (e.g. part-time work, flexible working hours) for young parents.	• Committee on Youth and Family Affairs under MIPD • MLSPP • NCE
	1.14. Promote social awareness campaigns to address gender stereotypes.	• Committee on Youth and Family Affairs under MIPD • MLSPP • NCE • Local government • NGOs

Note: MLSPP is the Ministry of Labour and Social Protection of Population; PES is public employment services; NCE is the National Chamber of Entrepreneurs; WDC is the Workforce Development Center; and MIPD is the Ministry of Information and Public Development.

References

Barbieri, T., G. Basso and S. Scicchitano (2020), "Italian Workers at Risk during the COVID-19", *SSRN Electronic Journal*, http://dx.doi.org/10.2139/ssrn.3572065. [8]

Barbier, J., E. Hansen and A. Samorodov (2003), "InFocus Programme on Skills, Knowledge and Employability: Public-Private Partnerships in Employment Services", *Skills Working Paper*, No. 17, https://www.ilo.org/skills/pubs/WCMS_103882/lang--en/index.htm. [17]

Bauernschuster, S. and M. Schlotter (2015), "Public child care and mothers' labor supply: Evidence from two quasi-experiments", *Journal of Public Economics*, Vol. 123, http://dx.doi.org/10.1016/j.jpubeco.2014.12.013. [38]

Bloom, H., C. Hill and J. Riccio (2003), "Linking program implementation and effectiveness: Lessons from a pooled sample of welfare-to-work experiments", *Journal of Policy Analysis and Management*, Vol. 22/4, pp. 551-575, https://doi.org/10.1002/pam.10154. [25]

Card, D., J. Kluve and A. Weber (2018), "What works? A meta analysis of recent active labor market program evaluations", *Journal of the European Economic Association*, Vol. 16/3, http://dx.doi.org/10.1093/jeea/jvx028. [28]

Cazesi, S., A. Hijzeni and A. Saint-Martini (2016), "Measuring and assessing job quality: The OECD job quality framework", *OECD Social, Employment and Migration Working Papers*, No. 174, OECD Publishing, Paris, https://doi.org/10.1787/5jrp02kjw1mr-en. [45]

Duell, N. (2010), "Activation Policies in Japan", *OECD Social, Employment and Migration Working Papers*, No. 113, OECD Publishing, Paris, http://dx.doi.org/10.1787/5km35m63qqvc-en. [22]

Eurostat (2020), *European Union Labour Force Survey (EU LFS)*, European Commission, https://ec.europa.eu/eurostat/web/microdata/european-union-labour-force-survey. [7]

Gerfin, M. and M. Lechner (2002), "A Microeconometric Evaluation of the Active Labour Market Policy in Switzerland", *Economic Journal*, Vol. 112/482, pp. 854-893, https://doi.org/10.1111/1468-0297.00072. [24]

Geyer, J., P. Haan and K. Wrohlich (2015), "The effects of family policy on maternal labor supply: Combining evidence from a structural model and a quasi-experimental approach", *Labour Economics*, Vol. 36, pp. 84-98, http://dx.doi.org/10.1016/j.labeco.2015.07.001. [39]

Givord, P. and C. Marbot (2015), "Does the cost of child care affect female labor market participation? An evaluation of a French reform of childcare subsidies", *Labour Economics*, Vol. 36, pp. 99-111, http://dx.doi.org/10.1016/j.labeco.2015.07.003. [40]

Government of Kazakhstan (2018), *State Programme of Productive Employment and Mass Entrepreneurship Development 2017-2021 ("Enbek")*, http://adilet.zan.kz/kaz/docs/P1800000746. [30]

Habibov, N. (2014), "Does Reform in Kazakhstan Improve Access to Childcare? Evidence from Nationally-representative Surveys", *Children and Youth Services Review*, Vol. 40, pp. 13-19, https://doi.org/10.1016/j.childyouth.2014.02.013. [37]

Holland, K. and A. Mann (2020), "How Estonia is delivering online career guidance during the coronavirus crisis", *OECD Education and Skills Today*, https://oecdedutoday.com/estonia-online-career-guidance-during-coronavirus-crisis/. [9]

ILO (2014), *Maternity Protection and the Childcare Systems in Central Asia: National Studies in Kazakhstan and Tajikistan*, ILO, Geneva, https://www.ilo.org/moscow/information-resources/publications/WCMS_344656/lang--en/index.htm. [36]

ILO (2012), *Work and Family Responsibilities: The Republic of Kazakhstan*, ILO, Geneva, https://www.ilo.org/wcmsp5/groups/public/---europe/---ro-geneva/---sro-moscow/documents/publication/wcms_312669.pdf. [35]

ILOSTAT (2020), *ILOSTAT Database*, https://ilostat.ilo.org/data/ (accessed on 15 July 2020). [6]

Immervoll, H. and C. Knotz (2018), "How Demanding are Activation Requirements for Jobseekers?", *Discussion Paper Series*, No. 11704, IZA Institute of Labor Economics, http://ftp.iza.org/dp11704.pdf. [11]

Konle-Seidl, R. (2012), *Monitoring and Follow-up of IAPs and their Outcomes in Selected EU Countries*, Presentation at European Commission PES to PES Dialogue Meeting on Activation and Integration: Working with Individual Action Plans, https://ec.europa.eu/social/BlobServlet?docId=7530&langId=en. [18]

Lott, Y. and H. Chung (2016), "Gender Discrepancies in the Outcomes of Schedule Control on Overtime Hours and Income in Germany", *European Sociological Review*, Vol. 32/6, pp. 752-765, http://dx.doi.org/10.1093/esr/jcw032. [46]

Müller, K. and K. Wrohlich (2016), "Two Steps Forward—One Step Back? Evaluating Contradicting Child Care Policies in Germany", *CESifo Economic Studies*, Vol. 62/4, pp. 672-698, http://dx.doi.org/10.1093/cesifo/ifv020. [41]

OECD (2020), *OECD Employment Outlook 2020: Worker Security and the COVID-19 Crisis*, OECD Publishing, Paris, https://doi.org/10.1787/1686c758-en. [2]

OECD (2020), *OECD Family Database*, http://www.oecd.org/social/family/database.htm (accessed on 30 October 2020). [34]

OECD (2020), *OECD Labour Database*, http://dotstat.oecd.org/?lang=en (accessed on 30 October 2020). [26]

OECD (2020), "Public employment services in the frontline for jobseekers, workers and employers", *OECD Policy Responses to Coronavirus (COVID-19)* OECD Publishing, Paris, https://doi.org/10.1787/5b0fd8cd-en. [10]

OECD (2020), "Supporting people and companies to deal with the Covid-19 virus: Options for an immediate employment and social-policy response", *OECD Policy Responses to Coronavirus (COVID-19)* OECD Publishing, Paris, https://doi.org/10.1787/5b0fd8cd-en. [12]

OECD (2019), *OECD Employment Outlook 2019: The Future of Work*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9ee00155-en. [23]

OECD (2019), *OECD Family Database: Key characteristics of parental leave systems*, http://www.oecd.org/els/soc/PF2_1_Parental_leave_systems.pdf. [3]

OECD (2019), *Strengthening Active Labour Market Policies in Italy*, OECD Publishing, Paris, https://doi.org/10.1787/160a3c28-en. [15]

OECD (2017), *Building Inclusive Labour Markets in Kazakhstan : A Focus on Youth, Older Workers and People with Disabilities*, OECD Publishing, Paris, https://doi.org/10.1787/9789264273023-en. [1]

OECD (2017), *Connecting People with Jobs: Key Issues for Raising Labour Market Participation in Australia*, Connecting People with Jobs, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264269637-en. [44]

OECD (2017), *Dare to Share: Germany's Experience Promoting Equal Partnership in Families*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264259157-en. [43]

OECD (2017), *The Pursuit of Gender Equality: An Uphill Battle*, OECD Publishing, Paris, https://doi.org/10.1787/9789264281318-en. [29]

OECD (2016), *Be Flexible! Background Brief on How Workplace Flexibility Can Help European Employees to Balance Work and Family*, OECD Publishing, Paris, https://www.oecd.org/els/family/Be-Flexible-Backgrounder-Workplace-Flexibility.pdf. [47]

OECD (2016), *Connecting People with Jobs: The Labour Market, Activation Policies and Disadvantaged Workers in Slovenia*, Connecting People with Jobs, OECD Publishing, Paris, https://doi.org/10.1787/9789264265349-en. [14]

OECD (2016), *Investing in Youth: Lithuania*, Investing in Youth, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264247611-en. [33]

OECD (2016), *Multi-Dimensional Review of Kazakhstan: Volume 1. Initial Assessment*, OECD Development Pathways, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264246768-en. [4]

OECD (2015), *OECD Employment Outlook 2015*, OECD Publishing, Paris, https://doi.org/10.1787/empl_outlook-2015-en. [13]

OECD (2015), *Starting Strong IV: Monitoring Quality in Early Childhood Education and Care*, Starting Strong, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264233515-en. [42]

OECD (2014), *Connecting People with Jobs: Activation Policies in the United Kingdom*, Connecting People with Jobs, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264217188-en. [21]

OECD (2012), *Activating Jobseekers: How Australia Does It*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264185920-en. [19]

OECD (2012), *OECD Employment Outlook 2012*, OECD Publishing, Paris, http://dx.doi.org/10.1787/empl_outlook-2012-en. [27]

OECD (2012), *Sick on the Job? Myths and Realities About Mental Health and Work*, Mental Health and Work, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264124523-en. [20]

Rutkowski, J. (2011), *Promoting Formal Employment in Kazakhstan*, World Bank, http://conference.iza.org/conference_files/InfoETE2011/rutkowski_j1928.pdf. [5]

Scoppetta, A. (2013), *Successful Partnerships in Delivering Public Employment Services*, European Commission, Brussels, DG Employment, Social Affairs and Inclusion, Unit C.3 - Skills, Mobility and Employment Services, https://ec.europa.eu/social/BlobServlet?docId=14096&langId=en. [16]

Thévenon, O. (2015), "Do 'Institutional Complementarities' Foster Female Labour Force Participation?", *Journal of Institutional Economics*, Vol. 12/2, pp. 471-497, http://dx.doi.org/10.1017/S1744137415000399. [32]

Thévenon, O. (2013), "Drivers of Female Labour Force Participation in the OECD"*, OECD Social, Employment and Migration*, No. 145, OECD Publishing, Paris, http://dx.doi.org/10.1787/5k46cvrgnms6-en. [31]

3 Fostering participation in adult learning of all forms in Kazakhstan

Participation in adult learning has significant benefits for individuals, employers and society as a whole, including higher wages, higher productivity for firms and higher levels of social trust. Throughout the OECD Skills Strategy project, the OECD has provided support for identifying how adult learning can help companies and individuals cope better with the COVID-19 crisis. As the economy starts recovering, fostering participation in adult learning can help Kazakhstan move away from a low-skill equilibrium, addressing a number of challenges, such as diversifying the economy away from exploiting natural resources. This chapter explains the importance of fostering participation in adult learning of all forms in Kazakhstan and provides an overview of current practices and performance. It then describes three opportunities for building a stronger adult learning system in Kazakhstan, focusing on improving the supply and quality of adult learning opportunities, increasing motivation, and removing barriers to participation.

The importance of fostering participation in adult learning of all forms

Participation in adult learning of all forms (see Box 3.1) has significant benefits for individuals, employers and society as a whole. For individuals, participation in formal adult education and training can lead to better employability prospects, higher wages and upward social mobility (Midtsundstad, 2019[1]). For employers, formal and non-formal training leads to higher productivity growth and is often a complement to innovation in the workplace (Acemoglu, 1998[2]; Dearden, Reed and Van Reenen, 2006[3]; Konings and Vanormelingen, 2015[4]). Participation in adult learning can also generate strong social benefits. Higher skilled adults typically report better health, feel more included in political processes and trust others more than low-skilled adults. Adult learning opportunities can help individuals achieve these higher levels of skills (OECD, 2016[5]).

Box 3.1. Defining different forms of adult learning

- **Formal education/learning** is provided in schools, colleges, universities or other educational institutions, and leads to a certification that is recognised by the national educational classification.
- **Non-formal education/learning** is defined as any organised and sustained educational activities that do not correspond exactly to the above definition of formal education. This includes courses through distance education, on-the-job training, seminars, workshops or private lessons.
- **Informal learning** relates to typically unstructured, often unintentional, learning activities that do not lead to certification. In the workplace, this is a more or less an automatic by-product of the regular production process of a firm.

Source: OECD (2011[6]), *PIAAC Conceptual Framework of the Background Questionnaire Main Survey*, www.oecd.org/skills/piaac/PIAAC(2011_11)MS_BQ_ConceptualFramework_1%20Dec%202011.pdf.

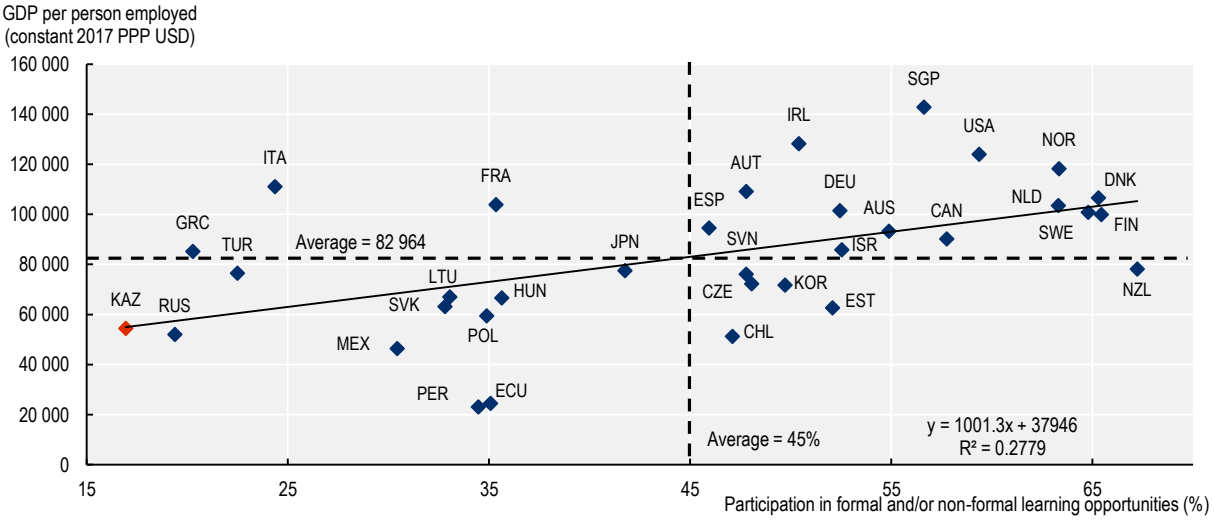
The coronavirus (COVID-19) pandemic has posed major challenges to Kazakhstan's skills system since early 2020, when social distancing measures were introduced (see Chapter 1). Throughout the OECD Skills Strategy project, the OECD team has provided support on how the supply of adult learning opportunities can be adjusted to meet the immediate needs of Kazakhstan during the crisis. As the economy starts recovering, strengthening adult learning can help Kazakhstan transition away from a low-skilled equilibrium. This is a situation characterised by a majority of firms employing poorly trained managers and workers, while exhibiting low productivity and/or producing low specification (or quality) goods and services. Kazakhstan exhibits the characteristics of a country in a low-skill equilibrium (see Figure 3.1), as it shows comparatively low levels of participation in adult learning of all forms and low productivity, in line with some other upper middle income countries, such as Mexico, Peru and the Russian Federation[1] (hereafter "Russia"). Moving towards high-productivity, high-skill activities will increase the adaptability of the Kazakhstani economy and support current efforts to diversify the economy away from exploiting natural resources (see Chapter 1), making Kazakhstan's economy and society more resilient to the impact of megatrends.

Kazakhstan has already introduced several measures to build a stronger adult learning system. For example, Kazakhstan has launched the State Programme of Productive Employment and Mass Entrepreneurship Development 2017-2021 *(Enbek)* to provide short-term modular vocational education and training (VET) courses to unemployed, under-employed and low-skill individuals. Kazakhstan has also introduced legislation to officially recognise non-formal education and training outcomes and organisations providing non-formal education.

This chapter begins with an overview of current practices and performance indicators for further developing participation in adult learning of all forms in Kazakhstan. It then describes three opportunities for building a stronger adult learning system, focusing on improving the supply and quality of adult learning opportunities, increasing motivation and removing barriers to participation.

Figure 3.1. Participation in adult learning and productivity across PIAAC-participating countries

Percentage of adults aged 25-64 who participated in formal and/or non-formal learning opportunities in the past 12 months, measured against worker productivity defined here as gross domestic product (GDP) per person employed



Note: PIAAC stands for the Programme for the International Assessment of Adult Competencies. For PIAAC data from Russia: The sample for the Russian Federation does not include the population of the Moscow municipal area. The data published, therefore, do not represent the entire resident population aged 16-65 in the Russian Federation but rather the population of the Russian Federation excluding the population residing in the Moscow municipal area.

Source: OECD calculations based on data from OECD (2019[7]), *Survey of Adult Skills Database (PIAAC, 2012, 2015, 2017)*, http://www.oecd.org/skills/piaac/data/ and OECD elaboration of the World Bank data (2020[8]), *GDP per person employed (constant 2017 PPP USD)*, https://data.worldbank.org/indicator/SL.GDP.PCAP.EM.KD.

StatLink https://doi.org/10.1787/888934233568

Kazakhstan's current arrangements and performance in fostering participation in adult learning

Current arrangements for the adult learning system

Kazakhstan provides adult learning in many ways, comprising formal and non-formal adult learning opportunities, across VET colleges, higher education (HE) institutions, private training providers and professional development centres. Large enterprises, which account for a large share of total employment and are frequently state-owned, often establish their own training centres. As in OECD countries and other countries, several ministries play a role in the adult learning system. In the case of Kazakhstan, these include the Ministry of Education and Science (MOES), the Ministry of Labour and Social Protection of Population (MLSPP) and the Ministry of National Economy (MNE). Ministries have introduced a range of state programmes to improve participation in adult learning of all forms, such as the *Enbek* programme,

the Digital Kazakhstan State Programme 2018-2022 (Digital Kazakhstan) and The State Programme for the Development of Education and Science 2020-2025.

Education and training institutions in the adult learning system

In Kazakhstan, formal education opportunities for individuals are mainly offered by over 800 VET colleges and 131 HE institutions. These numbers are relatively large given the size of the country. As of 2019, 43% of VET and 43% of HE institutions are private and have a narrow specialisation. Most of these private institutions were opened during the 1990s and the 2000s, when it was relatively easy to obtain a license. Access to HE institutions is contingent on passing an entrance exam, the Unified National Test (UNT), which is based on the secondary school curriculum. Non-formal education opportunities are generally offered by private training providers and professional development centres. The number of these centres increased dramatically between 2000 and 2015, but Kazakhstan only introduced the concept of non-formal education in legislation in 2019. Given this rapidly evolving setting, the quality of non-formal learning opportunities varies significantly across training providers and centres, as there is not a robust quality assurance system in place (see Opportunity 1 for further details).

As in OECD countries and other countries, companies are responsible for organising their own training depending on the size and capacity of their business. According to information provided by stakeholders consulted throughout the OECD Skills Strategy project, smaller employers frequently struggle in funding and organising their own training opportunities. Conversely, large firms that dominate the country's economic sectors, such as oil and gas, mining, and infrastructure, often establish their own training centres. For example, the sovereign wealth fund Samruk Kazyna, which owns the national rail and postal services and various national resources companies, has established its own corporate university to provide analytical and human resources support to its portfolio companies. Other examples of independent training centres are Kazakhstan Railway Company's Transport Technology Centre (http://edutransport.kz/) and Kazakhtelecom's Training Centre (https://learning.telecom.kz/mira/).

Roles of central and local government actors in the adult learning system

Several ministries and actors play a role in the adult learning system in Kazakhstan. The MOES plays a leading role in the formulation of the national policy for education and training, including the development of curricula, setting arrangements for ex ante and ex post quality assurance, and supporting the implementation of education policy by national universities and colleges. Local government authorities (*akimats)* are responsible for providing funding to VET colleges and local universities, and monitoring policy implementation on the ground.

In the context of labour market policies, the MLSPP oversees the provision of training to unemployed workers in the informal economy and socially vulnerable groups, including through employment centres located regionally. As well as helping inactive workers in their job search (see Chapter 2), employment centres co-operate with employers to provide short-term training (up to six months) at education institutions or training centres. The MNE leads and co-ordinates policies to foster industrial development, including strategies to support the growth of small and medium-sized enterprises (SMEs), measures to promote Kazakhstani exports and initiatives to encourage technological innovation across all enterprises. As part of its mandate to support the growth of SMEs, the MNE offers some incentives to promote continuous workforce training in SMEs (see Opportunity 3 for further details). The National Chamber of Entrepreneurs (NCE or *Atameken*) facilitates interactions between enterprises and ministries.

State programmes to increase participation in adult learning

Kazakhstan’s ministries have introduced a range of programmes to foster participation in adult learning of all forms. Although there is limited information on participation rates and their effectiveness, it is possible

to describe them at a high level, combining information in the public domain with evidence gathered during the OECD's consultations with stakeholders.

Since 2017, the MLSPP has been running the *Enbek* programme, which consists of four pillars: 1) strengthening technical and vocational education and short-term vocational training; 2) developing entrepreneurship skills and providing microloans/grants for entrepreneurs; 3) supporting employment promotion and labour force mobility; and 4) supporting youth entrepreneurship (see Chapter 2 for a detailed description). Under the first pillar, free short-term vocational training courses are available to the unemployed, workers younger than 29, the self-employed and individuals with no formal education. Employers can also enrol their employees in the programme but are required to pay for the training unless their employees are about to be laid off. In this case, 50% of the cost would be paid for by the MLSPP.

The Ministry of Digital Development, Innovation and Aerospace Industry (MDDIAI) is responsible for the Digital Kazakhstan programme, which has been running since 2018 (see Chapter 1). One of the five directions of the programme aims to foster the development of information and communication technology (ICT) skills by providing online training courses. The Ministry of Industry and Infrastructure Development leads on the delivery of the State Programme of Industrial-Innovation Development 2020-2025, which aims to improve economic diversification by promoting exports and increasing participation in higher value-added and innovation activities. To succeed in this respect, the programme foresees the need to develop training opportunities linked to Industry 4.0 activities.

Performance in fostering participation in adult learning

OECD and World Bank evidence suggests that Kazakhstan has comparatively low levels of participation in adult learning of all forms. According to the recently released Survey of Adult Skills, a product of the Programme for the International Assessment of Adult Competencies (PIAAC), the participation rate in adult learning is lower in Kazakhstan than all OECD countries and other upper middle income countries, such as Peru and Russia. Participation is lower across all demographic groups. Even highly skilled individuals in Kazakhstan participate only a few percentage points above the average for low-skilled adults in OECD countries. In part, this reflects comparatively low participation in job-related training by enterprises, across both large firms and SMEs. Training provision is concentrated highly unevenly across the country with rural, poorer regions falling behind urban centres such as Almaty and resource-rich regions, such as Atyrau.

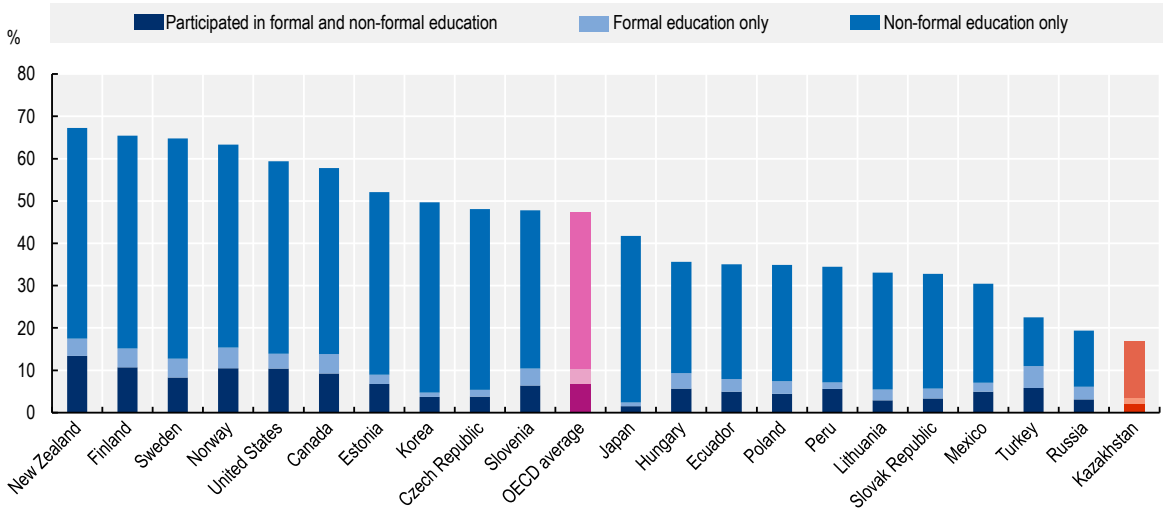
Participation in formal and non-formal education by individuals

OECD PIAAC data show that Kazakhstan has a comparatively low participation rate in adult learning: just 17% of adults participated in formal and/or non-formal learning in 2018 (see Figure 3.2). This participation rate is significantly below top-performing countries such as New Zealand (67%) and Finland (65%) and is considerably lower than the OECD average (47%). Kazakhstan also underperforms compared to other upper middle income countries such as Mexico (30%), Turkey (22%) and Russia (19%). In line with other countries, the majority of adults in Kazakhstan participate solely in non-formal learning opportunities (13.4%) with very few participating in just formal learning opportunities (1.5%) or a combination of the two (2.1%).

Participation rates in adult learning in Kazakhstan are consistently lower than in OECD countries across socio-demographic characteristics, defined by gender, age, and education level (see Figure 3.3). For example, both individuals with and without tertiary education significantly under participate in adult learning, compared to the average across OECD countries. Strikingly, individuals with tertiary education in Kazakhstan are as likely to participate in adult learning as individuals in OECD countries with less than upper secondary education.

Figure 3.2. Participation in adult learning in the past 12 months

Percentage of adults aged 25-64 who participated in formal and/or non-formal learning in the past 12 months

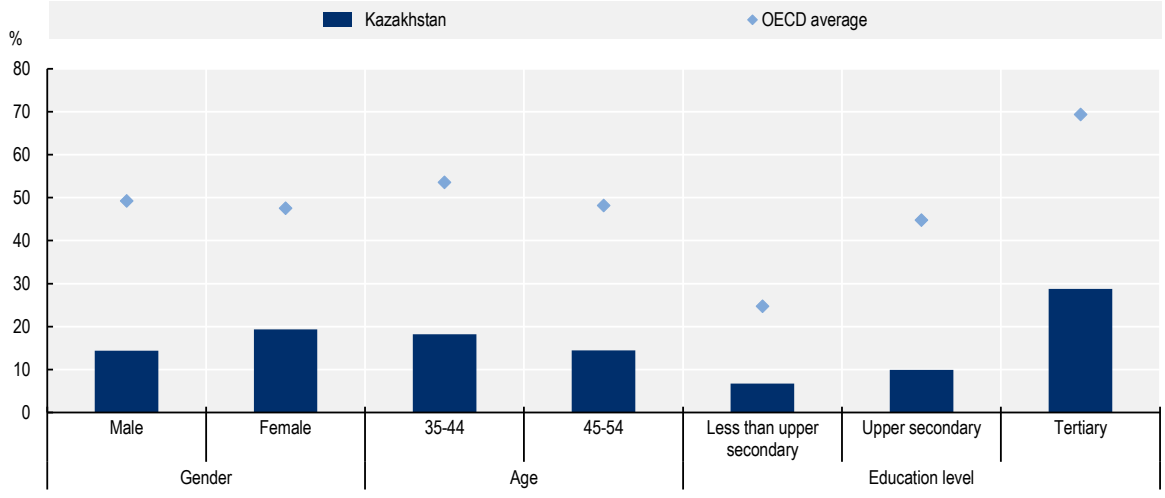


Note: For PIAAC data from Russia, see see the note under Figure 3.1.
Source: OECD calculations based on data from OECD (2019[7]), Survey of Adult Skills Database (PIAAC, 2012, 2015, 2017), http://www.oecd.org/skills/piaac/data/.

StatLink https://doi.org/10.1787/888934233587

Figure 3.3. Participation in adult learning across socio-demographic groups in the past 12 months

Percentage of adults aged 25-64 who participated in formal and/or non-formal learning opportunities in the past 12 months by socio-demographic group



Source: OECD calculations based on data from OECD (2019[7]), *Survey of Adult Skills Database (PIAAC, 2012, 2015, 2017)*, http://www.oecd.org/skills/piaac/data/.

StatLink https://doi.org/10.1787/888934233606

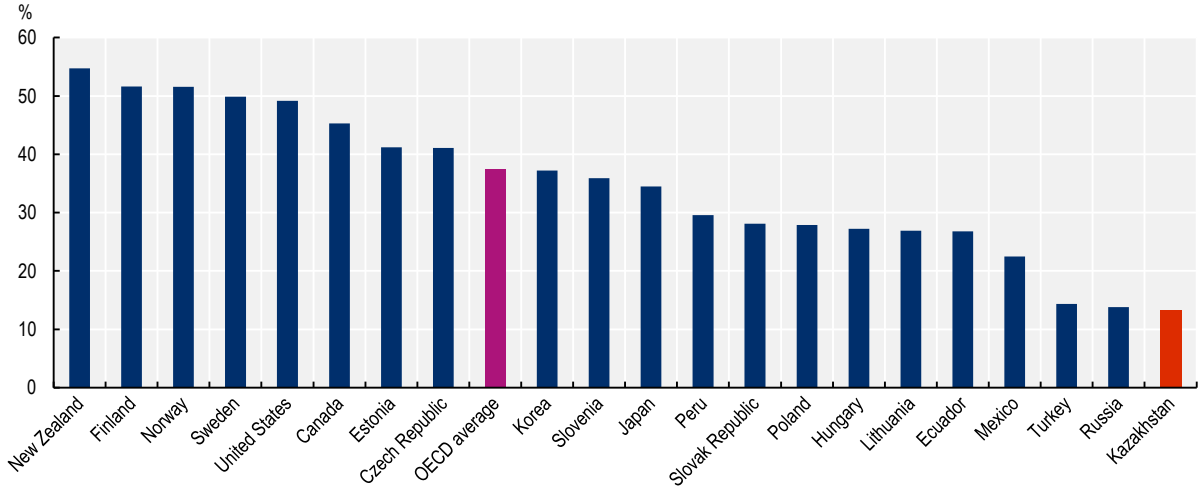
Participation in training provided by employers

In Kazakhstan, as in other countries, employers play an important role in encouraging participation in adult learning by providing training opportunities (see Figure 3.4). Of the total 15% of adults engaged in non-

formal training, 13% participate in job-related education, with just 2% participating in other types of non-formal education. Participation in job-related education is in line with other upper middle income countries, such as Turkey (17%) and Russia (16%). However, the total percentage of adults participating in job-related education in Kazakhstan is still much lower than the OECD average (37%).

Figure 3.4. Participation in non-formal job-related education in the past 12 months

Percentage of adults aged 25-64 who participated in non-formal job-related education in the past 12 months



Note: For PIAAC data from Russia, see see the note under Figure 3.1.
Source: OECD calculations based on data from OECD (2019[7]), *Survey of Adult Skills Database (PIAAC, 2012, 2015, 2017)*, http://www.oecd.org/skills/piaac/data/.

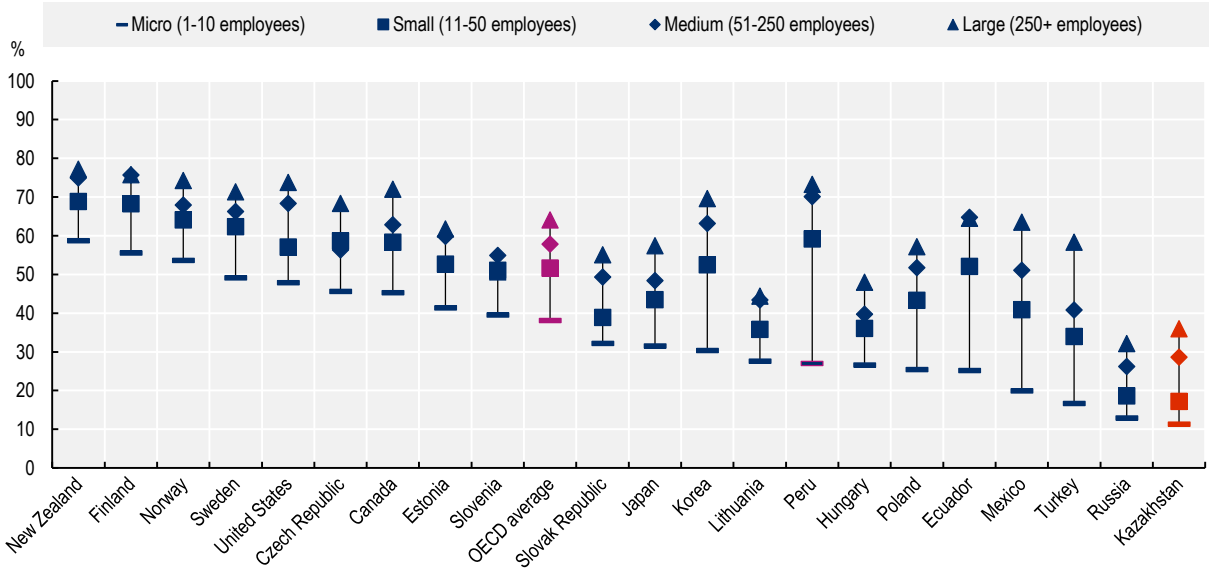
StatLink https://doi.org/10.1787/888934233625

The under-provision of job-related training extends to both large firms and SMEs (see Figure 3.5). The proportion of workers that participate in job-related education in large firms is lower than all OECD countries and all upper middle income countries covered by the Survey of Adult Skills (PIAAC), except Russia (see Figure 3.5). This relative under-provision in large firms is particularly problematic because large firms play a prominent role in Kazakhstan's economy: large firms in Kazakhstan account for 68% of formal employment, a larger proportion than any OECD country (the OECD average is just 31%), and contribute 75% to value added to the national economy (OECD, 2018[9]).

Across all countries, SMEs are generally less likely to provide job-related training, because they have fewer resources than large firms to overcome a range of informational and financial barriers, such as assessing their own training needs, identifying the right training programmes and liquidity constraints (International Labour Organization, 2017[10]). However, SMEs in Kazakhstan seem to be more exposed to these barriers, as they train fewer workers than all OECD countries and all upper middle income countries covered by the Survey of Adult Skills (PIAAC), except Russia (see Figure 3.5). This is concerning, because investment in training could help SMEs to better integrate into global value chains (GVCs), contributing to the diversification of the economy away from the exploitation of natural resources.

Figure 3.5. Participation in job-related adult education in the past 12 months, by firm size

Percentage of adults aged 25-64 who participated in job-related education in the past 12 months, by firm size

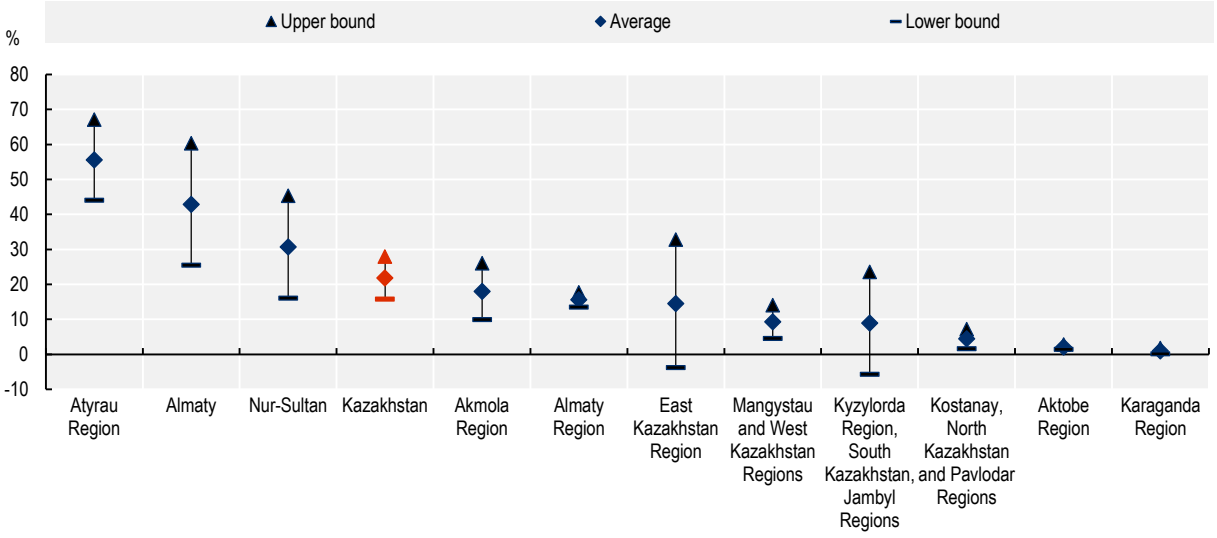


Note: For PIAAC data from Russia, see see the note under Figure 3.1.
Source: OECD calculations based on the OECD (2019[7]), *Survey of Adult Skills, PIAAC (2012, 2015, 2017)*, http://www.oecd.org/skills/piaac/data/.

StatLink https://doi.org/10.1787/888934233644

Figure 3.6. Percentage of firms offering training in Kazakhstan, by region

Percentage of firms offering formal training to their employees, by region, within a 90% confidence interval



Note: The figure includes averages with the upper and lower bounds of a 90% confidence interval. The sample included 1 424 firms of all sizes and sectors.
Source: OECD elaboration of the World Bank data (2019[11]), *Enterprise Surveys*, https://www.enterprisesurveys.org/en/custom-query.

StatLink https://doi.org/10.1787/888934233663

Regional dynamics are also important in explaining variation in training propensity across Kazakhstan (see Figure 3.6). Training provision by firms is concentrated highly unevenly across the country, with rural, poorer regions falling behind urban centres such as Almaty and resource-rich regions such as Atyrau. In several rural regions, such as Karaganda, the proportion of enterprises providing training is below 10%.

These results are likely driven by low participation in training by rural SMEs, which cannot afford to establish their own training centres and may face prohibitive costs in working with distant training providers. Combined, these findings point to a dual policy challenge for fostering participation in job-related training in Kazakhstan: increasing access to training among SMEs, especially in rural areas, while ensuring that large firms also expand their training offering.

Opportunities to foster participation in adult learning

This section describes three opportunities to foster participation in adult learning of all forms. The selection is based on input from literature, desk research, discussions with Kazakhstan's national project team, discussions with stakeholders in workshops in Nur-Sultan and Almaty, as well as virtual meetings involving more than 100 stakeholders. In light of this evidence, the following opportunities are considered to be the most relevant for the specific context in Kazakhstan to foster participation in adult learning of all forms:

- Opportunity 1: Strengthening the supply and quality of adult learning opportunities
- Opportunity 2: Increasing motivation to engage in adult learning
- Opportunity 3: Removing barriers to participation in adult learning.

Opportunity 1: Strengthening the supply and quality of adult learning opportunities

High levels of participation in adult learning require an adequate supply of opportunities tailored to the needs of individuals and employers. Adult learning opportunities should be flexible in format (e.g. part-time, on line), design (e.g. modular, credit-based courses) and location (e.g. the workplace) (OECD, 2019[12]). Adult learning opportunities also need to be of high quality to ensure that they result in real skills gains for individuals (OECD, 2019[12]). However, stakeholders consulted throughout the OECD Skills Strategy project considered that there were gaps in the supply of adult learning opportunities in Kazakhstan and that there is not yet a well-developed system of quality assurance for non-formal learning opportunities.

As the COVID-19 crisis unfolded, stakeholders also expressed concerns about the capacity of educational institutions to deal with the pandemic. Consequently, throughout the OECD Skills Strateg project, the OECD team has provided insights into how Kazakhstan can adapt the supply of adult learning opportunities to better cope with the COVID-19 crisis, drawing on experiences from OECD countries (Box 3.2).

As a new normal emerges, the policy focus will need to shift to strengthening the adult learning system so that Kazakhstan can benefit from the transformations induced by megatrends. In line with insights from stakeholders, this opportunity first considers how to strengthen the supply and quality of adult learning opportunities of all forms. Then, it explores how to improve the quality assurance system for non-formal adult learning opportunities.

Box 3.2. Adult learning recommendations to help Kazakhstan better cope with the COVID-19 crisis

Throughout the COVID-19 crisis, the OECD provided the following recommendations to Kazakhstan, based on international best practices, to enable upskilling and reskilling to take place in spite of social distancing measures in place.

Strengthen the offering of online courses for managers and employees explaining how to adopt teleworking-friendly practices

In order to promote a rapid move to teleworking for all operations that allowed it, countries took a series of measures to simplify its use, including through financial and non-financial support to companies. **Italy**, for example, simplified the procedure for teleworking by allowing companies and employees to arrange teleworking without a prior agreement with unions. **Japan** made available a 50% subsidy (up to JPY 1 million) towards the cost of introducing teleworking. **Belgium** gave employers the possibility to grant their teleworking employees a tax and social-security-free allowance of EUR 170 per month to cover telework-related costs, such as for a desk and office materials.

Online adult learning opportunities can also play an important role by disseminating knowledge about high-performance work practices (HPWPs) or other teleworking-friendly practices. For instance, in response to the pandemic, **Italy** set up a website that gathers various short courses that can help managers and employees develop the skills and competencies to telework more effectively (https://solidarietadigitale.agid.gov.it/).

Strengthen the adoption of online distance-learning tools and in-person VET for small groups to enable adult learners to upskill and reskill safely during the pandemic

Many countries and education institutions made quick progress in delivering online learning during the pandemic. **France** provided online VET courses free of charge for a period of three months, including the core curriculum of vocational schools and main training courses for professional qualifications. **Korea** provided a virtual training platform – Smart Training Education Platform (STEP) – that enables learning providers to upload their course content, in addition to 300 existing courses already available. This is being supported further by subsidies and quality assurance mechanisms. In the **Netherlands**, in-person VET in small groups was organised for students who do not have sufficient digital resources. Schools can also provide temporary access for these students to a workplace with Internet access, and a computer or laptop.

Source: OECD (2020[13]), *OECD Employment Outlook 2020*, https://doi.org/10.1787/1686c758-en; OECD (2020[14]), *VET in a time of crisis: Building foundations for resilient vocational education and training systems*, https://doi.org/10.1787/5b0fd8cd-en.

Strengthening the supply of adult learning

A systematic assessment of the supply of adult learning opportunities in Kazakhstan is currently not possible, due to the lack of comprehensive data on the number of programmes delivered and the quality of learning outcomes. Kazakhstan should consider gathering more detailed data on adult learning opportunities and labour market needs to strengthen provision (see Chapter 4) and use the information to conduct a systematic evaluation of different programmes (see Chapter 5). The evidence gathered by the OECD team does allow, however, for some high-level recommendations on current gaps in the supply of adult learning opportunities for individuals.

As foreshadowed in the current arrangements section, Kazakhstan has made some progress in expanding access to adult learning opportunities to vulnerable individuals, with the introduction of the *Enbek* programme. However, some stakeholders have expressed reservations about the quality of learning

opportunities offered within *Enbek*. Currently, very few impact evaluations of skills policies take place, meaning Kazakhstan should take steps to build a stronger impact evaluation culture (see Chapter 2) and strengthen the quality assurance system (see the section below).

More broadly, evidence from PIAAC data and stakeholders consulted during the mission suggest two areas where it is possible to strengthen the supply of adult learning opportunities.

First, it might be beneficial to expand the supply of foundational skills courses for literacy, numeracy and ICT, especially in rural areas. According to the recent OECD PIAAC data, the proportion of individuals with low digital skills is relatively high in both rural and urban areas of Kazakhstan (see Figure 3.7, Panel C).

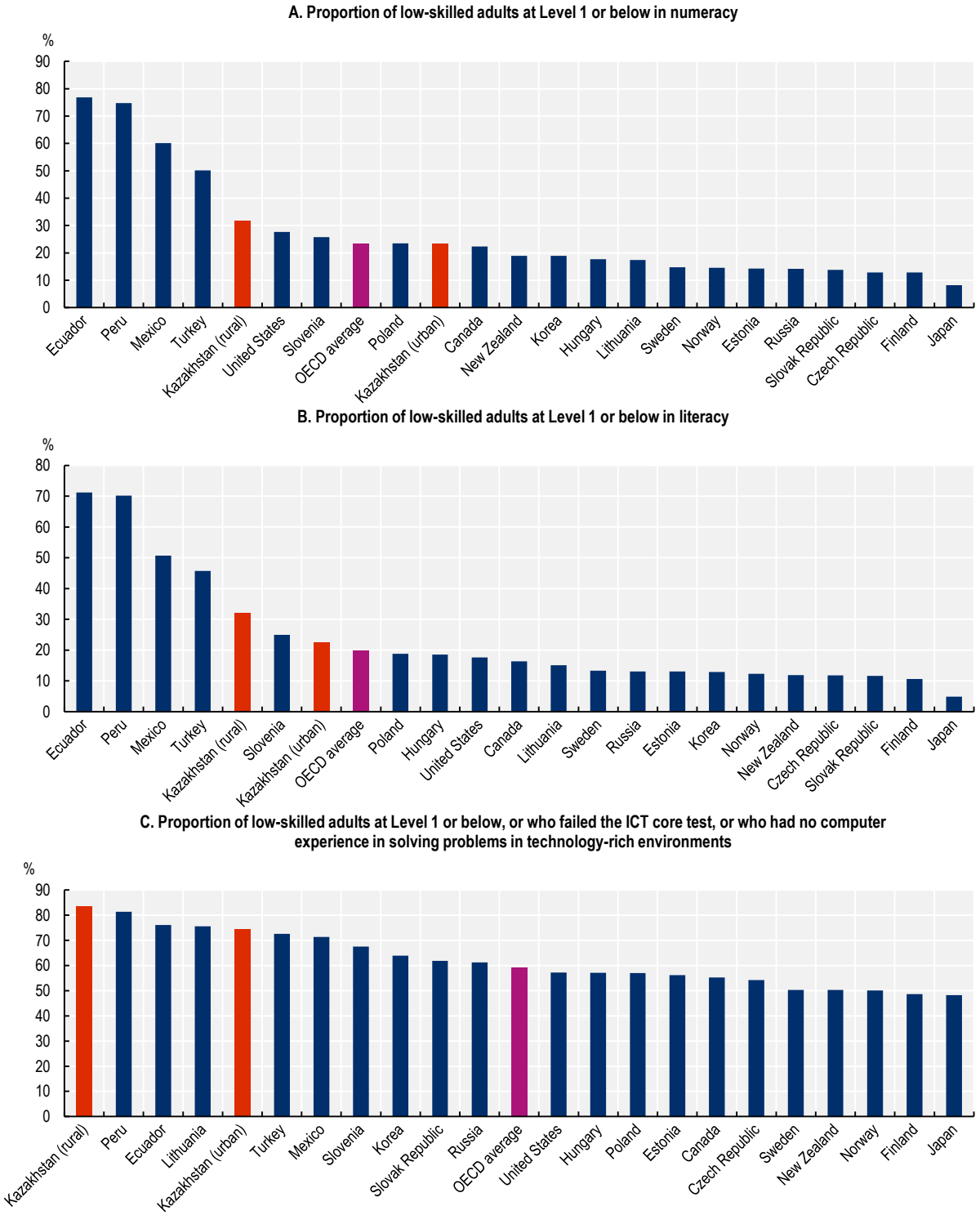
Approximately 81% of individuals in rural areas and 72% of those in urban areas performed below Level 2 (implying that they could, at best, complete simple tasks involving familiar technology applications); failed the ICT core test (implying that they could not use a mouse or keyboard); or had no computer experience in the test assessing skills required to solve problems in technology-rich environments (see Figure 3.7, Panel C). Kazakhstani adults perform relatively better in literacy and numeracy, but in rural areas, approximately one-third of adults performed below Level 2, implying that they could, at best, compute basic mathematical operations or extract key messages from a short text (see Figure 3.7, Panels A and B).

As a result, Kazakhstan will need to strengthen efforts to improve foundational skills courses. Kazakhstan has started to make some progress in this respect, through the Digital Kazakhstan initiative. As part of the programme, over 1 million individuals and 860 000 employees have already received digital literacy training, through online courses in e-services, e-commerce, basic digital skills, information security and open government. However, some stakeholders believe that delivering courses on line still fails to foster participation among more vulnerable individuals outside of major urban areas. This is consistent with international evidence, showing that in-person delivery still plays a crucial role in the dissemination of digital skills. Online delivery can only be effective once digital literacy skills are already in place. Older individuals in particular may require tailored support that is best delivered face-to-face. Kazakhstan could potentially leverage the *Conecta Joven* project in Spain to make further progress in the delivery of digital skills, particularly for older individuals (see Box 3.3).

More broadly, Kazakhstan should consider integrating foundational literacy, numeracy and digital modules within the *Enbek* programme and within training programmes organised by large employers, which according to stakeholders, currently focus mostly on technical skills. Kazakhstan could take inspiration from Australia's Skills for Education and Employment programme to understand how to co-ordinate basic skills interventions over a large and heterogonous territory (see Box 3.3).

Second, higher education needs to become more accessible for adults. Access to formal higher education qualifications for adults in Kazakhstan is generally difficult, especially if they have not enrolled in university after completing their secondary qualifications. In 2019, the possibility of taking the UNT entrance exam was expanded to four times a year (exams are now held in January, March, June and August) to improve access to higher education. However, according to information from the MOES, HE institutions still do not generally offer part-time formal education qualifications. Part-time degrees are only available in some private international universities, which adopt the US model, such as the Kazakhstan Institute of Management, Economics and Strategic Research (KIMEP) in Almaty. Adults can engage in distance education in approximately 70 HE institutions, but only if they are studying from abroad, have a disability, are serving criminal sentences or are pursuing a second tertiary qualification. Distance education can be provided through online or offline resources, depending on the subject, and universities have the autonomy to decide on the format of exams and midterms. Kazakhstan also has a small offering of massive open online courses (MOOCs). The National Platform of Open Education is only operating as a pilot, featuring a limited number of programmes, mostly in theoretical subjects. MOOCs could be a particularly attractive option for individuals who already have tertiary education and would like to reskill and update their knowledge.

Figure 3.7. Proportion of low-skilled adults struggling in literacy, numeracy and problem solving



Note: Level 1 performance in literacy means that the respondent is only able to read relatively short digital or print texts to locate a single piece of information that is identical to or synonymous with the information given in the question or directive. Level 1 performance in numeracy means that the respondent is only able to carry out basic mathematical processes in common, concrete contexts where the mathematical content is explicit. For problem solving, respondents who fail the ICT core test are unable to use a mouse or scroll through a web page, whereas respondents with Level 1 skills are only able to complete simple tasks on familiar technology applications, such as e-mail software. For PIAAC data from Russia, see see the note under Figure 3.1.

Source: OECD (2019[71]), *Survey of Adult Skills (PIAAC) (2012, 2015, 2017)*, http://www.oecd.org/skills/piaac/data/ with calculations from the Information and Analytical Centre within Kazakhstan's Ministry of Education and Science.

StatLink https://doi.org/10.1787/888934233682

Box 3.3. Relevant international examples: Strengthening the supply of adult learning

Strengthening the provision of foundational skills courses: Examples from Spain and Australia

In **Spain**, *Conecta Joven* is an innovative approach to strengthening digital skills that brings young people and adults together in person to facilitate the transfer of skills. Young people aged 15-19 are trained to deliver digital skills classes to older adults. This arrangement is mutually beneficial; young people can improve their personal and professional skills through teaching, adults benefit from in-person delivery of basic digital skills, and both benefit from the enhancing of intergenerational relationships. The programme has been running since 2006, allowing thousands of adults to receive basic digital skills training.

In **Australia**, the Skills for Education and Employment (SEE) programme provides free basic language, literacy and numeracy training for jobseekers experiencing disadvantage in the labour market due to their low skill levels. A range of organisations can refer participants to the programme at any point during the year, and training is provided by accredited community organisations, public training providers, such as technical colleges, private providers and universities. Most teaching is delivered face-to-face, but distance and online learning are also possible. Indeed, most providers have developed alternative teaching methods to minimise or remove classroom-based teaching, including organising project-based work or even direct work experience with skills development built into practical experiences.

Improving access to HE for adults: Example from Russia

In **Russia**, leading universities, such as the Higher School of Economics (HSE) and the Moscow Institute of Physics and Technology, founded the National Open Education Platform, https://openedu.ru/, in 2018. Open Education is a modern educational platform that invites Russian universities to use or host online courses, with learners currently able to choose from 603 courses across different disciplines. All courses hosted on the platform are available free of charge and without any formal education requirement, meaning anyone with a computer can participate. However, learners can pay to receive a certificate at the end of the programme to validate their grades from the course. The platform is a way for Russian universities to reduce their own costs for the development of an online platform by pooling resources together. All courses developed must meet certain quality standards and fulfil the requirements for learning outcomes. To date, 16 Russian universities provide courses through the platform, and over 2 million people have taken courses there.

Source: Australian Government Department of Education, Skills and Employment (2020[15]), *Skills for Education and Employment*, https://www.employment.gov.au/skills-education-and-employment; Australian Government Department of Education, Skills and Employment (2020[16]), *Skills for Education and Employment Facts vs Myths about the SEE Program*, https://www.employment.gov.au/facts-vs-myths-about-see-program; Fundacionesplai (n.d.[17]), *Conecta Joven*, https://fundacionesplai.org/socioeducativa/conecta-joven/; National Open Education Platform Association (2020[18]), *National Open Education Platform*, https://openedu.ru/; HSE University (2020[19]), *National Open Education Platform*, https://elearning.hse.ru/en/platform.

The MOES has recently launched the “Silver Universities” programme to strengthen the offering of non-formal higher education opportunities for older individuals. Under the initiative, all HE institutions need to provide adults aged 50 and above with opportunities to acquire new skills, retrain and remain intellectually active, but the details are not yet fully developed.

Kazakhstan needs to make further progress in expanding access to formal HE opportunities to all adults and improving the offering of MOOCs. Expanding access to formal HE opportunities could involve introducing part-time degrees and modular formal education qualifications, which could enable individuals to better combine study with work and family responsibilities. To improve the offering of MOOCs, Kazakhstan could further develop the National Platform of Open Education, leveraging lessons learned during the COVID-19 crisis. To succeed in this respect, Kazakhstan could take inspiration or form

partnerships with other platforms offering courses in Russian, such as the Russian National Open Education platform (see Box 3.3).

Recommendations for strengthening the supply of adult learning

2.1. **Strengthen the provision of courses to improve foundational skills, especially in rural areas, by integrating them into existing programmes and introducing new delivery models.** The MLSPP and the MOES could integrate foundational literacy, numeracy and digital provision within the *Enbek* programme, which currently focuses mostly on technical skills, and within training programmes delivered by large employers. To make further progress in the delivery of digital skills to older individuals, especially in rural areas, the MLSPP and the MOES could organise in-person sessions delivered by young people (e.g. as in Spain). The different initiatives should be effectively co-ordinated within the framework of the adult learning strategy (see Opportunity 2).

2.2. **Extend access to higher education opportunities for adults, by expanding part-time, modular and online delivery models.** The MOES should work with HE institutions to introduce formal HE courses, relying on part-time and modular delivery models, which should be open to all adults, regardless of previous educational attainment. The MOES should also expand the provision of distance education to all adults within Kazakhstan and work with HE institutions to further develop the National Platform of Open Education, potentially by taking inspiration or forming partnerships with other platforms offering courses in the Russian language.

Improving the quality assurance system for non-formal adult learning opportunities

Poor quality learning programmes can contribute to lower participation in adult learning because they reduce the benefits of undertaking adult learning opportunities for individuals and employers (OECD, 2019[12]). To ensure high-quality adult learning programmes, it is important to establish a strong quality assurance system (OECD, 2019[12]). Quality assurance mechanisms such as monitoring and evaluation procedures remain underdeveloped across the skills system in Kazakhstan (see Chapter 5). Chapter 5 provides recommendations on how to develop common standards for the quality assurance of education and training providers. When it comes to adult learning, as shown in the performance section, non-formal opportunities account for a substantial share of total participation. Hence, this section will focus on providing specific recommendations on how to improve the quality assurance system for non-formal learning opportunities.

Across OECD countries, quality assurance of non-formal learning opportunities involves a combination of: 1) ex ante recognition/certification of providers; 2) ex post monitoring and evaluation of providers; and 3) ex post monitoring and evaluation of learning outcomes (see Box 3.4). Ex ante recognition/certification and ex post monitoring/evaluation of providers help ensure that providers operate according to robust standards in designing and delivering adult learning opportunities (see Box 3.4). Ex post monitoring of learning outcomes makes sure that programmes result in measurable skills gains for the participants (see Box 3.4). The quality assurance system should also be complemented by clear guidance to training providers on how to implement quality standards, for instance, through good practice examples or self-evaluation tools (OECD, 2019[12]).

According to several stakeholders consulted during the OECD Skills Strategy project, non-formal education providers in Kazakhstan are not subject to any ex ante or ex post quality checks. As foreshadowed in the description of current arrangements, the Law of the Republic of Kazakhstan "On Education" only introduced the concept of non-formal education in 2019. According to the law, non-formal training centres

do not need formal or non-formal approval from MOES to operate. The law allows the MOES to create a list of recognised organisations that provide non-formal education, but registration is voluntary. Moreover, the conditions to join the list do not create a strong foundation for effective ex ante regulation. Providers are only required to submit legal documents confirming the establishment of the education institution, the availability of training rooms and the contracts of training staff. Little information on the quality of learning offered is contained in these legal documents. Similarly, non-formal education providers do not receive guidance on how to implement good quality standards. There is also no substantial ex post monitoring and evaluation of learning outcomes due to the lack of comprehensive labour market data (see Chapter 4).

In the future, Kazakhstan should tighten the rules for ex ante recognition/certification of providers and conduct ex post monitoring and evaluation of providers. Kazakhstan could build on the experience of other countries, such as Romania or Slovenia (see Box 3.4). Following reforms to the quality assurance regime, Kazakhstan should provide clear guidance and training to providers on how to adopt the quality standards. In the future, as better labour market data become available (see Chapter 4), Kazakhstan should develop a set of indicators to monitor and evaluate learning outcomes.

Box 3.4. Relevant international examples: Improving the quality assurance system for non-formal adult learning opportunities

Improving the quality assurance of non-formal education: Definitions and examples

A quality assurance regime for non-formal adult learning opportunities includes the following elements:

- **Ex ante recognition and certification of providers**: Introducing quality standards for the recognition, certification and accreditation of adult education programmes and/or institutions.
- **Ex post monitoring and evaluation of providers**: Assessing whether providers adhere to the quality standards, through a combination of desk-based analysis and on-site audits, which may lead to follow-up measures in cases of non-compliance.
- **Ex post monitoring and evaluation of learning outcomes**: Assessing whether learning opportunities lead to measurable skills gains for the learners, for instance, through surveys or examinations.

Several OECD countries and other countries have made progress in strengthening the quality assurance regime for adult learning opportunities. In the case of Kazakhstan, the experiences of Romania and Slovenia could prove valuable.

In **Romania**, adult vocational training providers need to be accredited if they want to deliver nationally recognised certificates. The accreditation is based on quality criteria and is carried out by tripartite authorisation commissions (composed of representatives from the Ministry of Labour and Social Justice, the Ministry of National Education, the National Agency for Employment and social partners). Providers are accredited for four years and monitored throughout this period.

Slovenia has combined ex ante recognition/certification and ex post monitoring/evaluation of providers with clear guidance to training providers. The Slovenian Institute for Adult Education (SIAE) has developed a set of tools to incentivise training providers to implement a culture of quality, including a green quality logo that is granted to providers for continuous and systematic work on quality. The providers must prove that they systematically carry out self-evaluation exercises to be granted the quality logo. The SIAE has also developed training programmes for individuals to become quality counsellors in adult education. Training providers who want to improve their quality management system can have one or more staff members participate in the training or hire a qualified quality counsellor.

Some countries have also delivered working sessions with providers to help them understand and implement the quality standards. For instance, in **Japan**, workshops are organised for training providers to get familiar with and better understand the quality guidelines. There have been discussions on making participation in these workshops compulsory for training providers that want to offer publicly funded training programmes.

Source: OECD (forthcoming[20]), *Policy Recommendations and Implementation Plan to Improve the Quality Assurance of Adult Education and Training and its Governance in Portugal*; OECD (2019[12]), *Getting Skills Right: Future-Ready Adult Learning Systems*, https://dx.doi.org/10.1787/9789264311756-en.

Recommendations for improving the quality assurance system for non-formal adult learning opportunities

2.3. **Introduce a strong certification and monitoring system to certify the quality of non-formal adult learning opportunities.** The MOES should tighten ex ante and ex post quality assurance for learning providers, following a two-step process. First, the MOES can strengthen the rules underlying the list of recognised organisations to put a stronger focus on quality metrics (e.g. as in Romania), as opposed to legal documents. Then, the MOES could either draft legislation to make it legally binding for non-formal education providers to adhere to these quality standards or could introduce a quality logo for providers that are part of the list and conduct continuous and systematic work on quality (e.g. as in Slovenia). In either case, the MOES should conduct some ex post monitoring of providers to ensure that quality standards are respected. The MOES needs to ensure that the resulting quality assurance framework uses standards consistent with the other frameworks across the skills system (see Chapter 5) and that it monitors whether providers are respecting anti-discrimination laws for people with disabilities (see Opportunity 3).

2.4. **Provide guidance and training opportunities to training providers on how to implement the quality standards.** The MOES could develop training programmes for individuals to become quality counsellors in adult education (e.g. as in Slovenia) and/or could organise workshops for training providers to get familiar with and better understand the quality guidelines (e.g. as in Japan).

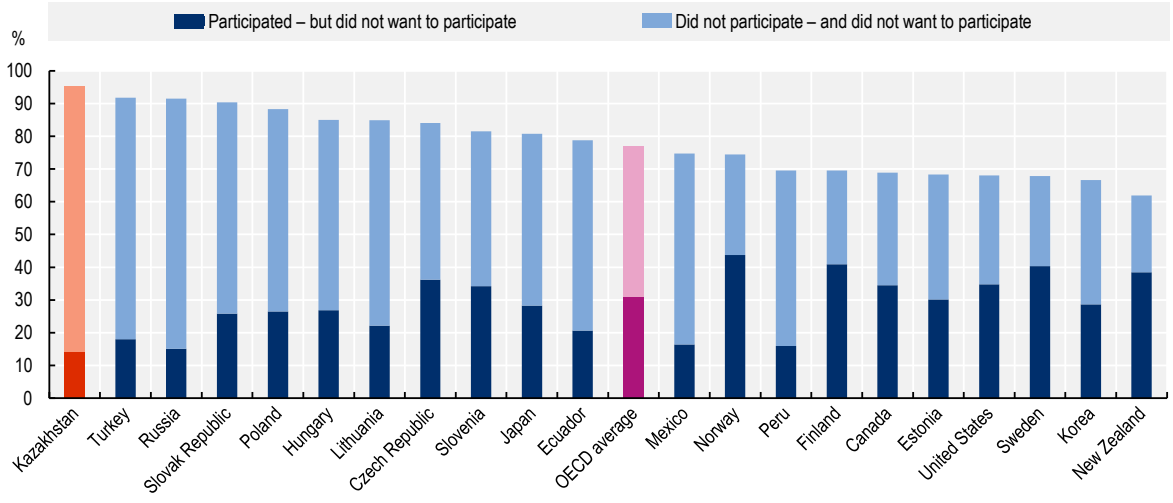
Opportunity 2: Increasing motivation to engage in adult learning

Strengthening the supply and quality of adult learning opportunities will likely be insufficient on its own to raise participation. Individuals and employers need to be strongly motivated to engage in adult learning. For individuals, motivation is considered key for successful adult education engagement (Carr and Claxton, 2002[21]), and is an even more significant factor than socio-economic background (White, 2012[22]). Strong levels of motivation among employers also help ensure that they organise firm-level training for their workforce and that they are more inclined to allow their employees to take time off to pursue other forms of formal and non-formal education.

Stakeholders involved in consultations throughout the OECD Skills Strategy project reported that adults and employers in Kazakhstan typically have low levels of motivation to engage in learning. These insights are consistent with international evidence. According to OECD PIAAC data (see Figure 3.8), many adults in Kazakhstan lack the motivation to participate in adult learning: 95% of adults did not want to participate in adult learning in 2018, including both individuals who did not participate and did not want to participate (81%) and individuals who participated but did not want to participate (14%). This rate is higher than the OECD average (77%) and than rates in other upper middle income countries, such as Mexico (75%).

Figure 3.8. Adults not wanting to participate in education and training

Percentage of adults aged 25-64 who did not want to participate in adult learning opportunities



Note: For PIAAC data from Russia, see see the note under Figure 3.1.
Source: OECD calculations based on OECD (2019[7]), *Survey of Adults Skills database (PIAAC) (2012, 2015, 2017)*, www.oecd.org/skills/piaac/.

StatLink https://doi.org/10.1787/888934233701

This opportunity describes two policy directions to make progress in this respect. First, it explores how Kazakhstan can create a consensus among stakeholders and individuals about the importance of adult learning. Then, it considers how Kazakhstan can increase the commitment of large employers to engage in adult learning. Importantly, increasing the motivation of individuals to undertake adult learning opportunities will also depend on the progress in developing a consolidated platform to provide comprehensive information on learning opportunities, access to career guidance, and information on skills in high demand, which is discussed in Chapter 4.

Creating a consensus about the importance of adult learning

To some extent, low motivation to engage in learning might reflect the lack of consensus among government ministries and stakeholders about the importance of adult learning.

Adult learning is not a common concept for policy makers, stakeholders and individuals in Kazakhstan. The idea of lifelong learning only became an objective of Soviet educational systems in 1987, just a few years before the fall of the Soviet Union, whereas in several European countries and the United States, the concept of lifelong education has been evolving since the 1970s (Faure et al., 1972[23]; Council of Ministers of the Soviet Union, 1987[24]). This implies that many working-age adults are not familiar with the idea of adult learning. As shown in the overview of current arrangements, since its independence, Kazakhstan has made some progress in establishing an adult learning system. However, as suggested by several stakeholders during the OECD Skills Strategy project, a shared understanding of the importance and the benefits of adult learning is still lacking. For instance, programmes like *Enbek* and Digital Kazakhstan do not explicitly mention the importance of engaging in adult learning but link the opportunities to more immediate benefits, such as promoting active employment of the population and improving human capital through better digital competencies. In part, this also reflects the lack of effective co-ordination and co-operation arrangements among different ministries, such as the MOES and MLSPP, and between different stakeholders (see Chapter 5).

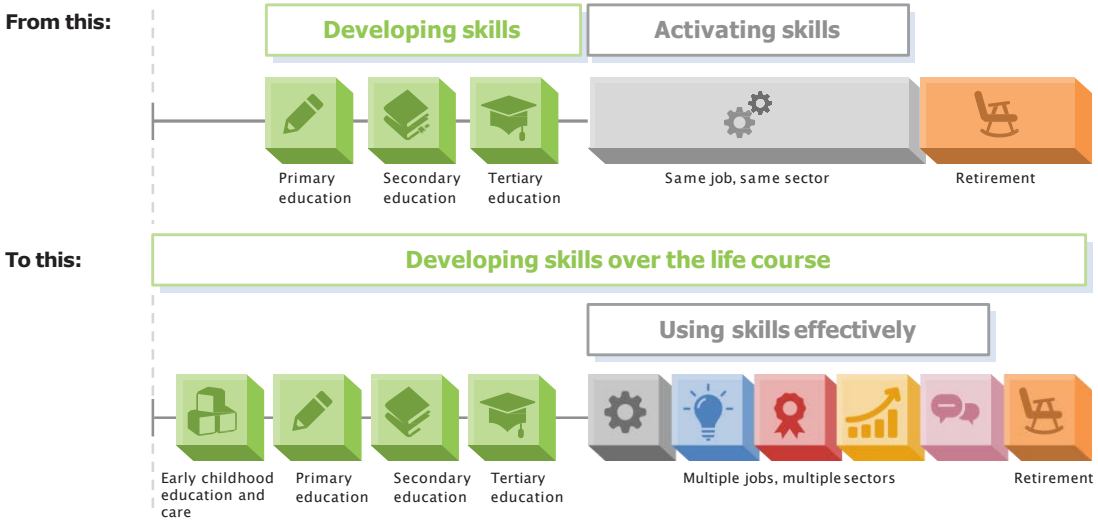
To help build a consensus around the importance of adult learning, Kazakhstan could develop a shared vision that describes the different forms of adult learning and their benefits, in line with several OECD

countries, such as Estonia (see Box 3.5). The shared vision should involve different government ministries and stakeholders, such as education institutions, local government and trade unions. In the case of Kazakhstan, it could also be important to involve large employers.

Building on comments from stakeholders, the shared vision should emphasise the importance of learning throughout the life course, potentially building on the framework developed by the OECD Centre for Skills (see Figure 3.9). Under this framework, traditionally front-loaded education systems that see individuals develop and then activate their skills are transformed to encourage the development of skills throughout an individual's working life. This concept of lifelong learning enables countries to adapt and thrive in a rapidly changing world, which will require individuals to reskill and upskill multiple times throughout their careers in response to megatrends affecting Kazakhstan (see Chapter 1). By developing a strong supply of skills, countries also create incentives for firms to redesign their business models and practices to make greater use of the skills available to them.

On the back of this vision, as in Estonia (see Box 3.5), Kazakhstan could launch a strategy on adult learning that clearly outlines priorities for the development of adult education and sets precise targets for participation across different cohorts of learners. This strategy could form the basis for closer co-operation between the MOES, the MLSPP and other relevant ministries on the subject of adult learning, which, as for other skills policy areas, has been challenging so far (see Chapter 5).

Figure 3.9. Life-long learning within a new model for skills development and use



Source: OECD (2019[25]), *OECD Skills Strategy 2019: Skills to Shape a Better Future*, https://dx.doi.org/10.1787/9789264313835-en.

The vision and strategy should not only exist on paper, however. Kazakhstan should actively raise awareness about adult learning among individuals through a series of co-ordinated initiatives. Several stakeholders suggested that Kazakhstan should promote potential learning opportunities and benefits to individuals through a variety of channels, such as traditional media, the Internet, social partners and career guidance counsellors. This insight is consistent with international best practice. An in-depth analysis of adult learning policies by the European Commission has identified providing information on adult learning benefits and opportunities through online portals, awareness campaigns and career guidance counsellors as effective policy levers for raising participation in adult learning (European Commission, 2015[26]).

Other chapters in this report provide recommendations on how to make progress in these respects. Chapter 4 discusses in depth how Kazakhstan can better disseminate information on adult learning opportunities and benefits through a consolidated portal and how Kazakhstan can improve career guidance to adults. Chapter 2 discusses how Kazakhstan could increase engagement in adult learning among

vulnerable individuals such as those not in education, employment or training (NEETs), individuals at risk of displacement and workers employed in the informal economy. Another area where Kazakhstan could make further progress is awareness-raising campaigns and events. Previous experience suggests that these initiatives need to be tailored to the needs and motivations of different learners, rather than adopting overly general messages and framing (OECD, 2019[12]). Kazakhstan could take inspiration from initiatives in Slovenia and Estonia (see Box 3.5).

Box 3.5. Relevant international examples: Creating a consensus about the importance of adult learning

Developing a holistic vision and strategy of adult learning: An example from Estonia

In 2014, **Estonia** launched its Lifelong Learning strategy, a comprehensive strategy to set priorities and guide funding decisions up until 2020. To help form the basis of the strategy, representatives from civil society organisations and the Ministry of Education and Research produced a vision for lifelong learning, which identified the biggest challenges facing the Estonian education system. Education and labour market experts were then consulted to help identify solutions to these challenges, which directly informed the development of The Estonian Lifelong Learning Strategy 2020. This strategy set priorities for the development of adult education, such as increasing adult learning participation and raising adult qualification levels. Key indicators were put in place to quantitatively measure the progress of the strategy in practice. Additionally, a 15-member lifelong learning steering committee was formed, which included experts from the fields of education and employment. Every two years, the steering committee revised the implementation of the strategy to best meet Estonia's needs.

Raising awareness of the benefits of adult learning: Examples from Slovenia and Estonia

In **Slovenia**, a Lifelong Learning Week (LLW) has taken place every year since 1996. The week is an opportunity to draw attention to the benefits of adult learning and the options available for individuals through educational, promotional information and guidance, as well as social and cultural events. Every year the LLW involves several hundred institutions including non-governmental organisations (NGOs), interest groups and other stakeholders. The week is organised by the Slovenian Institute for Adult Education and every year revolves around different themes and events. In 2020, themes included quality, reading, and the digital transformation of society. From 450 events in 1996, there were close to 9 000 in 2018. These events include open days, round tables, exhibitions, presentations of educational programmes, learning and creative workshops, talks and a parade that takes place across the country (17 locations on the same day in 2019). In addition, there is an active digital presence for the week and a range of radio interviews, social media posts and videos are posted and promoted.

In **Estonia,** *Jälle kooli* (Back to school again), is an adult learning campaign targeting adults of all ages to encourage them to reskill and upskill. Core to the campaign is a new adult learning information website, as well as a strong social media presence. On the website, adults are able to find out about how to engage in learning opportunities at adult gymnasiums, vocational schools, higher education institutions and in-service training. Through interactive maps, individuals are able to locate learning opportunities in close proximity to themselves. There are also videos, inspirational stories and discussions with employers to inspire individuals to undertake adult learning.

Source: Ministry of Education and Research (2014[27]), *The Estonian Lifelong Learning Strategy 2020*, https://www.hm.ee/sites/default/files/estonian_lifelong_strategy.pdf; OECD (2020[28]), *Increasing Adult Learning Participation: Learning from Successful Reforms*, https://doi.org/10.1787/cf5d9c21-en; Centar and Praxis (2019[29]), *Elukestva õppe strateegia vaheindamine [Mid-term review of the lifelong learning strategy 2020], Centar and Praxis*; Slovenian Institute for Adult Education (2020[30]), *Lifelong Learning Week*, https://tvu25.acs.si/; Jälle Kooli Campaign (n.d.[31]), *Jälle kooli [Back to school again] Web Portal*, https://jallekooli.ee/.

Recommendations for creating a consensus about the importance of adult learning

2.5. **Develop a shared vision on the importance of adult learning based on extensive consultations with stakeholders.** The Government of Kazakhstan should promote the development of a shared vision that clearly describes the different forms of adult learning and their benefits to individuals, employers and society as a whole (e.g. as in Estonia). The output of this process should include a document that outlines the vision, which should be publicly available to both government and non-government stakeholders. A newly introduced inter-ministerial working group (see Chapter 5) could potentially take the lead in the development of the vision, but the process should involve all ministries that play a role in the adult learning system, such as the MLSPP and the MOES, and stakeholders, in particular employers, trade unions, educational institutions and local government. The Government of Kazakhstan should then raise awareness about the shared vision by using a variety of channels, such as workshops, seminars, the Internet and social media.

2.6. **Consider launching a specific strategy for adult learning to foster better co-operation and co-ordination among ministries and stakeholders.** On the back of the shared vision, the Government of Kazakhstan should consider launching a specific strategy for adult learning to foster better co-operation between different ministries and among stakeholders, which so far has not been strong (see Chapter 5). Alternatively, the Government of Kazakhstan should make sure that the principles of the vision are integrated into all government programmes and initiatives and that they are closely aligned moving forwards, for instance by increasing co-operation and co-ordination within a newly introduced inter-ministerial working group (see Chapter 5).

2.7. **Raise awareness about adult learning opportunities among individuals through a series of targeted campaigns and events.** The newly introduced inter-ministerial working group (see Chapter 5), or if the working group is not introduced, the MLSPP and the MOES should develop targeted campaigns and events to raise awareness about adult learning opportunities and benefits among specific cohorts, such as low-skilled adults or individuals with a tertiary qualification. The campaigns could rely on a combination of traditional media, such as newspapers or TV, the Internet, as well as open days, round tables, exhibitions and presentations of educational programmes (e.g. as in the Lifelong Learning Week in Slovenia).

Increasing large employers' commitment to adult learning

Kazakhstan's high proportion of large employers means that any effort to increase participation in adult learning across the country will depend on motivating large firms to strengthen their commitment to adult learning. Creating a consensus about the importance of adult learning will be an important first step, but additional measures will be needed to make further progress.

As foreshadowed in the performance section, large employers play an important role in the economy, but they seem to be under-investing in job-related training for their workforce, compared to other OECD countries. It is currently difficult to systematically assess the reasons for this under-investment, because, as discussed in Opportunity 1 above and Chapter 4, there is currently a lack of data on the available adult learning opportunities in Kazakhstan. However, the evidence gathered from stakeholders during the OECD Skills Strategy project makes it possible to gain a high-level understanding of the main drivers.

Some stakeholders consulted during the project mentioned that the under-provision of training in large enterprises might reflect the lack of motivation to engage employees in professional development. This is

a plausible explanation because unlike SMEs, large employers are likely to have the human and monetary resources to overcome informational and financial barriers to providing training to their staff. Low motivation among large firms could reflect the legacy of the Soviet Union where the culture of large companies providing training was almost non-existent. Stakeholders also indicated that some large companies are still unconvinced that training can lead to productivity and employment gains, perhaps reflecting previous low-quality training options. However, according to stakeholders, the commitment to adult learning varies greatly across different enterprises. Some large enterprises with a foreign presence, such as Air Astana and Kazakh Telecom, have a stronger commitment to continuous training and adopt international best practices, such as individual training plans for each employee. However, large state-owned firms, which account for about one-third of total employment, often have less well-developed training plans and provide training every two to three years, focusing on technical skills.

Kazakhstan could strengthen large employers' commitment to adult learning in two ways. First, Kazakhstan could launch a review of training plans in state-owned enterprises. The plans could be strengthened to ensure that they focus more heavily on the development of foundational (see Opportunity 1) and soft skills. Kazakhstan could potentially take inspiration from Philips' Vocational Qualification Programme (VQP) to make progress in this respect (see Box 3.6). Second, Kazakhstan could strengthen social dialogue between workers and employers. As remarked in the 2019 *OECD Employment Outlook*, social dialogue is an important tool to ensure that workers actively engage in adult learning (OECD, 2019[32]). Social dialogue includes all kind of negotiation, consultation or, simply, exchange of information at any level between employers and workers. Social dialogue can encourage adult learning because it allows workers to signal to employers their training needs and bargain more effectively for their training rights (OECD, 2019[32]). According to stakeholders, social dialogue on adult learning opportunities in Kazakhstan is at the initial stage of development. There are currently no institutional mechanisms for meaningful social dialogue to ensure that adult learning takes place and that working arrangements optimise productivity. Going forward, Kazakhstan could draw on the experiences of Germany to foster social dialogue, especially among large enterprises, through the introduction of work councils (see Box 3.6). These bodies represent the employees of a specific company, as opposed to one or more entire sectors, as is the case with trade unions.

More broadly, the introduction of a training levy, which is discussed at length in Chapter 5, can increase large employers' commitment to adult learning, by earmarking some expenditures for training purposes.

Box 3.6. Relevant international examples: Increasing large employers' commitment to adult learning

Designing training initiatives for employees: An example from Philips Electronics Netherlands

In the **Netherlands**, the Vocational Qualification Programme (VQP) was offered by Philips Electronics between 2004 and 2011. It aimed to train the company's staff to meet the skills and knowledge requirements of the company and the labour market, and to help experienced but unqualified production workers to gain a sector-recognised diploma. VQP was a joint initiative of Philips Electronics and the Netherlands' four largest employer organisations, defined in a collective labour agreement in 2004. In 2004, local VQP training programmes were set up in every production unit, all under the framework of the national VQP training scheme, which allowed for adaptions to local training needs and infrastructure. Between 2004 and 2010, 1 900 employees gained a nationally recognised diploma, and 3 000 employees, corresponding to 75% of Philips Electronics Netherlands' overall employees, had undergone training. After 2010, the company shifted the focus of its training efforts to engage employees who had not taken part in the VQP, particularly low-skilled employees aged over 40.

Increasing the involvement of employer organisations in adult learning: An example from Germany

In **Germany**, the most important employee representative body is the works council (*Betriebsrat*), which can be elected in establishments with more than five regularly employed employees who are eligible to vote. The size of the works council depends on the size of the firm. The formation of a works council is not mandatory for employees, and the initiative must come from the employees or the unions, with the employer bearing the costs of the works council to perform its duties. Works councils are set up especially in medium-sized and large enterprises, and more rarely in small enterprises: they are organised in 97.5% of firms with more than 1 000 workers and in 4.2% of firms with 5-20 employees. The works council can draft works agreements, which are binding for all employees. These work agreements are a special type of contract regarding the working conditions of the individual employees, with the same direct and binding effect as statutory law. Trade unions work in tandem with these work councils, often sitting in on work council meetings to provide advice drawn from experience across the sector.

Source: Windisch, H.C. (2015[33]), *Adults with low literacy and numeracy skills: A literature review on policy intervention*, https://dx.doi.org/10.1787/5jrxnjdd3r5k-en; DICE Database (2015[34]), *Workplace Representation – Legal Basis and Thresholds*, www.ifo.de; OECD (2020[35]), *OECD Skills Strategy Slovak Republic: Assessment and Recommendations*, https://doi.org/10.1787/bb688e68-en.

Recommendations for increasing large employers' commitment to adult learning

2.8. **Review training plans in state-owned enterprises to ensure that they enable all employees to develop a broad set of technical, foundational and soft skills.** The Government of Kazakhstan should take steps to review whether the training plans offered by state-owned enterprises enable all employees to develop a broad set of skills, for example, those discussed in the vision for adult learning (see the previous section). Following the review, the state-owned companies could implement more comprehensive personal development plans, enabling all employees to develop technical, foundational and soft skills (e.g. as Philips in the Netherlands). The plans should be linked to the adult learning strategy (see the previous section) and could make use of training leave arrangements (see Opportunity 3).

2.9. **Legislate the introduction of work councils in order to foster social dialogue about job-related training and adult learning.** The Government of Kazakhstan should legislate to introduce work councils (e.g. as in Germany) to provide a platform where employees and employers could reach binding agreements about participation in job-related training and other forms of adult learning. The work councils could form the basis for co-operation in other areas as well, including but not limited to, working conditions and wages. Trade unions might provide support to work councils in carrying out these functions.

Opportunity 3: Removing barriers to participation in adult learning

Even when individuals and employers are motivated to participate in adult learning, they frequently face barriers that prevent them from transitioning from an interest to active participation (OECD, 2017[36]). Minimising these barriers is crucial to raising participation in adult learning. For adults, the key barriers are generally related to cost and time. Adult learning opportunities are often too expensive or difficult to combine with family and work responsibilities. People with disabilities might also face physical and psychological barriers that prevent them from accessing education and training facilities. Among employers, as foreshadowed in the performance section, SMEs might lack sufficient knowledge, time and

financial resources to organise training opportunities (International Labour Organization, 2017[10]). Stakeholders consulted throughout the OECD Skills Strategy project stressed the importance of minimising barriers both for individuals and for SMEs. Building on their feedback and on the international evidence, this opportunity first discusses how Kazakhstan can remove physical, financial and time-related barriers for individuals. Then, it considers how Kazakhstan can minimise informational and financial barriers for SMEs.

Removing barriers to adult learning for individuals

In Kazakhstan, adult learners are exposed to a range of financial and time-related barriers. Further, people with disabilities face additional challenges in accessing adult learning opportunities. This requires a series of co-ordinated policy interventions.

A previous study by the OECD suggests that there are more than 630 000 people with disabilities in Kazakhstan, equivalent to approximately 3.5% of the total population (OECD, 2017[37]). The OECD study identified a series of barriers to the employability of people with disabilities in Kazakhstan, including outdated language and comparatively weak anti-discrimination laws (OECD, 2017[37]). According to stakeholders consulted during the OECD Skills Strateg project, people with disabilities in Kazakhstan also struggle to access adult learning opportunities and educational opportunities more generally. Data and academic research seem to confirm these insights. About 45% of people with disabilities in Kazakhstan have no education and less than 1% of all people with disabilities study in higher education institutions in the country (Cherevyk, 2016[38]). This is likely driven by both infrastructural and cultural barriers: educational institutions struggle to organise a barrier-free environment, and there is resistance in society to the idea of inclusive education (Cherevyk, 2016[38]).

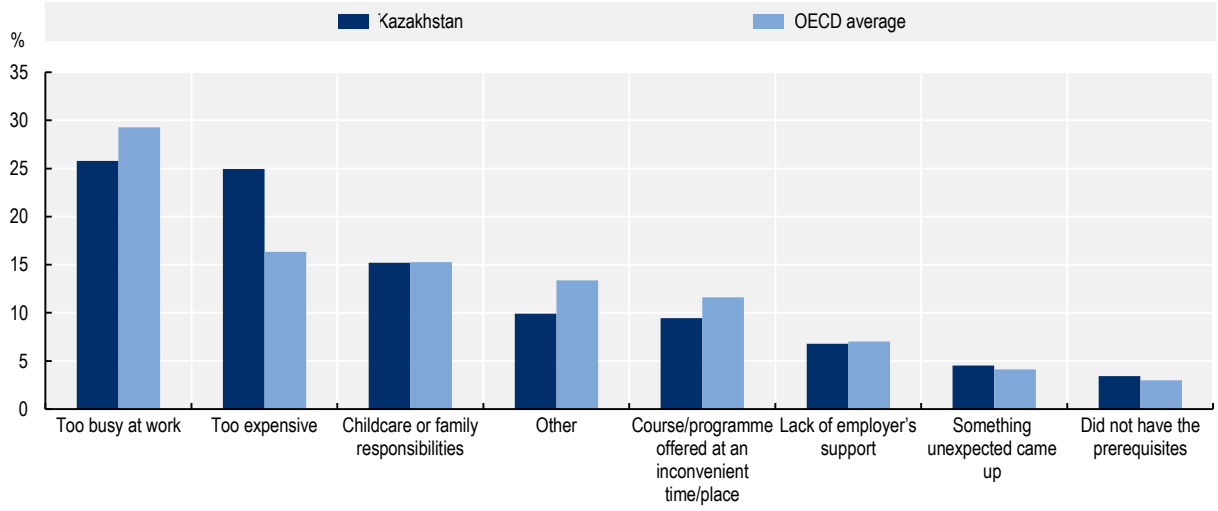
A recent Human Rights Watch report has highlighted that Kazakhstan needs to make substantial progress in improving the quality and accessibility of compulsory education for individuals with disabilities (Human Rights Watch, 2019[39]). When it comes to educational institutions responsible for adult learning provision, some progress is already underway. In July 2020, the MOES updated regulations for VET and HE institutions to improve physical infrastructure. According to the new regulations, approximately 70% of VET and HE institutions should have a barrier-free environment for individuals with disabilities, up from the current threshold of 40%. However, Kazakhstan should take bolder steps to improve the accessibility of learning opportunities to adults with disabilities in two ways.

First, Kazakhstan could improve the enforcement of anti-discrimination laws in non-formal education institutions. Current legislation specifies that people with disabilities should not be discriminated against, but, according to stakeholders, there is little monitoring to ensure that the law is observed. Respecting the anti-discrimination laws could become one of the criteria of the newly introduced quality assurance process (see Opportunity 1). Second, Kazakhstan should introduce a series of measures to increase incentives and support for adults with disabilities who intend to undertake adult learning opportunities. To make progress in these respects, Kazakhstan could take inspiration from national and international examples (see Box 3.7).

As well as improving incentives and support for people with disabilities, Kazakhstan should take action to minimise time-related and financial barriers for all individuals. According to the recently published PIAAC data, adults in Kazakhstan identify being too busy at work and courses being too expensive as the main obstacles to participation in adult learning (see Figure 3.10). These obstacles are similar to those observed in OECD countries on average. However, a substantially larger share of individuals in Kazakhstan report courses being too expensive as a barrier to participation in adult learning (25% in Kazakhstan with respect to 16% on average across OECD countries).

Figure 3.10. Obstacles to participation in adult learning

Percentage of adults aged 25-64 who listed the following obstacles to preventing their participation in adult learning



Source: OECD calculations based on OECD (2019[7]), *Survey of Adults Skills database (PIAAC) (2012, 2015, 2017)*, www.oecd.org/skills/piaac/.

StatLink https://doi.org/10.1787/888934233720

Financial incentives can play a crucial role in reducing barriers for individuals. A variety of schemes can be used (see Table 3.1), but the majority of incentive schemes come in the form of subsidies and loans (OECD, 2017[36]). Tax incentives and training leave measures are available in most countries, but their take-up and effectiveness vary substantially (OECD, 2017[36]). Individual learning accounts (ILAs) have remained relatively uncommon, possibly because they can be costly to administer, frequently only provide limited financial support and are disproportionately used by highly skilled individuals (OECD, 2017[36]).

Kazakhstan has so far made limited use of financial incentives for individuals. According to information from the MOES and the MLSPP, the most important financial incentives are those available within the *Enbek* programme. As described in the section on current arrangements, some vulnerable workers can receive free provision for short-term vocational training courses. In addition, according to information provided by the MLSPP, the unemployed receive a stipend to cover living and transportation expenses. Combining free provision of training courses with supplementary financial incentives, as in the case of *Enbek*, can be relatively attractive to reduce barriers to participation among vulnerable adults. Other financial incentive schemes, such as vouchers or tax incentives, may result in lower take-up because they generally imply more complex administrative and application procedures, which can prove burdensome for vulnerable adults (OECD, 2017[36]). However, as discussed in Chapter 4, the provision of training courses provided through *Enbek* can still be more effectively aligned with labour market needs.

To further reduce financial and time barriers, Kazakhstan could strengthen the offering of financial incentives beyond vulnerable groups and introduce training leave arrangements.

Strengthening financial incentives could also be useful to reduce financial barriers for higher-skilled adults. Adults with a secondary education qualification and above currently receive no financial support for adult learning opportunities. Kazakhstan could consider introducing a combination of subsidies and loans to increase uptake of formal and non-formal learning opportunities among higher-skilled adults.

Table 3.1. Financial incentives for individuals to offer or participate in adult learning opportunities

Incentive	Description
Subsidies	Schemes that decrease costs of participation through a direct transfer of money to the individual (e.g. through a voucher), the training provider or the employer. Subsidies can take the form of scholarships, grants, bursaries, allowances, vouchers and training cheques.
Individual learning accounts (ILAs)	Virtual training accounts that can be opened by individuals to fund future learning activities.
Tax incentives	Tax allowances (i.e. deductions from taxable income); tax credits (sums deducted from the tax due); tax relief (lower rates for some taxpayers or activities).
Loans	Include guarantees, interest rate subsidies, loan guarantees, income-contingent repayments, student loan remission and/or forgiveness.
Study/training leave	Schemes that give employees a right to study leave (and guarantee the right to return to their jobs after course completion) and reimburse employees/employer for the lost working time.

Source: OECD (2019[40]), *Individual Learning Accounts: Panacea or Pandora's Box?,* https://doi.org/10.1787/203b21a8-en; OECD (2017[36]), *Financial* Incentives *for Steering Education and Training*, https://dx.doi.org/10.1787/9789264272415-en.

Introducing training leave legislation could be useful to address time-related barriers related to "being too busy at work", at least for workers employed in large enterprises. Large employers generally find it less difficult than SMEs to cope with staff absences, because they can draw on a larger pool of employees to distribute the absent employee's workload (OECD, 2017[36]). Given the substantial percentage of large employers in Kazakhstan's economy, introducing training leave legislation could be a practical solution to free up people's time to undertake learning opportunities. However, to encourage the uptake of training leave, Kazakhstan should also introduce compensatory mechanisms for learners and employers, in line with several OECD countries, by paying workers while on their training leave. The amount of financial support provided could amount to the worker's full wage or consist of an allowance, which in other countries is often equivalent to the level of unemployment benefit (see Box 3.7) (OECD, 2019[12]). In most cases, this allowance is paid directly to the worker, but in some cases, the employer continues to pay the workers wage and claims back the expenses (OECD, 2017[36]). To implement compensatory mechanisms, Kazakhstan could draw on the experiences of several OECD countries (see Box 3.7).

Lastly, to minimise time-related and financial barriers, Kazakhstan should make further progress in developing a system for the recognition of prior learning (RPL). Developing an effective RPL system can help address both financial and time-related barriers by reducing the duration of learning time (OECD, 2019[12]). Since 2016, the World Bank has been involved in the project "Development of labour skills and stimulation of jobs", which is expected to implement an independent qualification assessment and certification system as a last stage of the development of the National Qualification System (NQS). According to information from stakeholders, pilot projects have been conducted to develop certification centres in tourism, oil and gas and metallurgy, but further developments have stalled, due to financial constraints and lack of clarity in implementation mechanisms. Going forward, Kazakhstan should further develop the RPL system in the context of revamping the process for developing the National Qualification System (see Chapter 5).

Box 3.7. Relevant national and international examples: Removing barriers to adult learning for individuals

Creating a barrier-free environment for people with disabilities: Examples from Kazakhstan and Australia

In **Kazakhstan**, the Innovative School of Internet Technologies (ISIT) is a socially orientated institution that provides ICT education, in such areas as Internet marketing, web design, programming and mobile application development. In particular, ISIT aims to encourage participation in these areas from people with disabilities. To this end, socially vulnerable groups are supported with discounts starting from 50% and increasing depending on the individual's financial situation. In addition, the school has launched an information and consulting service for people with disabilities that can be accessed by phone or email. As part of this service, video content is available to help support students with disabilities at the school find employment. To date, hundreds of students with disabilities have benefitted from education at ISIT.

In **Australia**, the Australian Disability Clearinghouse on Education and Training (ADCET) plays a crucial role in promoting inclusive practices for people with a disability in post-secondary education. ADCET provides information for disability practitioners, academics, teachers and students with disabilities. It is funded by the Australian Government and hosted by the University of Tasmania. Resources include online courses for VET staff and educators on how to communicate, interact and respond to the needs of individuals with disabilities to positively influence their experience and educational outcomes. There is also extensive information on what inclusive technology is needed for specific disabilities, where to access the technology, and how to incorporate it into learning.

Training leave arrangements: Examples from OECD countries

Several OECD countries have made use of financial incentives to encourage the uptake of study and training leave. In **France**, for example, workers on study leave (*Congé Individuel de Formation*) are entitled to their full wage, but most other countries put a cap on this replacement wage (e.g. Walloon and German-speaking communities of Belgium) or pay an allowance that is often equivalent to the level of unemployment benefit (e.g. *Weiterbildungsgeld* in Austria). To minimise deadweight loss, financial incentives are often tailored to specific groups. In **Austria**, training choices need to be approved by the Public Employment Services, which should only be done if the course is likely to improve the labour market prospects of the individual in question. **Belgium** has gone further by providing longer study leave for individuals who (re)train in areas where labour market shortages exist (*métier en pénurie/knelpuntberoep*).

Source: Evidence gathered by the OECD team; Australian Disability Clearinghouse on Education and Training (ADCET) (n.d.[41]), *ADCET Home*, https://www.adcet.edu.au/, OECD (2017[36]), *Financial Incentives for Steering Education and Training*, https://dx.doi.org/10.1787/9789264272415-en; OECD (2019[12]), *Getting Skills Right: Future-Ready Adult Learning Systems*, https://dx.doi.org/10.1787/9789264311756-en; OECD (2020[28]), *Increasing Adult Learning Participation: Learning from Successful Reforms*, https://dx.doi.org/10.1787/cf5d9c21-en.

Recommendations for removing barriers to adult learning for individuals

2.10. **Increase incentives and support offered to adults with disabilities to minimise barriers that prevent them from accessing learning opportunities.** The Government of Kazakhstan could introduce some subsidies (derived directly or through training providers) for adults with disabilities, as in the ISIT. To provide further support, the Government of Kazakhstan could also introduce a centre that, as ADCET does in Australia, promotes inclusive practices for people with a disability in post-secondary education. The centre could be based within the newly introduced Skills Policy Council (see Chapter 5).

2.11. **Extend financial incentives beyond vulnerable groups to minimise cost-related barriers to participating in education and training.** The MOES, in co-operation with the MLSPP and the MNE, should consider introducing incentives to other groups of adults not currently covered through the *Enbek* programme, such as higher-skilled workers, who currently lack access to financial support. This could include the introduction of subsidies such as grants, bursaries, allowances or vouchers, and loans that have income-contingent repayments or guaranteed interest rates. These financial incentives, as well as the existing incentives under *Enbek*, could be directed at learning opportunities in high labour market demand according to skills assessment and anticipation (SAA) exercises, which are discussed in Chapter 4.

2.12. **Consider introducing training leave legislation and compensatory mechanisms to increase take-up of learning among adults who currently report being too busy at work.** The Government of Kazakhstan could introduce training leave legislation to help free up people's time to take part in adult learning opportunities. The government could decide to restrict training leave legislation to large employers, given that they generally find it less difficult than SMEs to cope with staff absences. The Government of Kazakhstan could complement legislation with compensatory mechanisms by reimbursing the employees who decide to take training leave. To minimise deadweight loss in the reimbursement scheme, the government could consider limiting the list of eligible courses to those in high labour market demand according to SAA exercises, which are discussed in Chapter 4. The reimbursement scheme could be financed via the training levy that Kazakhstan could consider introducing, based on the recommendations in Chapter 5.

Reducing informational and financial barriers for SMEs

As foreshadowed in the performance section, SMEs are more likely to be exposed to informational and financial barriers in organising and funding training opportunities. Organising training opportunities requires enterprises to have knowledge about their own training needs and the advantages and disadvantages of alternative options (International Labour Organization, 2017[10]). Acquiring this knowledge for SMEs can be problematic because unlike large firms, they often do not have a dedicated human resources unit and can have little time to spare among existing staff (International Labour Organization, 2017[10]). Even if SMEs have adequate information about their own needs and the available options, they may still find it difficult to fund training opportunities, because they can face higher unit cost per worker and they are more likely than large firms to be liquidity constrained (International Labour Organization, 2017[10]). In the case of Kazakhstan, these financial barriers are likely to be especially important for rural SMEs, which, unlike

large firms in rural areas, cannot afford to establish their own training centres, and may face prohibitive costs in working with distant training providers.

For these reasons, governments frequently offer tailored support and design financial incentives to increase participation in training among SMEs. Many governments provide free or subsidised skills and training needs assessments that help SMEs identify skills gaps in their workforce and develop training plans accordingly (Johanson, 2009[42]; OECD, 2019[43]).

The vast majority of financial incentives for SMEs come in the form of subsidies (OECD, 2017[36]). Tax incentives have remained relatively uncommon, possibly because they are associated with a higher deadweight loss (OECD, 2017[36]). The last few years have also seen a proliferation of government-backed training networks, which organise and co-ordinate training activities at the sector or local level (OECD, 2017[36]; International Labour Organization, 2017[10]). Training networks can reduce financial barriers for SMEs because they allow them to pool employees into the same training programme and benefit from reduced costs through economies of scale (Johanson, 2009[42]; OECD, 2019[43]). Training networks are frequently financed through training levies, specific taxes that pool resources from employers and earmark them for expenditure on training, which is discussed at length in Chapter 5 (OECD, 2017[36]).

As with the supply of adult learning in Opportunity 1, a systematic assessment of the importance of the different barriers to training in Kazakhstan is difficult, due to the lack of comprehensive employer-level data. As a result, Kazakhstan should improve existing employer-level surveys to gather more comprehensive information on factors driving the propensity to train (see Chapter 4). The available evidence still enables the formulation of some high-level recommendations on policy initiatives to minimise informational and financial barriers faced by SMEs.

The OECD undertook a detailed review of SME and entrepreneurship policy in Kazakhstan in 2018, which relied on extensive consultations with government ministries and employer representatives to minimise the evidence gaps (OECD, 2018[9]). The review concluded that there is only limited public support for continuous workforce training in SMEs in Kazakhstan (OECD, 2018[9]). The main support available to SMEs identified by the review was the Enterprise Competence Enhancement Component within the State Programme of Industrial-Innovation Development 2014-2019, which allowed SMEs in priority sectors to receive a partial reimbursement (40%) of the costs for training, for no more than 15 staff.

To increase support and incentives for SMEs, the review recommended introducing local training networks where SMEs could co-operate on organising training initiatives, as well as co-operation efforts with VET institutions (OECD, 2018[9]) Within the training networks, training facilitators could then help members assess their training needs and help them develop joint training plans (OECD, 2018[9]). According to the review, the creation of training networks and the support in developing the training plans could also be complemented by grants to SMEs to expand their training efforts (OECD, 2018[9]).

Recent initiatives do not seem to have made substantial improvements in the incentives and support framework offered to SMEs. The recently launched State Programme of Industrial Innovation Development 2020-2025 does not include any practical steps to strengthen support and incentives to SMEs. According to stakeholders consulted during the mission, the *Enbek* programme has not managed to develop an offering of training opportunities aligned with regional needs and attractive to SMEs, because it does not sufficiently involve employers in the design of the training opportunities. However, one promising initiative is the SME Competitiveness Project implemented in co-operation with the World Bank, which is ongoing (see Box 3.8). Kazakhstan will need to sustain the momentum generated by this project to create a permanent infrastructure to facilitate training for SMEs.

Going forward, developing training networks could be an attractive option for Kazakhstan for at least two reasons. First, they ensure a substantial degree of employer involvement, which can result in a better alignment of training opportunities with the needs of employers (Johanson, 2009[42]). This is particularly important in Kazakhstan, given the limited information on labour market and skill needs (see Chapter 4).

Second, training networks could be especially valuable to reduce financial barriers in rural areas, because they would enable SMEs to set up joint training centres or to more easily attract external training providers. Training facilitators are also important to help SMEs develop their training plans. Comparing the experiences of Ireland and Korea suggests that tailored advice can be valuable in enabling SMEs to fully engage in the services offered by the networks (see Box 3.8).

To some extent, the lack of progress in the implementation of these recommendations might be related to low levels of funding for skills policies (see Chapter 5). To increase available funding, Chapter 5 discusses the possibility of introducing a training levy with larger contributions from big enterprises, and details how this can work in practice. Some of the money raised through the training levy could be used to establish the training networks and pay towards the facilitators. In the case of Kazakhstan, given the high percentage of large enterprises, the set-up of the training networks could encourage co-operation between large employers and SMEs operating in their supply chain. This could happen, for instance, if large enterprises are required to contribute to the training levy, but are then allowed to transfer some of the levy credits to their suppliers. This would also increase the benefits that large enterprises derive from the levy, as increasing training intensity among their suppliers might result in higher quality inputs and/or lower input prices.

The introduction of the training networks and the facilitators could also be complemented by grants or loans for SMEs that would like to upskill their workforce to meet the requirements of Industry 4.0. The State Programme of Industrial Innovation Development 2020-2025 aims to make progress in this respect, but it does not introduce any concrete initiatives. The grants or loans could be part of a wider plan of workplace transformation, involving the adoption of new technologies and production processes. To make progress in this respect, Kazakhstan could take inspiration from Italy (see Box 3.8).

Box 3.8. Relevant national and international examples: Reducing informational and financial barriers for SMEs

The SME Competitiveness Project

Since 2015, **Kazakhstan** has collaborated with the World Bank through the SME Competitiveness Project to enhance the competitiveness and capacity of targeted small and medium-sized enterprises in Kazakhstan. There are four components to this project. The first is the SME capacity-building programme. This component has helped finance training and capacity-building activities to ensure that SME owners and managers consistently receive high-quality services under government-funded entrepreneurship support programmes. The second component aims to foster SME linkages in competitive sectors in part through the development of a supplier development programme (SDP) whose role will be to increase market linkages for SMEs with large local and multinational corporations operating in Kazakhstan. The third component is to help improve the evaluation and monitoring of SME programmes, and the fourth focuses on project management. The World Bank Group committed a USD 40 million loan for this project with the original timeline envisaged as operating between 2015-20. The COVID-19 pandemic has slowed the implementation of the project, the end date of which has now been pushed back to 2021. At the end of 2020, the overall implementation progress was listed as moderately satisfactory.

Designing and adapting training networks for SMEs: Examples from Ireland and Korea

In **Ireland**, Skillnet operates as a facilitator and funding agency for enterprise-led training networks across the country, providing half of the total cost for network activities. As of 2017, it had provided at least a year of funding to over 400 such networks. In 2016, 14 263 firms received employee training through Skillnet-funded networks. SME engagement in the networks has not always been strong. Only 3% of micro-businesses (0-9 employees) and 25% of small businesses (10-49 employees) participate in Skillnet-funded training networks, compared to 75% of medium-sized (50-249) businesses. A lack of awareness of the existence of training funds among smaller firm employees is part of the reason for low training uptake, but the design is important too. Only part of the training is funded, and this percentage is unaffected by company size, meaning smaller companies are more likely to face budgetary constraints accessing training.

Korea has managed to increase involvement of SMEs in training funds in the 2000s by offering tailored support. When Korea implemented training funds in the mid-1990s, it suffered from a similar lack of SME engagement. Only 4.7% of SMEs offered levy-supported training to their employees, compared to 77.6% of large enterprises. To address SME barriers to participation in training levies, the Government of Korea launched the Training Consortium Pilot Programme for SMEs in 2001. SMEs from similar sectors were grouped into training consortiums (TCs). These were run by training specialists who conducted skills and training needs assessments for each SME, planned training programmes, and then conducted evaluation studies upon an SME's completion of a training programme. The pilot programme had a significant positive impact on SME participation. The proportion of SMEs using training levies to provide training increased from 11% to 55% in one year. Consequently, the programme was rolled out on a national level.

Incentives for Industry 4.0 upskilling initiatives: An example from Italy

Italy's Industria 4.0 national plan was launched in February 2017. The initiative concentrates on two main areas. First, it seeks to support the uptake of innovative technologies, helping companies to adapt and digitally transform, grow and increase their competitiveness. Second, it focuses on the development of skills needed for businesses to effectively use such technologies. SMEs are the primary target of these measures, but larger businesses are also able to benefit from the plan as well, with approximately EUR 18 billion set aside in total over 2017-20. To promote the take-up of new technologies, SMEs can benefit from tax incentives and easy access to financing. The development of new skills is promoted through the launch of digital innovation hubs, which serve as a contact point between companies, investors and research institutions, funding for Doctorates in Industry 4.0 areas and a range of new educational programmes. Financial incentives for training in technological and digitally focused areas are also included. A tax credit of up to 50% of eligible expenses and within the maximum annual limit of EUR 300 000 can be claimed by small businesses (40% for medium-sized and 30% for large firms), with the amount increasing to 60% if employees trained are from more vulnerable groups of adults.

Source: OECD (2017[44]), *Getting Skills Right: Spain*, https://dx.doi.org/10.1787/9789264282346-en; World Bank (2020[45]), *SME Competitiveness Project*, https://projects.worldbank.org/en/projects-operations/project-detail/P147705?lang=en; European Commission (2017[46]), *Italy: "Industria 4.0"*, https://ec.europa.eu/growth/tools-databases/dem/monitor/sites/default/files/DTM_Industria4.0_IT%20v2wm.pdf; Italian Ministry of Economic Development (2020[47]), *Training Tax Credit 4.0*, https://www.mise.gov.it/index.php/it/incentivi/impresa/credito-d-imposta-formazione.

Recommendations for reducing informational and financial barriers for SMEs

2.13. **Establish local training networks to reduce financial barriers for SMEs, especially in under-performing rural regions.** The MNE, in co-operation with the NCE, should lead on the creation of local training networks to increase access to training opportunities among SMEs, especially in under-performing regions (e.g. as in Ireland). The MNE could potentially rely on funding gathered through training levies to pay towards the set-up of the networks (see Chapter 5). In this case, the MNE could consider enabling large employers to transfer some of the levy credits to their suppliers, either through grants or through direct access to training courses.

2.14. **Introduce training facilitators to help SMEs assess their training needs and develop their training plans.** The MNE, in co-operation with the NCE, should recruit and train facilitators to help members of the training networks assess their training needs and develop their training plans (e.g. as in Korea). The MNE could potentially rely on funding gathered through the training levy to pay towards the recruitment, training and salary of the facilitators (see Chapter 5).

2.15. **Introduce loans or grants to enable SMEs to upskill and reskill their workforce in the context of the Industry 4.0 transformation.** The MNE, in co-operation with the NCE, should introduce grants and loans that enable SMEs to upskill and reskill their workforce, within a wider plan of workplace transformation, involving the adoption of new technologies and production processes (e.g. as in Italy). The MNE could potentially rely on funding gathered through the training levy to fund these loans or grants (see Chapter 5).

Summary of policy recommendations

Table 3.2 summarises the recommendations for this chapter. Based on feedback from stakeholders and from the national project team, three recommendations have been selected that could be considered to have the highest priority based on potential impact and relevance in the current Kazakhstan context. To foster participation in adult learning of all forms, the OECD recommends that Kazakhstan should:

- Introduce a strong certification and monitoring system to certify the quality of non-formal adult learning opportunities (Recommendation 2.3).
- Develop a shared vision on the importance of adult learning based on extensive consultations with stakeholders (Recommendation 2.5).
- Review training plans in state-owned enterprises to ensure that they enable all employees to develop a broad set of technical, foundational and soft skills (Recommendation 2.8).

Table 3.2. High-level overview of recommendations to foster greater participation in adult learning in Kazakhstan

Policy directions	Recommendations	Responsible parties
Opportunity 1: Strengthening the supply and quality of adult learning opportunities		
Strengthening the supply of adult learning	2.1. Strengthen the provision of courses to improve foundational skills, especially in rural areas, by integrating them into existing programmes and introducing new delivery models.	• MLSPP • MOES
	2.2. Extend access to higher education opportunities for adults, by expanding part-time, modular and online delivery models.	• MOES • Higher education institutions
Improving the quality assurance system for non-formal adult learning opportunities	2.3. Introduce a strong certification and monitoring system to certify the quality of non-formal adult learning opportunities.	• MOES
	2.4. Provide guidance and training opportunities to training providers on how to implement the quality standards.	• MOES
Opportunity 2: Increasing motivation to engage in adult learning		
Creating a consensus about the importance of adult learning	2.5. Develop a shared vision on the importance of adult learning based on extensive consultations with stakeholders.	• Government of Kazakhstan • MOES • MLSPP • Adult learning inter-ministerial working group (see Chapter 5) • Employers • Trade unions • Educational institutions • Local government
	2.6. Consider launching a specific strategy for adult learning to foster better co-operation and co-ordination among ministries and stakeholders	• Government of Kazakhstan
	2.7. Raise awareness about adult learning opportunities among individuals through a series of targeted campaigns and events.	• Adult learning inter-ministerial working group (see Chapter 5) • MOES • MLSPP
Increasing large employers' commitment to adult learning	2.8. Review training plans in state-owned enterprises to ensure that they enable all employees to develop a broad set of technical, foundational and soft skills.	• Government of Kazakhstan • State-owned enterprises
	2.9. Legislate the introduction of works councils in order to foster social dialogue about job-related training and adult learning.	• Government of Kazakhstan • Trade unions
Opportunity 3: Removing barriers to participation in adult learning		
Removing barriers to adult learning for individuals	2.10. Increase incentives and support offered to adults with disabilities to minimise barriers that prevent them from accessing learning opportunities.	• Government of Kazakhstan • Adult learning inter-ministerial working group (see Chapter 5)
	2.11. Extend financial incentives beyond vulnerable groups to minimise cost-related barriers to participating in education and training.	• MLSPP • MOES • MNE
	2.12. Consider introducing training leave legislation and compensatory mechanisms to increase take-up of learning among adults who currently report being too busy at work.	• Government of Kazakhstan
Reducing informational and financial barriers for SMEs	2.13. Establish local training networks to reduce financial barriers for SMEs, especially in under-performing rural regions.	• MNE • NCE
	2.14. Introduce training facilitators to help SMEs assess their training needs and develop their training plans.	• MNE • NCE
	2.15. Introduce loans or grants to enable SMEs to upskill and reskill their workforce in the context of the Industry 4.0 transformation.	• MNE • NCE

Note: MLSPP is the Ministry of Labour and Social Protection of Population; MOES is the Ministry of Education and Science; MNE is the Ministry of National Economy; and NCE is the National Chamber of Entrepreneurs.

References

Acemoglu, D. (1998), "Why Do New Technologies Complement Skills? Directed Technical Change and Wage Inequality", *The Quarterly Journal of Economics*, Vol. 113/4, pp. 1055-1089, http://www.jstor.org/stable/2586974. [2]

Australian Disability Clearinghouse on Education and Training (ADCET) (n.d.), *ADCET Home*, https://www.adcet.edu.au/ (accessed on 29 July 2020). [41]

Australian Government Department of Education Skills and Employment (2020), *Skills for Education and Employment Facts vs Myths about the SEE Program*, https://www.employment.gov.au/facts-vs-myths-about-see-program. [16]

Australian Government Department of Education, S. (2020), *Skills for Education and Employment*, https://www.employment.gov.au/skills-education-and-employment (accessed on 28 July 2020). [15]

Carr, M. and G. Claxton (2002), "Tracking the Development of Learning Dispositions", *Assessment in Education: Principles, Policy & Practice*, Vol. 9/1, pp. 9-37, http://dx.doi.org/10.1080/09695940220119148. [21]

Centar and Praxis (2019), *Elukestva õppe strateegia vaheindamine [Mid-term review of the lifelong learning strategy 2020]*, http://www.praxis.ee/en/works/interim-evaluation-of-the-lifelong-learning-strategy/. [29]

Cherevyk, K. (2016), "Problems of Education and Employment of Disabled People in Kazakhstan", *Наука и практика*, Vol. 1/21, https://www.rea.ru/ru/org/managements/izdcentr/Documents/%D0%96%D1%83%D1%80%D0%BD%D0%B0%D0%BB%201(21).pdf. [38]

Council of Ministers of the Soviet Union (1987), *О мерах по коренному улучшению качества подготовки и использования специалистов с высшим образованием в народном хозяйстве [On measures to radically improve the quality of training and use of specialists with higher education in the national economy]*, http://docs.cntd.ru/document/901778983. [24]

Dearden, L., H. Reed and J. Van Reenen (2006), "The impact of training on productivity and wages: Evidence from British Panel Data", *Oxford Bulletin of Economics and Statistics*, Vol. 68/4, pp. 397-421, http://dx.doi.org/10.1111/j.1468-0084.2006.00170.x. [3]

DICE Database (2015), *Workplace Representation – Legal Basis and Thresholds*, https://www.ifo.de/ (accessed on 23 May 2020). [34]

European Commission (2017), "Italy: "Industria 4.0"", in *Digital Transformation Monitor*, https://ec.europa.eu/growth/tools-databases/dem/monitor/sites/default/files/DTM_Industria4.0_IT%20v2wm.pdf. [46]

European Commission (2015), *An in-depth analysis of adult learning policies and their effectiveness in Europe*, European Commission, Directorate General for Employment, Social Affairs and Inclusion, https://op.europa.eu/en/publication-detail/-/publication/c8c38dc9-89d0-11e5-b8b7-01aa75ed71a1/language-en. [26]

Faure, E. et al. (1972), *Learning to be: the world of education today and tomorrow*, UNESCO, Paris, http://unesdoc.unesco.org/ark:/48223/pf0000001801. [23]

Fundacionesplai (n.d.), *Conecta Joven*, https://fundacionesplai.org/socioeducativa/conecta-joven (accessed on 29 July 2020). [17]

HSE University (2020), *National Open Education Platform*, https://elearning.hse.ru/en/platform/ (accessed on 25 July 2020). [19]

Human Rights Watch (2019), *'On the Margins' Education for children with disabilities in Kazakhstan*, https://www.hrw.org/report/2019/03/14/margins/education-children-disabilities-kazakhstan. [39]

International Labour Organization (2017), *Upskilling SMEs: How governments fund training and consulting, Comparing experiences from Asia, Europe and North America*, ILO, Geneva, https://www.voced.edu.au/content/ngv:79526. [10]

Italian Ministry of Economic Development (2020), *Training Tax Credit 4.0*, https://ec.europa.eu/growth/tools-databases/dem/monitor/sites/default/files/DTM_Industria4.0_IT%20v2wm.pdf. [47]

Jälle Kooli Campaign (n.d.), *Jälle kooli [Back to school again] Web Portal*, https://jallekooli.ee/ (accessed on 27 July 2020). [31]

Johanson, R. (2009), *A Review of National Training Funds*, The World Bank: Social Protection & Labor, http://siteresources.worldbank.org/SOCIALPROTECTION/Resources/SP-Discussion-papers/Labor-Market-DP/0922.pdf. [42]

Konings, J. and S. Vanormelingen (2015), "The Impact of Training on Productivity and Wages: Firm-level Evidence", *The Review of Economics and Statistics*, Vol. 97/2, pp. 485–497, https://www.mitpressjournals.org/doi/abs/10.1162/REST_a_00460. [4]

Midtsundstad, T. (2019), "A review of the research literature on adult learning and employability", *Eur J Educ*, Vol. 54, pp. 13-29, https://doi.org/10.1111/ejed.12321. [1]

Ministry of Education and Research (2014), *The Estonian Lifelong Learning Strategy 2020*, https://www.hm.ee/sites/default/files/estonian_lifelong_strategy.pdf (accessed on 5 June 2020). [27]

National Open Education Platform Association (2020), *National Open Education Platform*, https://openedu.ru/ (accessed on 30 July 2020). [18]

OECD (2020), *Increasing Adult Learning Participation: Learning from Successful Reforms*, Getting Skills Right, OECD Publishing, Paris, https://dx.doi.org/10.1787/cf5d9c21-en. [28]

OECD (2020), *OECD Employment Outlook 2020: Worker Security and the COVID-19 Crisis*, OECD Publishing, Paris, https://doi.org/10.1787/1686c758-en. [13]

OECD (2020), *OECD Skills Strategy Slovak Republic: Assessment and Recommendations*, OECD Skills Studies, OECD Publishing, Paris, https://doi.org/10.1787/bb688e68-en. [35]

OECD (2020), "VET in a time of crisis: Building foundations for resilient vocational education and training systems", *OECD Policy Responses to Coronavirus (COVID-19)* OECD Publishing, Paris, https://doi.org/10.1787/5b0fd8cd-en. [14]

OECD (2019), *Adult Learning in Italy: What Role for Training Funds ?*, Getting Skills Right, OECD Publishing, Paris, https://doi.org/10.1787/9789264311978-en. [43]

OECD (2019), *Getting Skills Right: Future-Ready Adult Learning Systems*, Getting Skills Right, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264311756-en. [12]

OECD (2019), *Individual Learning Accounts: Panacea or Pandora's Box?*, OECD Publishing, Paris, https://dx.doi.org/10.1787/203b21a8-en. [40]

OECD (2019), *OECD Employment Outlook 2019: The Future of Work*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9ee00155-en. [32]

OECD (2019), *OECD Skills Strategy 2019: Skills to Shape a Better Future*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264313835-en. [25]

OECD (2019), *Survey of Adult Skills (PIAAC) (2012, 2015, 2017) (database)*, OECD Publishing, Paris, http://www.oecd.org/skills/piaac/data/. [7]

OECD (2018), *SME and Entrepreneurship Policy in Kazakhstan 2018*, OECD Studies on SMEs and Entrepreneurship, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264301450-en. [9]

OECD (2017), *Building Inclusive Labour Markets in Kazakhstan: A Focus on Youth, Older Workers and People with Disabilities*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264273023-en. [37]

OECD (2017), *Financial Incentives for Steering Education and Training*, Getting Skills Right, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264272415-en. [36]

OECD (2017), *Getting Skills Right: Spain*, Getting Skills Right, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264282346-en. [44]

OECD (2016), *Skills Matter: Further Results from the Survey of Adult Skills*, OECD Skills Studies, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264258051-en. [5]

OECD (2011), *PIAAC Conceptual Framework of the Background Questionnaire Main Survey*, OECD Publishing, Paris, http://www.oecd.org/skills/piaac/PIAAC(2011_11)MS_BQ_ConceptualFramework_1%20Dec%202011.pdf. [6]

OECD (forthcoming), *Policy Recommendations and Implementation Plan to Improve the Quality Assurance of Adult Education and Training and its Governance in Portugal*, OECD Publishing, Paris. [20]

Slovenian Institute for Adult Education (2020), *Lifelong Learning Week*, https://tvu25.acs.si (accessed on 30 July 2020). [30]

White, P. (2012), "Modelling the 'learning divide': Predicting participation in adult learning and future learning intentions 2002 to 2010", *British Educational Research Journal*, Vol. 38/1, pp. 153-175, http://dx.doi.org/10.1080/01411926.2010.529871. [22]

Windisch, H. (2015), "Adults with low literacy and numeracy skills: A literature review on policy intervention", *OECD Education Working Papers*, No. 123, OECD Publishing, Paris, https://dx.doi.org/10.1787/5jrxnjdd3r5k-en. [33]

World Bank (2020), *GDP per person employed (constant 2017 PPP $)*, http://data.worldbank.org/indicator/SL.GDP.PCAP.EM.KD. [8]

World Bank (2020), *SME Competitiveness Project*, https://projects.worldbank.org/en/projects-operations/project-detail/P147705?lang=en (accessed on 5 January 2021). [45]

World Bank (2019), *Enterprise Surveys*, https://www.enterprisesurveys.org/en/custom-query. [11]

4 Building an effective skills information system in Kazakhstan

An effective skills information system can play a key role in reducing skills shortages and mismatches by providing information on current and future skills needs. Such information can inform individual choices as well as a broad range of policies, from employment to education and training, including policies that address the most vulnerable groups. Timely skills information is particularly important in times of economic crisis characterised by rapidly changing labour markets. This includes the coronavirus (COVID-19) crisis, which might entail heterogeneous effects on skills demand across sectors. This chapter examines the importance of a skills information system in strengthening skills development and use in Kazakhstan. Following an overview of current arrangements and recent performance, it explores three opportunity areas: Strengthening skills assessment and anticipation tools; creating an enabling environment for an effective skills information system; and enhancing the use of skills information to inform policy making and stakeholders' choices.

The importance of building an effective skills information system

A skills information system (SIS) is the set of fundamental arrangements, facilities and procedures that support the collection, processing and dissemination of skills and labour market information. It includes information on current and future labour market needs generated by skills assessment and anticipation (SAA) exercises, as well as information on current vacancies and education and training opportunities for individuals. An effective SIS can allow countries to improve the alignment between skills supply and skills demand, helping to reduce skill imbalances (OECD, 2016[1]).

Skills imbalances comprise skills shortages, skills surpluses and skills mismatches (see Box 4.1). These imbalances can exert a negative impact on overall economic growth, on firms and on individuals (OECD, 2016[1]). Skills shortages can lead to increased labour costs and lost production due to unfilled vacancies. Firms experiencing skills shortages also appear to have fewer opportunities to innovate and to adopt new technologies (OECD, 2016[1]). Skills mismatches can have negative impacts on individuals in terms of their wage, career development and work satisfaction. In addition, a mismatch can result in lower productivity and economic output, reflecting the inability to effectively use the skills that the labour force accumulates through education and work experience (OECD, 2016[1]; OECD, 2019[2]). The estimates available suggest that the aggregate costs of qualifications and field-of-study mismatch can exceed 1% of a country's gross domestic product (GDP), reflecting the combination of productivity losses and the costs of developing skills that are not used (Mavromaras, McGuinness and Fok, 2009[3]; Montt, 2015[4]).

Box 4.1. Definitions: Different types of skills imbalance

Skills shortages refer to a situation in which the demand for a specific type of skill exceeds its supply in the labour market at the prevailing market wage rate.

Skills surpluses arise when the supply of a specific type of skill exceeds its demand in the labour market.

Skills mismatches describe situations in which workers' skills exceed or fall short of those required for the job under current market conditions. They can be measured along different dimensions:

- **Skills mismatch**: When workers have higher or lower skills proficiency than what is required by their job. If their skills proficiency is higher, workers are classified as over-skilled; if lower, they are classified as under-skilled.
- **Qualifications mismatch**: When workers have educational attainment that is higher or lower than what is required by their job. If their qualification level is higher, workers are classified as over-qualified; if lower, they are classified as under-qualified.
- **Field-of-study mismatch**: When workers are employed in a different field from that in which they have specialised.

Source: OECD (2016[5]), *Skills Matter: Further Results from the Survey of Adult Skills*, http://dx.doi.org/10.1787/9789264258051-en.

An effective SIS can help reduce skill imbalances by allowing sufficient production and dissemination of information on skills and labour market needs. Policy makers can rely on skills information to monitor the potential mismatch between educational outcomes and the demands of the labour market, and to design or revise employment, training and migration policies. Social partners can use this information to provide valuable input to governments on education and employment policy and the development of training programmes or provide advice to their members on skill development. Researchers and data analysts can use primary data to evaluate the impact of skills policies, produce evidence to inform policy design and

generate SAA tools. Individuals (e.g. students, jobseekers and workers) can also benefit by being able to access the information needed to make informed career and educational choices (OECD, 2016[1]).

However, in Kazakhstan, just as in other emerging economies around the world, the development of a strong skills information system requires many constituent elements, none of which are readily available. At the technical level, these involve access to detailed skills and labour market databases, as well as of sophisticated analytical tools to elaborate the basic statistical information. At the communication and policy level, they include the capacity to disseminate the information to a wide range of interested stakeholders, which is essential, in turn, to nurture the policy debate. Many OECD countries report that poor statistical infrastructure and lack of knowledgeable human resources are key factors undermining the capacity to implement performing assessment systems (OECD, 2016[1]). In many countries, these difficulties go hand in hand with a lack of co-ordination among relevant agencies.

These challenges have been made even more urgent by the coronavirus (COVID-19) pandemic, which has resulted in rapidly changing work practices, including distancing measures and teleworking, for example. At the same time, the emergence of new employment needs in some services, notably the care sector, has been mirrored by a decline in other activities, such as recreation and hospitality, for example. Regular, up-to-date skills information will help track the impact of these diverse developments on the jobs on offer and the skills expected to match them.

This chapter begins with an overview of existing SAA exercises and the data collection and management system in Kazakhstan and an assessment of the overall performance of the SIS. Then, it identifies three opportunities to build an effective SIS in Kazakhstan, based on desk research and discussions with government and stakeholder representatives (participants) consulted during the OECD Skills Strategy project.

Kazakhstan's current arrangements and performance in building its skills information system

Current arrangements for the skills information system

Public and private institutions carrying out skills assessment and anticipation

In Kazakhstan, the Ministry of Labour and Social Protection of Population (MLSPP) and its research and policy analysis branch, the Workforce Development Centre (WDC), play a central role in generating, managing and disseminating information on labour market and skills needs. The skills analysis that they carry out is by industry and by occupations, and regards both national and regional levels.

The MLSPP is responsible for the formation of skills forecasting and anticipation within the country. It does so by relying on a set of guidelines for the formulation of the national labour force forecasting system. Notably, the recently created National System for Labour Force Forecasting (NSLFF) builds on guidelines updated in March 2019.

There are three main forecast terms in Kazakhstan's SAA system:

- short-term human resources forecast (forecast period: one year)
- medium-term workforce forecast (forecast period: five years)
- long-term human resources forecast (forecast period: up to 2050).

Several private institutions also carry out skills analysis and disseminate labour market and skills information to the public. For example, HeadHunter, a private online job-matching portal, provides information on changing demand and supply of work positions and average salaries. Some industry

associations also analyse short-term skills shortages to inform and support the recruitment needs of their members.

The MLSPP within the framework of the World Bank project 'Development of Labour Resources and Stimulation of Workplaces', carries out qualitative skills technology foresight (STF) exercises for nine major industries in Kazakhstan to help disentangle possible future market trends and anticipate which professions and skills will be in increasing demand in coming decades. It provides one example of possible initiatives to assess and forecast skills demand.

Data collection and management to support an effective skills information system

The Bureau of National Statistics conducts surveys (e.g. the Labour Force Survey, Household Survey, census) to collect skills and labour market data. For example, the quarterly Labour Force Survey (LFS) collects some skills and labour market data, including the decompositions of salaries, working hours and unemployment duration by socio-demographic characteristics (e.g. age, region, education level, gender). In addition to the statistical office, the MLSPP and the WDC carry out specific thematic surveys to track the number of graduates or employment growth, for example.

Furthermore, in 2019, the National Chamber of Entrepreneurs (NCE or *Atameken*) conducted an employer survey at the national level to collect data on short-term skills needs. It was first conducted as a pilot in the Aktobe region in 2018, with the participation of over 5 000 employers. It was then scaled up nationally in 2019 and covered over 600 000 enterprises. The funding for the national survey was provided by the MLSPP. Pending the availability of additional funding, the NCE has plans to replicate the survey in the future. Other private research institutions and sector associations, such as KazEnergy and tourist sector associations, also conduct surveys, interviews and focus group discussions to collect data on current and future skills demands for particular industrial sectors, such as oil, gas, tourism and mining.

There are two main labour market databases in Kazakhstan: the Automated Labour Market Information System (ALMIS) and the Electronic Labour Market Exchange. The aim of ALMIS is to collect and manage regional data and to automate some employment services provided by the MLSPP, local government authorities and the employment centres. For instance, through ALMIS, the employment centres can access pension data to double-check the employment status of potential clients. For its part, the Electronic Labour Market Exchange provides comprehensive information on available job vacancies. This is mainly used by employers who have new vacancies to advertise and jobseekers searching for jobs on line.

Performance in building an effective skills information system

Assessment of the current skills information system

According to stakeholders consulted during the OECD Skills Strategy project, the existing skills assessment and anticipation tools have limitations and do not build a comprehensive picture of current and future labour market needs. Stakeholders expressed doubts about the results of the NSLFF carried out by the MLSPP and the WDC.

Efforts from the private sector are not entirely successful in compensating for these limitations. As foreshadowed in the section above, some sector associations analyse short-term skills shortages for specific sectors to inform industry representatives for hiring and qualifications upgrade purposes. However, the results of these exercises are mainly intended for dissemination among members of the given association, rather than the general public.

To some extent, limited quality and coverage of SAA exercises reflect obstacles to collect and manage high-quality data. In Kazakhstan, labour market and educational data are not collected systematically, or with sufficient frequency or breakdowns by regions and socio-demographic characteristics. For instance, three rounds of workforce data collections were carried out at the firm level between 2015 and 2017 by

the MLSPP and WDC. Although these exercises allowed for some inference about the expected short-term changes in employers' skills needs, and facilitated forecasts of occupations that will be in demand in the future, they have been discontinued since. Furthermore, collected data did not include information on disability status, participation in formal and informal training by adults. or adult learning opportunities, for example. These limitations hinder the production of granular analysis to understand labour market conditions for specific groups of populations or adult learning supply (see Chapter 3).

Efforts to disseminate available skills and labour market information is also limited. Several stakeholders consulted as part of the OECD Skills Strategy project reported that potential users, who could greatly benefit from the information, are not aware of the existence of the information due to lack of advertisement and promotion. Numerous training institutions, policy makers, jobseekers and students are willing to use this information and evidence but do not know where to find it.

Evidence on current skills imbalances

The limitations in domestic data sources and robust skills assessment and anticipation methodologies make it difficult to build a comprehensive picture of skill imbalances in Kazakhstan. The available evidence from international data sources suggests that Kazakhstan experiences substantial shortages and skills mismatches, with negative consequences for firms and individuals.

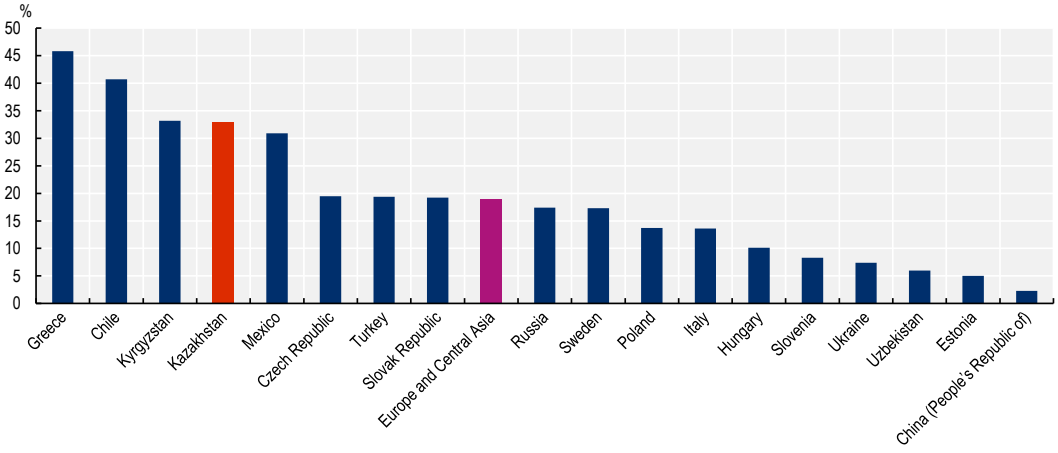
The recently released World Bank Enterprise Survey data show that more than 30% of firms in Kazakhstan believe that the low skill levels of the workforce is a major obstacle to the performance of their productive activities, which is relatively high by international comparison (see Figure 4.1).

According to the recent Survey of Adult Skills, a product of the Programme for the International Assessment of Adult Competencies (PIAAC) data, in Kazakhstan over 25% of workers feel that they are over-qualified for their tasks, while 10% feel they are under-qualified. Accordingly, almost 35% of workers feel that the tasks that they carry out do not match their level of qualification (see Figure 4.2, Panel A). In addition, the available data show that there are significant skills mismatches by field of study in Kazakhstan. About 40% of workers have a job that is not relevant to their education (see Figure 4.2, Panel B), which is relatively high, compared to the OECD average.

These mismatches result in substantial earning losses for individuals. On average, across the sample of OECD countries for which PIAAC data are available, over-qualified workers earn about 17% less than well-matched workers in the same field and who have the same qualification and proficiency levels. At 19%, in Kazakhstan, the wage penalty for over-qualified workers is somewhat higher. The equivalent wage penalty for OECD countries for over-skilling is 7% and that for field-of-study mismatch is 3%, compared to 4% and 5% for Kazakhstan, respectively (see Figure 4.3) (OECD, 2019[2]).

Building an effective skills information system is crucial for the development of a wide set of policies to help reduce the above-mentioned imbalances. Policy makers can use information generated by the SIS to improve the responsiveness of the education and training system to labour market needs, including by better tailoring the limited funding available. These efforts can be combined with better dissemination of information among students and jobseekers. Better exposure to information on labour market and skills needs can help steer individuals towards career and learning options in high demand in the labour market.

Figure 4.1. Percentage of firms that identify low skill levels as a major constraint in Kazakhstan and selected countries, 2019 or nearest available year



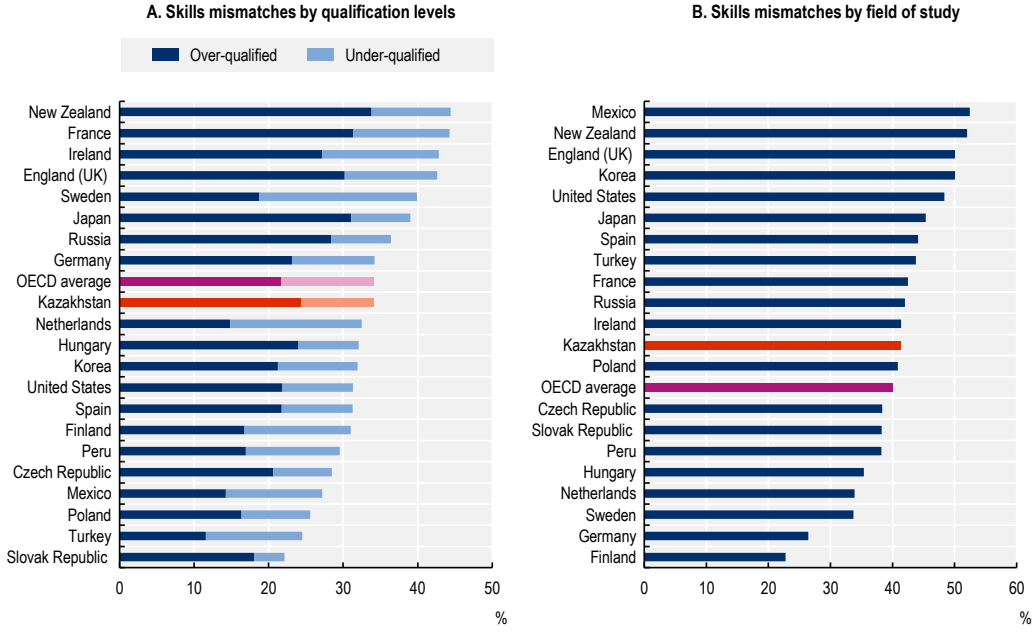
Note: Data for Italy, Kazakhstan, Kyrgyzstan, the Russian Federation (hereafter "Russia"), Turkey and Uzbekistan refer to 2019; Greece to 2018; Sweden to 2014; the Czech Republic, Estonia, Hungary, Poland, the Slovak Republic, Slovenia and Ukraine to 2013; the People's Republic of China (hereafter "China") to 2012; and Chile and Mexico to 2010.

The sample for the Russian Federation does not include the population of the Moscow municipal area. The data published, therefore, do not represent the entire resident population aged 16-65 in the Russian Federation but rather the population of the Russian Federation excluding the population residing in the Moscow municipal area.

Source: OECD calculations based on World Bank data (2019[6]), *Enterprise Surveys*, http://enterprisesurveys.org/en/enterprisesurveys.

StatLink https://doi.org/10.1787/888934233739

Figure 4.2. Skills mismatches in Kazakhstan and selected countries



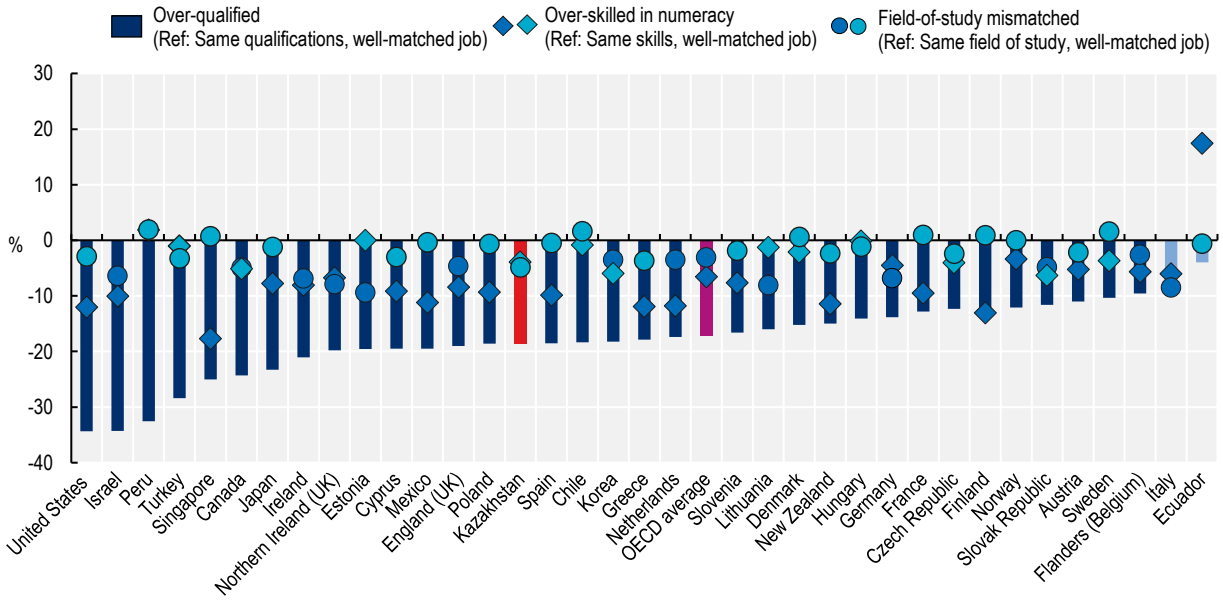
Note: For PIAAC data from Russia see the note under Figure 4.1.

Source: OECD calculations based on data from OECD (2019[7]), *Survey of Adult Skills (PIAAC, 2012, 2015, 2018)*, http://www.oecd.org/skills/piaac/data/.

StatLink https://doi.org/10.1787/888934233758

Figure 4.3. Impact of mismatches in qualifications, numeracy and field of study on wages

Percentage difference in wages between over-qualified, over-skilled or field-of-study mismatched workers and their well-matched counterparts



Note: Coefficients from ordinary least squares regression of log hourly wages on mismatch directly interpreted as percentage effects on wages. Coefficients adjusted for years of education, age, gender, marital status, working experience, tenure, foreign-born status, establishment size, contract type, hours worked, public sector dummy, proficiency in numeracy and numeracy use at work. The wage distribution was trimmed to eliminate the 1st and 99th percentiles. The regression sample includes only employees. Statistically significant values (at the 5% level) are shown in a darker tone.

Source: OECD calculations based on data from OECD (2019[7]), *Survey of Adult Skills (PIAAC) (2012, 2015, 2018)*, http://www.oecd.org/skills/piaac/data/.

StatLink https://doi.org/10.1787/888934233777

Opportunities to build an effective skills information system

This section describes three opportunities to strengthen the skills information system in Kazakhstan. The selection is based on input from literature, desk research, discussions with Kazakhstan's national project team, discussions with stakeholders in workshops in Nur-Sultan and Almaty, as well as virtual meetings involving more than 100 stakeholders. In light of this evidence, the following opportunities are considered to be the most relevant for the specific context in Kazakhstan to build an effective skills information system:

- Opportunity 1: Strengthening skills assessment and anticipation tools
- Opportunity 2: Creating an enabling environment for an effective skills information system
- Opportunity 3: Enhancing the use of skills information to inform policy making and stakeholders' choices.

Opportunity 1: Strengthening skills assessment and anticipation tools

Rigorous analytical methodologies and instruments underpinning SAA tools are key to producing reliable, informative and relevant information on current and future skill needs. To maximise the utilisation of skills analysis, it is important to ensure that skills assessment and anticipation results are not only reliable and up-to-date but also relevant to the needs of different users (OECD, 2016[1]). However, as foreshadowed in the performance section, Kazakhstan has so far struggled in developing robust SAA tools. Building on

these insights, this opportunity aims to provide recommendations on how to strengthen the skills assessment and anticipation exercises through two policy directions, as follows.

Strengthening skills assessment and anticipation methodologies to better identify and support immediate skills and job-matching needs

Both quantitative and qualitative SAA methodologies are used in Kazakhstan. While the MLSPP focusses on quantitative SAA methodologies through the NSLFF, the Atlas of New Profession includes a qualitative approach. The results of discussions with experts in the field are collected into surveys identifying labour market trends, pressing challenges and upcoming skills opportunities and future skills needs. The Atlas of New Profession's foresight approach builds on the International Labour Organization (ILO)'s methodological framework. Groups of experts from different sectors (mining and metallurgy; oil and gas; energy; agriculture; construction; machine building; information technology; transport and logistics; tourism) engage in a dialogue and develop a conceptual vision of future skills needs. Stakeholders consulted during the OECD Skills Strategy project signalled that there are ongoing discussions within the MLSPP to improve SAA methodologies and further increase their coverage and frequency. Going forward, these discussions could benefit from redoubling efforts in two areas.

First, Kazakhstan should further refine and expand existing SAA tools. It is more important than ever to update skills information regularly and frequently to best respond to the current economic crisis, and track their responses to the ensuing recovery. As mentioned earlier, the COVID-19 pandemic, as well as ongoing digitalisation, have had a significant and rapid impact on skills demand and supply in the labour market (see Chapter 1). To make progress on tracking labour market and skills needs, Kazakhstan should consider reinforcing regional and sectoral skills analysis. This could involve mapping and consolidating existing SAA exercises and evidence in the country. For example, the MLSPP could consolidate evidence from sector associations, which, as discussed in the performance section, do not currently share their results publicly.

Reinforcing regional and sectoral SAA tools could also contribute to strengthening skills assessment and anticipation in the longer term. In effect, since labour market mobility often occurs within sectors or regions, mismatches and shortages observed in one region or level may not exist in others. Conversely, national-level assessments or aggregate data may sometimes overlook specific skills needs in a particular region or sector (Shah and Burke, 2005[8]). Breaking down skills analysis could be particularly important to countries with large regional differences and territorial coverages, such as Kazakhstan.

To strengthen its quantitative analytical tools, Kazakhstan could also take inspiration from the OECD Skills for Jobs indicators and methodology (see Box 4.2). These indicators have strengthened the evidence base on skills shortages and skills mismatches in numerous OECD countries and emerging economies (e.g. Malaysia and Thailand). They provide an overview of relative shortages and surpluses for skills and abilities in the labour market and measure skills mismatches through qualification and field-of-study mismatch indicators.

Furthermore, Kazakhstan could improve the robustness of the SAA results from the NSLFF by combining quantitative and qualitative approaches. Previous studies highlight the importance of adopting an integrated approach for measuring current or future skills needs in order to achieve robust and reliable skills analysis results. Countries generally apply a range of quantitative and qualitative methodologies to infer current or future skills needs, including (but not restricted to) macro-level forecasts, sectoral studies, questionnaires to employers and regional surveys on employment (CEDEFOP, 2008[9]). Making use of both quantitative and qualitative data helps to achieve robust and reliable results as each methodology has different advantages and disadvantages.

Qualitative information may help overcome certain shortcomings of quantitative approaches. For instance, quantitative forecast-based skills projections tend to be comprehensive, but they often fail to produce

granular results to effectively inform the choices of employers, students and jobseekers. Furthermore, collecting detailed and reliable quantitative data could be demanding and costly. Quantitative data, such as wages and hours of work, could lack reliability as they tend to be under-reported for certain occupations/sectors with high levels of informality. Analysis based on employer surveys can be easier to carry out, but it implies higher risks of leading to partial results, reflecting subjective replies, selection biases and low response rates. Qualitative analysis methods based on focus group discussions, Delphi style methods, and scenario developments allow for the consideration of a broader range of factors than just economic factors, although results may again be subjective (OECD, 2016[1]).

To exploit complementarities, many countries use quantitative and qualitative approaches in combination, rather than as substitutes (OECD, 2016[1]). This seems to be particularly appealing to emerging economies, which, much like Kazakhstan, have limited quantitative data and rapidly changing labour markets (ILO, 2017[10]). However, the synergies between the quantitative and qualitative SAA methodologies remain largely unexploited. To make progress in this respect, Kazakhstan could learn from the experiences of several OECD countries, such as Sweden (see Box 4.2).

More broadly, Kazakhstan could also benefit from "big data" approaches to monitor changes to skills needs in real time. For instance, analysing changes in online vacancies can be useful to monitor labour market demand, especially in the case of unforeseen shocks, such as that induced by the COVID-19 pandemic.

Box 4.2. Relevant international examples: Strengthening skills assessment tools to better identify and support immediate skills and job-matching needs

OECD Skills for Jobs indicators: Shortages, surpluses and mismatches

To analyse the degree of skill shortages and surpluses in countries' labour markets, the Skills for Jobs methodology uses five sub-indicators to detect occupational shortage/surplus pressure: 1) employment growth; 2) hours worked growth; 3) unemployment rate; 4) change in the share of under-qualified workers; and 5) hourly wage growth. For each occupation, the long-run trends of these indicators are measured relative to economy-wide trends. The five indicators are aggregated into a final occupational shortage index. To gain an understanding of the actual skills that are in shortage or surplus (rather than the occupations), the occupational shortage indicator is translated into a skills need indicator by using information on skills requirements by occupation (from the US Department of Labour's O*NET database). The final skills needs indicator shows the degree of shortage or surplus for a wide range of skills, abilities and knowledge types.

Skills for Jobs also computes qualification and field-of-study mismatch indicators, measuring the misalignment between a worker's occupation and his/her qualification level and field of study, respectively. Workers are said to be under-qualified when their highest educational attainment is below the usually observed qualification level in the worker's occupation. In the opposite case, when a worker's qualification level is above the standard qualification level in his/her occupation, the worker is over-qualified. Similarly, a worker is mismatched in terms of field of study when the field of study of his/her highest attained qualification does not match the field generally required in the worker's occupation.

Combining quantitative and qualitative data sources in SAA tools

Several OECD countries have worked to combine quantitative and qualitative data sources, systemically, in the same exercise. Common quantitative sources of information include analyses of labour market information (e.g. flows in and out of employment by occupation and sector, trends in wages by occupation, trends in hours worked by occupation, etc.), vacancy surveys, employer surveys, surveys of recent graduates and administrative data (e.g. data on enrolments in, and graduation from, various levels of education). Qualitative inputs include the information provided by sector skills councils and sector studies in foresight exercises. They also include Delphi methods, which, through iterative and anonymous participation from experts, allow for reaching convergence on possible future scenarios.

In **Sweden**, enriching quantitative information with qualitative insights about trends and labour market dynamics is key to the Swedish National Institute of Economic Research's (Konjunkturinstitutet, NIER) approach to skills anticipation. NIER conducts a monthly survey of more than 6 000 businesses to capture sentiments in the Swedish economy. Many questions are future-oriented, touching on softer concepts such as employment strategies or hiring expectations. The purpose is to provide policy makers and stakeholders with an early indication of future trends, some of which would probably not show up in more traditional econometric forecasting models. This information feeds into the more quantitative skills anticipation exercise.

Source: Adapted from OECD (2017[11]), *Getting Skills Right: Skills for Jobs Indicators*, https://dx.doi.org/10.1787/9789264277878-en; UKCES (2010[12]), *Skills for Jobs: Today and Tomorrow*, https://www.gov.uk/government/publications/skills-for-jobs-today-and-tomorrow; Konjunktur Institutet (2018[13]), *User Guide to the Economic Tendency Survey*, https://www.konj.se/download/18.5d694bf9162f539b6bb421ae/1524654654064/Konjunkturbarometern-april-2018.pdf.; CEDEFOP (2017[14]), *Skills Anticipation in Sweden*, https://skillspanorama.cedefop.europa.eu/en/analytical_highlights/skillsanticipation-sweden.

Recommendations for strengthening skills assessment and anticipation methodologies to better identify and support immediate skills and job-matching needs

3.1. **Carry out a stocktaking analysis of existing SAA tools.** The MLSPP and WDC should build a comprehensive inventory of existing SAA tools, especially at the regional and sectoral level, and analyse advantages and disadvantages to identify gaps in knowledge, possible pitfalls in co-ordination and opportunities to strengthen their methodologies. Changes are being planned by the MLSPP and WDC in this direction. Building on the results of this inventory, the MLSPP and WDC could introduce additional regional/sectoral forecasts and quantitative SAA tools building on the OECD Skills for Jobs indicator. The stocktaking analysis could also benefit from the feedback of the inter-ministerial working group on skills and labour market information (see the following section).

3.2. **Adopt an integrated approach by combining qualitative and quantitative methods to achieve robust skills analysis results.** Building on the results of the stocktaking analysis, WDC and other skills research institutes could work to combine quantitative and qualitative methods in one exercise, for example by using macro-level forecasts, sectoral studies, job postings data, questionnaires to employers and regional surveys on employment. The MLSPP and WDC could analyse skills using diverse sources, including employer surveys and skills anticipation exercises, in a co-ordinated way. It is advisable to use both forecast and foresight techniques for skills anticipation (e.g. as in the case of Sweden's NIER).

Producing skills assessment and anticipation results that are more relevant to end users

In many cases, information on skills needs fails to fulfil the key objective of informing choices for policy makers, individuals and social partners. Bringing anticipation exercises closer to the needs and requirements of the end users is difficult in any country (OECD, 2016[1]). Including the voices of all relevant stakeholders in the skills assessment and anticipation process is key to ensuring that SAA exercises define and measure skills in a way that can inform and influence the decision-making sphere. For example, for education and training providers, information about trends for specific occupations may not translate directly into the specific skills and courses or fields of study being promoted (OECD, 2016[1]).

Kazakhstan has considerable room for improvement on this front. For example, the MLSPP could conduct more consultations with the governmental and non-governmental stakeholders to understand their needs and align the design of SAA tools with the expected uses. Several participants in the workshops and meetings during the OECD Skills Strategy project noted that there is limited dialogue when it comes to the production of SAA tools among relevant governmental stakeholders, including the MLSPP, the Ministry of Education and Science (MOES) and regional authorities. Similarly limited is the dialogue among the MLSPP and non-governmental stakeholders, such as educational institutions and employer representatives. This is consistent with the findings regarding other policy areas addressed in this review, such as adult learning (see Chapter 3) and the assessment and monitoring of skills policies (see Chapter 5).

In addition to supporting the design and development of user-relevant SAA tools, engaging stakeholders could also contribute to increasing trust in the SAA results and relevant decision making. Stakeholders would be more likely to support the results of the analysis and their usefulness if they were involved in the process of developing the tools.

Chapter 5 discusses the possibility of establishing an inter-ministerial working group on skills and labour market information to promote co-operation and co-ordination in the production and dissemination of information on skills and the labour market. This body could play a prominent role in gathering feedback from relevant stakeholders on the existing skills assessment and anticipation tools to ensure that they are relevant to the needs of different users. In turn, this could also increase trust in the SAA results. Kazakhstan could take inspiration from OECD country examples, such as Estonia and France, to understand how to promote effective dialogue within the inter-ministerial working group (see Box 4.3).

Box 4.3. Relevant international examples: Producing skills assessment and anticipation results that are more relevant to end users

Consolidation and dissemination of SAA tools: Examples from Estonia and France

A variety of mechanisms have proven successful in helping to produce SAA tools relevant to the needs of end users, including working groups (e.g. the inter-ministerial skills working groups in the United States) or roundtables with specific objectives and timelines (e.g. collaboration across regional/sub-regional administrative levels in the Netherlands). Sector skills councils (e.g. in Canada, the Czech Republic and the United Kingdom) and independent bodies such as national skills advisory groups (e.g. in Denmark, Finland and Germany) can also assist stakeholders in providing relevant information.

Estonia introduced two laws in 2015 to improve the governance of skills anticipation. The new arrangement established that the System of Labour Market Monitoring and Future Skills Forecasting (Oskuste Arendamise koordinatsioonisüsteem, OSKA) provides skill forecasts in five sectors every year. Based on quantitative forecasts and qualitative insights developed by sectoral expert panels, the OSKA Co-ordination Council publishes a yearly analysis of labour market trends and skills needs. Representatives from employers and trade unions are involved in the co-ordination council that oversees OSKA, alongside ministries and the Estonian unemployment insurance fund. Education providers are also involved in sectoral expert panels, while experts from universities and professional associations sit on the OSKA Panel of Advisers (a body guiding methodological discussion and reflection). The whole system is administered and developed by the Estonian Qualifications Authority (Kutsekoda) and is co-funded by the European Social Fund. The OSKA Co-ordination Council publishes the main findings by sector on a portal (https://oska.kutsekoda.ee/) and issues recommendations for policy makers, educational institutions and employers.

In **France**, Strategy France (France Stratégie), a government think-tank, is developing an Employment Skills Network (Réseau Emploi Compétences, REC) to better co-ordinate various skills analysis exercises results from different actors. It engages with a variety of stakeholders, including the Prime Minister's Office and the research branch of the Ministry of Labour (France Stratégie, DARES); regional observatories (Observatoire Régional Emploi Formation, OREF); the Public Employment Service (Pôle Emploi); sectoral observatories; and employer organisations (e.g. Mouvement des Entreprises de France (MEDEF)'s Tendance Emploi Compétence).

Source: OECD (2016[1]), *Getting Skills Right: Assessing and Anticipating Changing Skill Needs*, http://dx.doi.org/10.1787/9789264252073OECD; OECD (2019[15]), *Getting Skills Right: Creating Responsive Adult Learning Systems*, www.oecd.org/employment/emp/adult-learning-systems-2019.pdf; OECD (2020[16]), *OECD Skills Strategy Slovak Republic: Assessment and Recommendations*, https://doi.org/10.1787/bb688e68-en.

Recommendations for producing skills assessment and anticipation results that are more relevant to end users

3.3. **Promote dialogue among relevant ministries, sectoral and regional experts throughout the process of production of SAA tools.** The MLSPP can continue to play a central role in producing skills analysis. The proposed inter-ministerial working group on skills and labour market information (see Chapter 5) could become a forum to promote dialogue on SAA tools, both between the MLSPP and MOES, as well as multiple stakeholders such as regional and sectoral experts. Through clear and pre-established procedures, the inter-ministerial working group on skills and labour market information could provide a platform to aggregate feedback from diverse stakeholders. It is important to ensure that sufficient region- or sector-specific input and feedback are received across relevant ministries and regional or sectoral experts to produce detailed and relevant skills analysis results.

Opportunity 2: Creating an enabling environment for an effective skills information system

Creating an enabling environment is crucial to establish and operate an effective skills information system. Importantly, this requires access to timely and high-quality labour market and skills data. Without prompt

and secure access to such data, it becomes difficult for researchers and policy makers, for example, to evaluate the impact of skills policies, generate new evidence to inform policy development or carry out SAA exercises. However, data per se will not suffice. They need to be processed and analysed to generate meaningful insights. This depends on having human resources with abundant knowledge and skills in qualitative and quantitative data analysis. As foreshadowed in the performance section, Kazakhstan has so far struggled across both dimensions. To create an enabling environment for an effective SIS, Kazakhstan could therefore undertake two policy directions, as follows.

Improving the quality and accessibility of data on skills and the labour market

A wide range of data is important for research and analysis on skills policies. Useful data typically include skills, labour market and education data, such as, for example, flows in and out of employment by occupation and sector, trends in wages by occupation, information on career and learning opportunities (see Chapter 3) and enrolments in and graduation from various levels of education. These data can come in different types, each with different advantages and disadvantages (see Table 4.1). Reliable and consistent data series from household and business surveys and administrative records generally make an important contribution. Qualitative data can enrich the evidence base, for example, by addressing problems and concerns more subtly and in greater depth.

Table 4.1. Type and characteristics of labour market and skills data

Type of data	Advantages	Disadvantages
Surveys of evidence addressing employers and other groups, such as households, for example, and asking questions about employment and pay levels, filled and unfilled vacancies, etc.	Direct user and customer involvement, focuses on how people behave, not on what they say or perceive	May be problematic in getting responses, need large samples to get robust data, therefore could be expensive
Surveys of opinion, directed at employers and other groups, asking questions about skill deficiencies and skill gaps, among others	Direct user and customer involvement, allows more direct skills measuring	May be subjective and inconsistent, may focus too much on the marginal and ephemeral
Administrative data, such as tax records, pension fund data, enrolments and graduation data from various levels of education	Useful to achieve complete coverage of the target population and entail relatively lower cost in data production	Lack of common identifier in records for the reconciliation of data
Interviews and related techniques	May be able to address problems and concerns more subtly and in greater depth	May be unrepresentative
Workshops	Useful mechanism for exchanging views	Can provide a partial view
Other informal contacts	Useful mechanism for exchanging views	May be anecdotal and not grounded in reality

Source: Kriechel, B., T. Rasovec and R. Wilson (2016[17]), "Part B: Skills Forecasts", https://doi.org/10.2816/376143; ILO (2017[10]), *Skills Needs Anticipation*, https://www.ilo.org/skills/areas/skills-training-for-poverty-reduction/WCMS_616207/lang--en/index.htm.

As described in the current arrangements section, in Kazakhstan, like in many other countries, the Bureau of National Statistics and the public employment services (PES) contribute through the compilation of regular labour force surveys, household and census statistical surveys, and vacancy and jobseeker data. The PES also oversee the *Enbek* digital platform, which is a rich database that houses data from the employers and jobseekers registered at employment centres. The Electronic Labour Market Exchange platform accumulates vacancy information from both state and private hiring agencies and online platforms. It has information about jobseekers, their qualifications, youth who are not in employment, education or training (NEET), members of young families, large families with multiple children close to poverty levels, people with disabilities and other vulnerable groups receiving financial assistance. There have been efforts to integrate the *Enbek* platform with other government platforms, such as the enterprises database and the pension system, for example. Although the benefits of these efforts are potentially important for long-term forecasting, which require longer data time series and microdata sources, the timeline for finalisation of the integration process remains unknown, at the time of writing.

More broadly, there is a general perception, including within the MLSPP and WDC, that insufficient coverage, frequency and continuity of data collection in Kazakhstan are key obstacles preventing research on skills and the labour market, including the realisation of robust SAA. It was noted that the skills, labour market and education data from statistical surveys are not collected systematically and do not include sufficient and in-depth information on the socio-demographic characteristics of respondents. For example, the current labour force survey or employer survey questionnaires do not include questions on disability status or work satisfaction, making it difficult to analyse labour conditions and develop evidence-based policies for specific groups of people. In addition, there are no comprehensive data on participation in formal and informal training by adults, which limits the capacity to assess gaps in the adult learning supply (see Chapter 3). The OECD requested data about adult learning opportunities in the country but did not receive them as they do not seem to be gathered at present.

The frequency and continuity of data collection could be further strengthened. Several surveys cannot be updated on a regular basis, reflecting a lack of funding, which undermines the relevance and continuity of information available. For example, the annual employer survey that the MLSPP and WDC launched in 2015 to collect data to assess short-term skills needs was discontinued after the third round (in 2017). Subsequently, NCE took over this responsibility and launched a large employer survey in 2019. However, it remains uncertain whether there will be other rounds in the future. Such discontinuity in data collection hampers building time-series data, which limits the available scope of the research to generate long-term skills forecasts and analyse labour market trends and prospects.

Once data are collected, it is crucial to facilitate access so that relevant research institutes and bodies can utilise them (see Box 4.4). Stakeholders consulted during the OECD Skills Strategy project stressed that in Kazakhstan, there is limited access to the microdata relevant to research on skills and labour market issues (e.g. LFS, business surveys and household surveys). The researchers who can apply to access the microdata must be affiliated to a limited number of eligible research organisations. Their special requests must undergo a cumbersome administrative acceptance process, which can take up to six months. Many countries face challenges to facilitate access to microdata, as they are often subject to a range of legal and technical restrictions: binding data user agreements, data confidentiality and non-disclosure rules, unavailability of “safe rooms” for hosting confidential data in user organisations, etc. In order to overcome these barriers and facilitate the use of large survey and administrative datasets administered by national authorities (i.e. national statistical offices, ministries, administrations), a number of OECD countries are reflecting on and implementing functional models to centralise the storage of large datasets, ensure data confidentiality and provide remote access to a large user community (see Box 4.4).

Box 4.4. Relevant international examples: Improving the quality and accessibility of data on skills and the labour market

Labour market information collection: An example from the Netherlands

Skills assessment in the **Netherlands** includes various instruments and data sources, such as surveys from statistical offices, other surveys that are conducted with graduates entering the labour market, and administrative data from PES, the education ministry and social security insurance contributions. Various bodies and skills councils contribute qualitative (and additional quantitative) material to assist in understanding detailed problems. Long and medium-term forecasting models assess skills imbalances by detailed occupation and qualification (a combination of field and level) using survey data. There are also tracer studies of all major training programmes that elicit school-to-work transitions from recent graduates (one to two years after graduation). Several sector studies are also conducted within the same organisation. The PES generate several short-term, specific labour market forecasts and analyses, including vacancies. Within sector councils, ministries and tripartite policy groups, labour market or education and training system responses are discussed and incorporated into recommendations.

Improving access to research data: Examples from Sweden, the United Kingdom and France

In **Sweden**, digital services and application programming interfaces (APIs) facilitate access to labour market statistical information. The ambition of the Swedish Government's digital agenda is to improve conditions for the reuse of public information from government agencies for both commercial and non-profit purposes. Companies and private individuals have access to Statistics Sweden's statistics. A large part of this information is available for use in new products and digital services developed by third parties. Data from Statistics Sweden's Statistical Database can be digitally transferred via an API, allowing the use of tables or selected information from Statistics Sweden's Statistical Database to build applications for smartphones or new web services.

The UK Data Service is a national data service, hosted by the University of Essex in the **United Kingdom (UK)**. It provides access for research to data collected by UK government departments and other agencies. It gives free access to all researchers and students, government analysts, business consultants and data analysts, non-governmental organisations, international organisations, think-tanks, and so on. There are currently more than 6 000 datasets available from a variety of sources, such as UK census data; government surveys such as the Labour Force Survey, the Annual Population Survey (APS), the Health Survey and the Time Use Survey; longitudinal datasets such as the British Household Panel Survey (BHPS) and Understanding Society; cross-national surveys such as the European Social Survey and Eurobarometer; business microdata, etc. Access to the data catalogue, documentation and guides are available free of charge. Registration is required to download data, and its use is subject to licensing requirements specified by data owners.

In **France**, the Centre d'Accès Sécurisé aux Données (CASD) functions as a trusted third party for the secure provision of data and for data matching. It is a public interest group composed of the National Statistical Office (INSEE), research and academic institutions. The main purpose of CASD is to organise and implement secure services to access confidential data for non-profit research, study, evaluation or innovation, activities described as "research services", mainly public. Its mission is also to promote technological development to improve secure access to data in the private sector. Secure and equitable access is provided to accredited data users, allowing for advanced processing and analysis. An SD-Box with biometric access control provides remote access to the secure infrastructure where confidential data is stored in a so-called "secure bubble". More than 336 data sources are available at CASD. They cover: 1) public data sources – surveys conducted by INSEE, research institutions, ministries, tax and administrative data; 2) health data on public and private hospital stays and health cohorts; 3) private sector data from partner companies looking to increase the security of their data through external access.

Source: ILO (2017[10]), *Skills Needs Anticipation: System and Approaches,* https://www.ilo.org/skills/areas/skills-training-for-poverty-reduction/WCMS_616207/lang--en/index.htm; ONS (2019[18]), *Accessing secure research data as an accredited researcher*, www.ons.gov.uk/aboutus/whatwedo/statistics/requestingstatistics/approvedresearcherscheme#becoming-an-approved-researcherthrough-the-ons-approved-researcher-scheme; CBS (2019[19]), *Microdata: Conducting your own research*, www.cbs.nl/en-gb/ourservices/customised-services-microdata/microdata-conducting-your-own-research.

Recommendations for improving the quality and accessibility of data on skills and the labour market

3.4. **Improve the frequency and coverage of quality data on skills and labour markets by strengthening statistical surveys and expanding administrative data collection.** The Bureau of National Statistics should improve the level of detail and coverage of statistical surveys. This could be done by improving questionnaire designs in the surveys of evidence addressing employers and households, for example, asking questions about employment and pay levels, filled and unfilled vacancies, expanding the number of indicators, exploring new sampling criteria and classification and increasing frequency. To complement data from statistical surveys, the Bureau of National Statistics could also expand administrative data collection, such as tax records, pension fund data, and data on enrolment and graduation from various levels of education. The Bureau of National Statistics, in co-operation with the proposed inter-ministerial working group on skills and labour market information (see Chapter 5) could be responsible for monitoring that all organisations and institutions (e.g. providers of adult education and training) who receive public funding submit data to the government.

3.5. **Strengthen access to microdata in a secure way, for instance, by gathering anonymised datasets in a centralised digital portal.** The Bureau of National Statistics should simplify procedures for policy makers and external researchers who would like to access microdata in a secure way. It could consider developing a secure, centralised portal (e.g. as in the United Kingdom), where external researchers and policy makers can access anonymised data, pending a registration procedure. The Bureau of National Statistics could also establish an independent centre (e.g. as in France) to supervise the secure provision of data and for data matching.

Developing the human resources needed to build an effective skills information system

Developing human resources and technical capacity to understand, process and manage data is as important as improving the quality and accessibility of available datasets. Without competent human resources with sufficient knowledge in qualitative and quantitative data management, it is not possible to take full advantage of available data to exploit meaningful insights and information (ILO, 2017[10]).

In Kazakhstan, the lack of well-trained human capital stands out among the factors that prevent effective exploitation of available data on skills and the labour market (World Bank, 2015[20]). As discussed in the previous section, the Electronic Labour Market Exchange platform contains substantial information on vacancies and jobseeker characteristics. However, World Bank research suggests that such information is under-used and rarely analysed at the regional or national level, because of insufficient knowledge and skills among researchers and policy makers (World Bank, 2015[20]). This view appears to have been corroborated by remarks from several stakeholders consulted during the OECD Skills Strategy project who stressed that the capacity to manage granular skills and labour market data is limited in Kazakhstan. Many stakeholders considered that the lack of well-trained and experienced professionals is a significant barrier hindering the development of a reliable SIS. Moreover, according to stakeholders, not many students are aware of career and training opportunities to become data analysts, economists or statisticians, resulting in an insufficient number of professionals in the field.

Kazakhstan is not the only country in this situation. According to the ILO, the lack of human resources with relevant knowledge and expertise explains the bulk of the observed limited capacity of low- and middle-income countries to generate skills and labour market information – with more than three-quarters of the

countries in the sample experiencing such a problem (ILO, 2017[10]). Several OECD countries, such as Estonia, Ireland, Portugal, the Slovak Republic, have also identified the lack of human resources as a main constraint to carrying out SAA exercises and analysis of skills and labour market policies (OECD, 2016[1]).

Going forward, Kazakhstan should provide adequate training opportunities to policy makers and researchers involved in processing and analysing data on the labour market and skills, for example, for producing skills assessment and anticipation tools. Kazakhstan could possibly design short courses targeting policy makers, as the London Schools of Economics has done in the United Kingdom (see Box 4.5). It could also do more to raise the awareness of young people of the importance of undertaking studies in fields relevant to the processing and analysis of data on labour market and skills, such as economics, mathematics or statistics. Kazakhstan might be inspired by France and Korea to make further progress in increasing the number of its skills analysis professionals (see Box 4.5).

Box 4.5. Relevant international examples: Developing the human resources needed to build an effective skills information system

Training courses to develop practical skills for analysing public policy: An example from the United Kingdom

In the **United Kingdom**, the London School of Economics and Political Science (LSE) provides a Public Policy Analysis online certificate course, which combines research, theory and practice. Developed by LSE's School of Public Policy, which is the LSE's centre for public policy training, it provides knowledge on core elements of the public policy process and analytical frameworks for analysing the success and failure of policy. Furthermore, the courses help develop practical skills and techniques and an understanding of the quantitative tools and research methodologies available to conduct evidence-based policy analysis.

Improving curricula to deliver new skills and technologies: Examples from France and Korea

In **France**, the implementation of a skills-based curriculum by the École Centrale de Lyon was initially challenged by existing conceptions about curricula in the sector. It is thanks to the support of other local engineering schools interested in their information technology (IT) skills referential that the model has gained ground. Similarly, the compatibility of the online laboratories of Amrita University with the Indian National Curriculum and the review of its contents by relevant authorities are a major factor supporting their large-scale adoption. One common barrier to the adoption of new teaching models or resources lies in the lack of professional development, including both formal teacher training and peer learning. Even at the development stage, providing professional development is a key factor for success for the successful implementation of a teaching model.

In **Korea**, the revised national curriculum reinforces software education to enhance students' capacity in a creativity-based society. It emphasises the development of computational thinking, coding skills, and creative expression through software. To ensure that teachers can effectively deliver the revised curriculum a plan was developed to provide 60 000 elementary school teachers (30% of the total) with specialised training in software education. In addition, 1 800 middle school teachers who are certified to teach IT/computing will receive additional training.

Source: LSE (2020[21]), *Public Policy Analysis: Online Certificate Course,* https://cdn.www.getsmarter.com/uploads/course/info_pack/173/lse-public-policy-analysis-online-certificate-course-prospectus.pdf; OECD (2018[22]), "A brave new world: Technology and education", https://doi.org/10.1787/9b181d3c-en.

Recommendations for developing the human resources needed to build an effective skills information system

3.6. **Provide adequate training opportunities to key actors, including policy makers and researchers involved in processing and analysing data on skills and the labour market.** The Government of Kazakhstan should ensure that policy makers and researchers have access to high-quality re-skilling and up-skilling opportunities relevant to processing and analysing data on labour market and skills, such as economics, mathematics, statistics and statistical modelling. The Government of Kazakhstan should support the development of up-to-date training materials, and ensure that training and educational environments are equipped with necessary information and information and communication technology (ICT) devices to effectively transfer knowledge and build necessary skills.

3.7. **Raise the attractiveness of careers related to the analysis of labour market and skills data, by improving the quality of the learning environment and offering financial incentives to prospective tertiary students.** The MOES should consider improving curricula in secondary schools (e.g. as in Korea) and universities (e.g. as in France) to raise the attractiveness of fields such as economics, mathematics and statistics. The MLSPP, in collaboration with the MOES, should also consider offering subsidies and scholarships to attract competent prospective tertiary students to such fields, while providing sufficient information about the potential and benefits of related careers. This could be done by increasing student access to career guidance (see Opportunity 3 below).

Opportunity 3: Enhancing the use of skills information to inform policy making and stakeholders' choices

Although the information from a skills information system should be disseminated across a variety of users, reaching this broad audience requires adequate communication channels (e.g. an online portal and/or seminars) and tailoring the information to the target audience. Career guidance could play an important role in providing information on skills demands as well as on training and learning opportunities. It could help individuals make informed career decisions. However, according to stakeholders consulted during the OECD Skills Strategy project, Kazakhstan has so far struggled in both areas. To enhance the use of skills information in decision making, Kazakhstan could explore two policy directions, as follows.

Promoting sufficient dissemination of skills and labour market information among all relevant audiences

Users have different reasons and purposes for using skills information. For instance, policy makers might use skills and labour market information to design and evaluate policies, while education and training institutions can use them to better align their programmes. On the other hand, students, adult learners and career guidance services could use such information to ensure that choices about learning and careers are aligned with labour market demand (OECD, 2019[23]).

However, several participants in the workshops and meetings held during the OECD Skills Strategy project noted that the dissemination of skills information in Kazakhstan is fragmented and not always tailored to the needs of different users. To maximise its utilisation, skills and labour market information should be disseminated among potential users in a way that is relevant and easily understood. For example, in many cases, the presentation of skills information from skills assessment and anticipation exercises can be too technical and hard to understand for non-experts (OECD, 2016[1]).

Achieving these objectives requires the support of accessible channels of communication. Although the Electronic Labour Market Exchange platform, which connects private, online, job-matching portals, provides public access to the results of SAA exercises as well as information on job vacancies and learning opportunities, several stakeholders stressed that many potentially interested users are not aware of the existence of the platform and do not know where to find the information. This happens, reportedly, despite the fact that there is a strong consensus that skill, labour market and educational information play a positive role in informing policies, the identification of programmes and individual choices.

Accordingly, Kazakhstan could do more to reinforce dissemination to reach out to the public. In addition to the publishing of reports and posting the information on dedicated websites, efforts may be made to expand the recourse to public media (radio, TV, newspapers and magazines) and social platforms. Efforts might also include the expansion of online and offline channels, such as webinars, seminars and conferences. Kazakhstan can draw inspiration from the dissemination practices of OECD countries (see Box 4.6).

At the same time, there seems to be scope for ministries and social partners in Kazakhstan to play a more proactive role as facilitators. The proposed inter-ministerial working group on skills and labour market information discussed in Chapter 5 could play a key role in providing a relevant forum to empower the MLSPP and WDC to discuss how to develop diverse communication and awareness mechanisms to improve information dissemination.

Box 4.6. Relevant international examples: Promoting sufficient dissemination of skills and labour market information among all relevant audiences

Disseminating information to a wider audience: Examples from Poland, Bulgaria and Sweden

In **Poland**, the main tool for forecasting, the Study of Human Capital (BKL), includes a clear dissemination strategy, using structured steps and mechanisms, defined by a specific budget line. The annual reports are uploaded on the BKL website and are further supported by cycles of national conferences and regional seminars, which target multiple stakeholders. BKL experts participate in employment committees by playing an advisory role. PES officials are actively involved in the analysis that BKL carries out.

In **Bulgaria**, the new system for forecasting workforce demand encompasses a formal "Mechanism for including the results of forecasts in developing and implementing government policies". It identifies competent institutions interested in the results of the forecasts and sets out clear and transparent guidelines for dissemination. Users and their institutions are encouraged to provide regular feedback and recommendations, taking into account their experience with using forecasting results for policy formulation and implementation. The Ministry of Labour uses this feedback to review and improve its forecasting methods.

In **Sweden**, both Statistics Sweden and public employment services are actively involved in the preparation and dissemination of SAA results. Statistics Sweden promotes regular publications and reports to keep the wider public and researchers up to date with developments in the Swedish labour and skills markets. Conferences and seminars are also organised to enhance the diffusion of skills assessment and anticipation information. The Prognosdag (Forecast Day) is an important event that takes place every third year that gathers a variety of stakeholders (e.g. national ministries, agencies and researchers) to discuss new forecasts on skills and the labour market. The PES is also in contact with the National Agency for Education to build bridges with education providers to disseminate SAA information.

Source: European Commission (2015[24]), *Skills Governance in the EU Member States*, https://ec.europa.eu/social/BlobServlet?docId=15587&langId=en; OECD (2016[25]), *Getting Skills Right: Sweden*, http://dx.doi.org/10.1787/9789264265479-en.

Recommendations for promoting sufficient dissemination of skills and labour market information among all relevant audiences

3.8. **Develop diverse communication and awareness mechanisms to reach out to all relevant users.** The MLSPP and WDC could go beyond publishing reports and posting information on the Electronic Labour Market Exchange platform and vacancy banks, by promoting wider distribution through the use of public media (radio, TV, newspapers and magazines) and social platforms. To broaden the audience and ensure those with limited access to digital devices are also included, dissemination could be promoted via both online and offline channels, e.g. by organising webinars, conferences, seminars and workshops on a regular basis. The proposed inter-ministerial working group on skills and labour market information (see Chapter 5) could become a relevant forum for discussion to allow the MLSPP and WDC to gather feedback on how to develop diverse communication and awareness mechanisms across different groups.

3.9. **Tailor the presentation of the information to the needs of a diverse audience in order to ensure relevance.** The MLSPP and WDC should take an extra step to interpret the skills information and explain their implications in clear and simple terms that non-professionals can understand. Following these efforts, the MLSPP and WDC in collaboration with the inter-ministerial working group on skills and labour market information (see Chapter 5), could prepare a tailored dissemination strategy, mapping information (e.g. short-term information on labour market needs vs. longer-term trends) and channels (e.g. online portals vs. seminars) to different users (e.g. businesses, educational institutions, labour and policy leaders). Monitoring mechanisms are also required to ensure that the dissemination strategy produces desirable outcomes.

Using skills information to support career guidance services

Effective career guidance information could play an essential role in helping individuals make informed career and educational decisions that privilege skills and professions that are currently in high demand or are expected to emerge (European Commission, 2015[24]).

However, recent analysis by the Friedrich Ebert Foundation has stressed that career guidance is insufficient in Kazakhstan, which poses concerns, particularly with respect to the young generations. For example, in 2016, almost 75% of 19-year-olds and 60% of young people aged 24-25 years in Kazakhstan relied on their parents for their career decisions (Friedrich Ebert Foundation Kazakhstan, 2016[26]). As youth do not have sufficient information about the jobs that are in high demand and evolving skills demands, more generally, they have no choice but to rely on their close networks, mainly relatives and friends, whose perspectives are often based on anecdotal evidence and personal bias. Similarly, adults who have already joined the labour force find it difficult to access independent career advice in Kazakhstan, according to evidence gathered during the OECD Skills Strategy project.

Stakeholders consulted during the project also confirmed that in Kazakhstan, existing career guidance services do not take into account the findings of skills assessment and anticipation exercises. Although there is growing awareness across universities, colleges and individuals that many professions are declining, and possibly disappearing soon, few actions have been taken to introduce better career guidance.

In Kazakhstan, career guidance services are provided mainly by employment centres and private employment agencies. Although schools normally do not provide career guidance, Kazakhstan has several career guidance platforms in place, including one called Edunavigator (www.edunvavigator.kz), which helps high-school students discover their talents and choose their career paths. The platform includes a questionnaire to assist students in their efforts to narrow their areas of interest. Furthermore, it provides information on relevant training courses and internship opportunities in the professions that match students' interests and competencies. However, the platform focuses. for the most part, on the student's interests and capabilities, with little consideration given to evolving labour market trends, changing skills demand and availability of learning or education opportunities.

In OECD countries, it is relatively common to have information on study and training opportunities and skills and labour market trends on the same portal, to facilitate access to comprehensive information. This allows jobseekers, students and their families to more easily assess the advantages and disadvantages of different study and training options, along with career prospects, allowing them to make informed choices on their career and educational paths. Kazakhstan might be inspired by how a few OECD countries have designed information portals that rely on consolidated skills assessment and anticipation exercises (see Box 4.7).

The promotion of regular interactions between local authorities, chambers of commerce and schools would be important to ensure that the data related to skills demand and supply are used to develop more dynamic and up-to-date guidance tools that students and their families can trust (OECD, 2016[25]). This could materialise in the creation of stakeholder forums, of which Estonia provides an interesting example. Since 2010, Estonia uses a National Career Guidance Forum to gather together various stakeholders, including policy makers from relevant ministries (the Ministry of Social Affairs, the Ministry of Education and Research and the Ministry of Economic Affairs and Communications), practitioners and other target groups. The forum aims to ensure that career guidance services are provided in a co-operative and co-ordinated manner (European Commission, 2015[24]).

Box 4.7. Relevant international examples: Using skills information to support career guidance services

Informative career guidance systems for students and adults: Examples from Denmark, Canada, Poland, the United Kingdom and Lithuania

In **Denmark**, the Education Guide web portal offers a wealth of information to both youth and adults on education and training opportunities, jobs and professions, labour market conditions and statistics, and study programmes taught in English. The service also includes guidance materials and activities, which are accessible through a combination of channels, including online chat, phone, webinars, email services and social media interaction. The support of professional counsellors ensures that the services provided are personalised to take into account the profile and needs of each client. In addition, there is an online tool, Uddannelseszoom (education zoom) for students to make informed decisions about the course they choose to study at the tertiary education level. Uddannelseszoom links labour market outcomes to specific qualifications, allowing students to more actively consider career prospects when choosing where and what to study. The information provided to students includes unemployment levels, average pay, whether the qualification equipped previous graduates with the correct skills for their career, and how they got their first job after leaving education. The information is based on skills analysis results that monitor graduate outcomes. The Ministry of Education and Research has overseen the project since its launch in 2015, and the tool is continuously updated as new statistics become available. The Ministry of Higher Education and Science launched a media campaign just ahead of the deadline for higher education applications. It sought to encourage students to take labour market outcomes from Uddannelseszoom into consideration when making their choices.

In **Canada**, the Department of Employment and Social Development has centralised the dissemination of labour market information and skills assessment on a single platform (Job Bank). The users can access tailored information according to their interests and experience. The platform has been modernised to provide quality job-matching services along with detailed and timely labour market information. Job Bank has recently created a section with guidance on how to look for a job since the COVID-19 crisis. It also includes up-to-date sector-specific information about job vacancies during the pandemic.

In **Poland**, prospective tertiary graduates can use the ELA-Nauka portal to inform their university choice. This portal is the main tool to distribute key results from the Polish graduate tracking database. It provides infographics on what graduates are doing (further study, in work, unemployed, etc.) and can be sorted by subject area. It also ranks individual courses by area, such as total salary, the risk of being unemployed and time taken to find a job. Similar to the Danish Uddannelseszoom, students can directly compare specific programmes. Regular summaries are published to convey key trends and findings and, in order to increase engagement, the portal can be accessed both on line and via a dedicated app on the App Store and Google Play. A more detailed website – ELA Pro – provides statistical summaries, reports and the methodology behind the rankings.

In the **United Kingdom**, the online data portal, LMI for All, connects existing sources of high-quality, reliable labour market information (LMI) to individual clients with the aim to inform their career decisions. The information is freely available through a single portal or via an application (API). The UK Commission for Employment and Skills (UKCES) is the entity responsible for the portal.

In **Lithuania**, the main national web portal, AIKOS, provides information, guidance and counselling to students, employees and employers. It disseminates information on education and training programmes, as well as on education and employment statistics (vacancies, unemployed persons).

Source: CEDEFOP (2016[27]), *Labour Market Information and Guidance*, https://www.cedefop.europa.eu/files/5555_en.pdf; Government of Canada (2021[28]), *Job Bank*, www.jobbank.gc.ca/home; OECD (2016[1]), *Getting Skills Right: Assessing and Anticipation Changing Skills Need,* https://dx.doi.org/10.1787/9789264252073-en; European Commission (2015[24]), *Skills Governance in the EU Member States*, https://ec.europa.eu/social/BlobServlet?docId=15587&langId=en; OECD (2017[29]), *In-Depth Analysis of the Labour Market Relevance and Outcomes of Higher Education Systems: Analytical Framework and Country Practices Report,* oecd.org/education/skills-beyond-school/LMRO%20Report.pdf; Danish Ministry of Education and Research (2019[30]), *Uddannelseszoom Portal*, www.ug.dk/vaerktoej/uddannelseszoom; Polish Ministry of Science and Higher Education (2019[31]), *ELA Portal*, https://ela.nauka.gov.pl.

Recommendations for using skills information to support career guidance services

3.10. Introduce a consolidated portal to provide individuals with access to information on skills needs, labour market trends and the availability of study/work opportunities. The proposed inter-ministerial working group on skills and labour market information (see Chapter 5), in collaboration with the MLSPP, could consider creating a single portal that has comprehensive information on labour market demand as well as career and study opportunities. For example, the Electronic Labour Market Exchange platform could be interlinked with other career guidance platforms (e.g. Edunavigator) to facilitate collaboration and information exchange. This will allow students and jobseekers to access integrated information that they need to make informed and unbiased career decisions. The platform should include up-to-date information about relevant training programmes (e.g. as in Denmark and Portugal), labour market developments in the aftermath of the COVID-19 crisis (e.g. as in Canada) and recommendations for developing skills and looking for a job effectively.

3.11. Organise a career guidance forum to gather various stakeholders to ensure career guidance is provided in a co-operative manner, based on skills analysis of current and future skills needs. The proposed inter-ministerial working group on skills and labour market information (see Chapter 5), in collaboration with the MOES and the MLSPP, could guide the formation of a forum to promote regular interactions between local authorities, chambers of commerce and educational institutions. They could encourage policy makers from relevant ministries, practitioners and other target groups to participate in the forum, for example, by providing incentives to participate or raising awareness about its importance.

Summary of policy recommendations

Table 4.2 summarises the recommendations for this chapter. Based on feedback from stakeholders and from the national project team, three recommendations have been selected that could be considered to have the highest priority based on potential impact and relevance in the current Kazakhstan context. To build an effective skills information system, the OECD recommends that Kazakhstan should:

- Adopt an integrated approach by combining qualitative and quantitative methods to achieve robust skills analysis results (Recommendation 3.2).
- Improve the frequency and coverage of quality data on skills and labour markets by strengthening statistical surveys and expanding administrative data collection (Recommendation 3.4).
- Introduce a consolidated portal to provide all individuals with access to information on skills needs, labour market trends and the availability of study/work opportunities (Recommendation 3.10).

Table 4.2. High-level overview of recommendations to build an effective skills information system in Kazakhstan

Policy directions	Recommendations	Responsible parties
Opportunity 1: Strengthening skills assessment and anticipation tools		
Strengthening skills assessment and anticipation methodologies to better identify and support skills and job-matching needs	3.1. Carry out a stocktaking analysis of existing SAA tools.	• MLSPP • WDC
	3.2. Adopt an integrated approach by combining qualitative and quantitative methods to achieve robust skills analysis results.	• MLSPP • WDC
Producing skills assessment and anticipation results that are more relevant to end users	3.3. Promote dialogue among relevant ministries, sectoral and regional experts throughout the process of production of SAA tools.	• MLSPP • Inter-ministerial working group on skills and labour market information (see Chapter 5)
Opportunity 2: Creating an enabling environment for an effective skills information system		
Improving the quality and accessibility of data on skills and the labour market	3.4. Improve the frequency and coverage of quality data on skills and labour markets by strengthening statistical surveys and expanding administrative data collection.	• Bureau of National Statistics
	3.5. Strengthen access to microdata in a secure way, for instance, by gathering anonymised datasets in a centralised digital portal.	• Bureau of National Statistics
Developing the human resources needed to build an effective skills information system	3.6. Provide adequate training opportunities to key actors, including policy makers and researchers involved in processing and analysing data on skills and the labour market.	• Government of Kazakhstan
	3.7. Raise the attractiveness of careers related to the analysis of labour market and skills data, by improving the quality of the learning environment and offering financial incentives to prospective tertiary students.	• MOES • MLSPP
Opportunity 3: Enhancing the use of skills information to inform policy making and stakeholders' choices		
Promoting sufficient dissemination of skills and labour market information among all relevant audiences	3.8. Develop diverse communication and awareness mechanisms to reach out to all relevant users.	• MLSPP • WDC • Inter-ministerial working group on skills and labour market information (see Chapter 5)
	3.9. Tailor the presentation of the information to the needs of a diverse audience in order to ensure relevance.	• MLSPP • WDC • Inter-ministerial working group on skills and labour market information (see Chapter 5)
Using skills information to support career guidance services	3.10. Introduce a consolidated portal to provide all individuals with access to information on skills needs, labour market trends and the availability of study/work opportunities.	• Inter-ministerial working group on skills and labour market information (see Chapter 5) • MLSPP
	3.11. Organise career guidance forum to gather various stakeholders to ensure career guidance is provided in a co-operative manner, based on skills analysis of current and future skills needs.	• Inter-ministerial working group on skills and labour market information (see Chapter 5) • MOES • MLSPP

Note: MLSPP is the Ministry of Labour and Social Protection of Population; WDC is the Workforce Development Centre; and MOES is the Ministry of Education and Science.

References

CBS (2019), *Microdata: Conducting your own research*, http://www.cbs.nl/en-gb/ourservices/customised-services-microdata/microdata-conducting-your-own-research. [19]

CEDEFOP (2017), *Skills Anticipation in Sweden*, Cedefop, Luxembourg, https://skillspanorama.cedefop.europa.eu/en/analytical_highlights/skillsanticipation-sweden. [14]

CEDEFOP (2016), *Labour Market Information and Guidance*, Cedefop, Luxembourg, https://www.cedefop.europa.eu/files/5555_en.pdf. [27]

CEDEFOP (2008), "Systems for Anticipation of Skill Needs in the EU Member States", https://www.cedefop.europa.eu/files/WorkingPaper01_Oct2008.pdf. [9]

Danish Ministry of Education and Research (2019), *Uddannelseszoom Portal*, http://www.ug.dk/vaerktoej/uddannelseszoom. [30]

European Commission (2015), *Skills Governance in the EU Member States*, European Commission, Brussels, https://ec.europa.eu/social/BlobServlet?docId=15587&langId=en. [24]

Friedrich Ebert Foundation Kazakhstan (2016), *Youth in Central Asia: Kazakhstan*, https://library.fes.de/pdf-files/bueros/kasachstan/13343.pdf. [26]

Government of Canada (2021), *Job Bank*, http://www.jobbank.gc.ca/home. [28]

ILO (2017), *Skill Needs Anticipation: Systems and Approaches - Analysis of Stakeholder Survey on Skill Needs Assessment and Anticipation*, ILO, Geneva, https://www.ilo.org/skills/areas/skills-training-for-poverty-reduction/WCMS_616207/lang--en/index.htm. [10]

Konjunktur Institutet (2018), *User Guide to the Economic Tendency Survey*, https://www.konj.se/download/18.5d694bf9162f539b6bb421ae/1524654654064/Konjunkturbarometern-april-2018.pdf. [13]

Kriechel, B., T. Rašovec and R. Wilson (2016), "Part B: Skills Forecasts", in *Developing Skills Foresights, Scenarios and Forecasts - Guide to Anticipating and Matching Skills and Jobs*, https://doi.org/10.2816/376143. [17]

LSE (2020), *Public Policy Analysis: Online Certificate Course*, https://cdn.www.getsmarter.com/uploads/course/info_pack/173/lse-public-policy-analysis-online-certificate-course-prospectus.pdf. [21]

Mavromaras, K., S. McGuinness and Y. Fok (2009), "Assessing the Incidence and Wage Effects of Overskilling in the Australian Labour Market", *The Economic Record*, Vol. 85/268, pp. 60-72, https://doi.org/10.1111/j.1475-4932.2008.00529.x. [3]

Montt, G. (2015), "The causes and consequences of field-of-study mismatch", *OECD Social, Employment and Migration Working Papers*, No. 167, OECD Publishing, Paris, https://doi.org/10.1787/5jrxm4dhv9r2-en. [4]

OECD (2020), *OECD Skills Strategy Slovak Republic: Assessment and Recommendations*, OECD Skills Studies, OECD Publishing, Paris, https://doi.org/10.1787/bb688e68-en. [16]

OECD (2019), *Getting Skills Right: Creating Responsive Adult Learning Systems*, OECD Publishing, Paris, https://www.oecd.org/els/emp/adult-learning-systems-2019.pdf. [15]

OECD (2019), *OECD Skills Strategy 2019: Skills to Shape a Better Future*, OECD Publishing, Paris, https://doi.org/10.1787/9789264313835-en. [23]

OECD (2019), *Skills Matter: Additional Results from the Survey of Adult Skills*, OECD Skills Studies, OECD Publishing, Paris, https://dx.doi.org/10.1787/1f029d8f-en. [2]

OECD (2019), *Survey of Adult Skills (PIAAC) (2012, 2015, 2019) (database)*, http://www.oecd.org/skills/piaac/data/. [7]

OECD (2018), "A brave new world: Technology and education"*, Trends Shaping Education Spotlights*, No. 15, OECD Publishing, Paris, https://doi.org/10.1787/9b181d3c-en. [22]

OECD (2017), *Getting Skills Right: Skills for Jobs Indicators*, Getting Skills Right, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264277878-en. [11]

OECD (2017), *In-Depth Analysis of the Labour Market Relevance and Outcomes of Higher Education Systems: Analytical Framework and Country Practices Report*, Enhancing Higher Education System Performance, OECD Publishing, Paris, http://www.oecd.org/education/skills-beyond-school/LMRO%20Report.pdf. [29]

OECD (2016), *Getting Skills Right: Assessing and Anticipating Changing Skill Needs*, Getting Skills Right, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264252073-en. [1]

OECD (2016), *Getting Skills Right: Sweden*, Getting Skills Right, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264265479-en. [25]

OECD (2016), *Skills Matter: Further Results from the Survey of Adult Skills*, OECD Skills Studies, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264258051-en. [5]

ONS (2019), *Accessing secure research data as an accredited researcher*, http://www.ons.gov.uk/aboutus/whatwedo/statistics/requestingstatistics/approvedresearcherscheme#becoming-an-approved-researcherthrough-the-ons-approved-researcher-scheme. [18]

Polish Ministry of Science and Higher Education (2019), *ELA Portal*, https://ela.nauka.gov.pl. [31]

Shah, C. and G. Burke (2005), "Skills Shortages: Concepts, Measurement and Policy Responses", *Australian Bulletin of Labour*, Vol. 31/1, https://dspace.flinders.edu.au/xmlui/handle/2328/27700 (accessed on 2 April 2019). [8]

UKCES (2010), *Skills for Jobs: Today and Tomorrow*, Vol. 2: Evidence Report, https://www.gov.uk/government/publications/skills-for-jobs-today-and-tomorrow. [12]

World Bank (2019), *Enterprise Surveys*, http://enterprisesurveys.org/en/enterprisesurveys. [6]

World Bank (2015), *Skills and Jobs Project*, https://www.worldbank.org/en/news/loans-credits/2015/03/30/kazakhstan-skills-and-jobs-project. [20]

5 Strengthening the governance of the skills system in Kazakhstan

Effective governance arrangements are essential to support Kazakhstan in developing and using skills. The success of skills policies typically depends on the actions of a wide range of actors, including government bodies, employers, employees, their associations, education and training providers, representatives of civil society and local communities. Achieving this requires a whole-of-government approach, effective stakeholder engagement, integrated information systems and co-ordinated financing arrangements. This chapter explains the importance of strengthening the governance of the skills system and provides an overview of Kazakhstan's current practices and performance in this area. It then explores three opportunities to strengthen skills governance: strengthening co-ordination and co-operation across the whole of government; strengthening stakeholder engagement in skills policies; and better aligning and co-ordinating financing arrangements.

The importance of strengthening the governance of the skills system

Effective governance arrangements are central to effective skills policies and creating a resilient skills system. The skills policy priorities discussed in the previous chapters will only realise their full potential if accompanied by supportive governance arrangements. The policy responses to the economic crisis resulting from the coronavirus (COVID-19) pandemic also require strong governance arrangements, as many challenges of Kazakhstan's skills system might be exacerbated.

For the purpose of this chapter, skills policies refer to the set of measures to improve the development and use of skills throughout the life course. Policy areas related to the development of skills include compulsory schooling, vocational education and training (VET), higher education (HE), training for enterprises and adult learning opportunities. Policy areas related to the use of skills include activation policies, such as active labour market programmes (ALMPs) and policies to disseminate better management and work practices in workplaces.

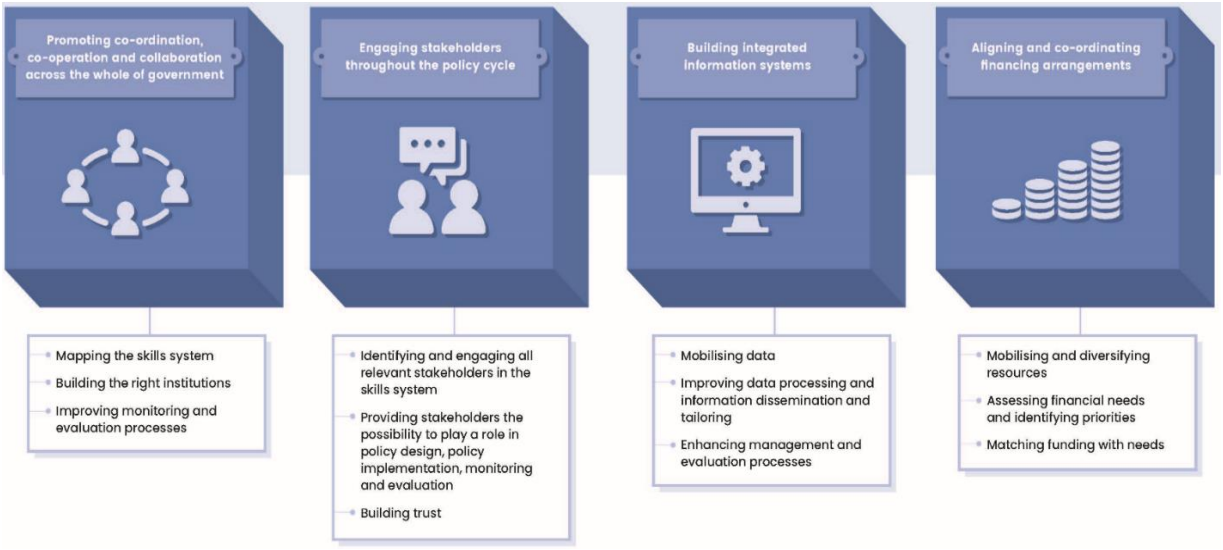
Skills policies contribute to societal as well as economic goals by both fostering economic development, as evidenced through key indicators like wages, productivity, growth and export performance, and reducing unemployment and wage inequality (OECD, 2020[1]).The governance of skills policies is therefore complex, involving a wide range of actors in the provision, financing, reform and day-to-day administration, from different levels of government to stakeholders such as employers, employees, their associations, education and training providers, representatives of civil society and local communities.

To manage their complex interactions, effective governance needs to be multilevel and agile. Multilevel governance involves creating a set of arrangements for making binding decisions that engage a multiplicity of interdependent actors at different levels of territorial aggregation through continuous negotiation, deliberation and implementation (Schmitter, Wiener and Diez, 2018[2]). Agile governance enables policy makers to rapidly gather input from a variety of stakeholders to design cross-cutting policy solutions (World Economic Forum, 2019[3]). The COVID-19 pandemic has highlighted the importance of having agile governance arrangements, as different ministries in Kazakhstan, as in other countries, have had to quickly design policies to solve shared challenges, such as supporting access to learning opportunities and skills activation. Agile governance arrangements will also prove crucial to increase the resilience of the skills system in the context of megatrends, such as digitalisation, by enabling Kazakhstan to rapidly adapt to new circumstances (World Economic Forum, 2019[3]).

The *OECD Skills Strategy 2019* (OECD, 2019[4]) identifies four pillars on which well-functioning governance arrangements are built (see Figure 5.1). These four pillars can be seen as enabling conditions for other skills policy areas (OECD, 2019[4]):

- The first pillar captures co-ordination across the whole of government (a "whole-of-government approach"). This includes "vertical" co-ordination between different levels of government as well as "horizontal" co-ordination between different departments of government that are either directly responsible for skills policy or impact on skills policies. It also captures whether horizontal and vertical co-ordination are supported by effective assessment and monitoring practices.
- The second pillar emphasises the importance of stakeholder engagement in skills policies. These non-governmental stakeholders include employers and their associations, trade unions as well as education and training providers, students, and the voluntary and community sector.
- The third pillar recognises that an integrated information system to assess (future) skills needs is necessary to cope with the inherent complexity and uncertainty present in skills policy.
- The final pillar captures the necessity of aligning and co-ordinating financing arrangements within skills policy.

Figure 5.1. The four pillars for strengthening the governance of skills policies



Source: OECD (2019[4]), *Skills Strategy 2019: Skills to Shape a Better Future*, https://dx.doi.org/10.1787/9789264313835-en.

Given its particular importance in Kazakhstan's context, building an effective skills information system is discussed separately in Chapter 4. This chapter focuses on the three remaining pillars: promoting co-ordination and co-operation across the whole of government; engaging stakeholders throughout the policy cycle; and aligning and co-ordinating financing arrangements. This chapter first provides an overview of Kazakhstan's skills governance system and performance across these three pillars. Subsequently, it identifies opportunities that can help Kazakhstan to strengthen the governance of its skills system, based on desk research and discussions with government and stakeholder representatives (participants) consulted during the OECD Skills Strategy project.

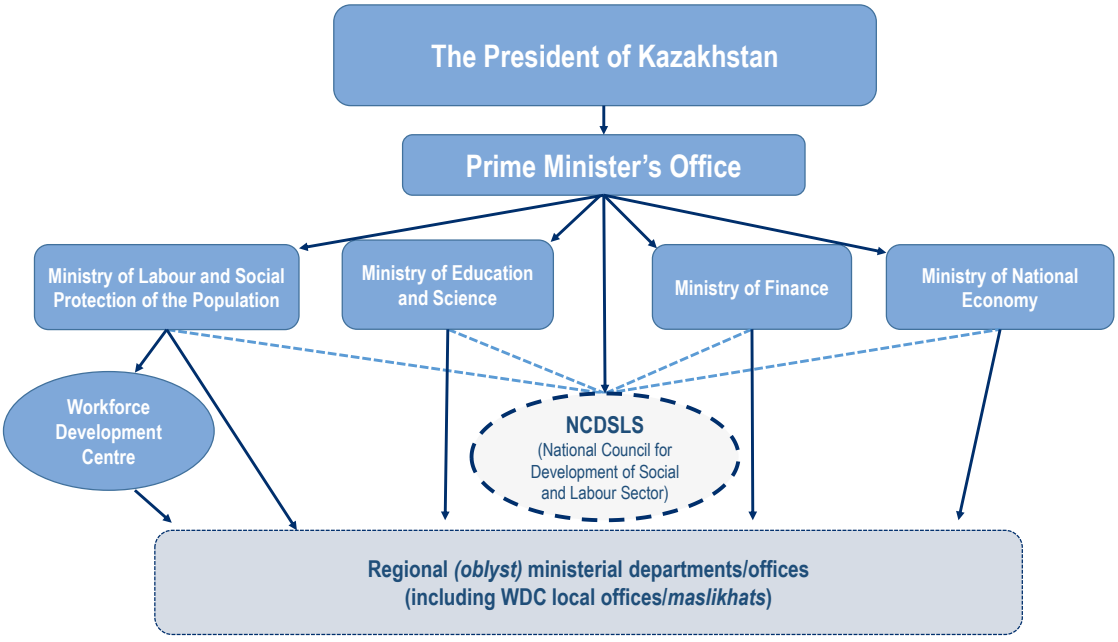
Kazakhstan's current arrangements and performance in the governance of its skills system

Current arrangements for the governance of skills policies

Promoting co-operation and collaboration across the whole of government

Several ministries and government bodies play a role in skills policies in Kazakhstan, as in OECD countries and other countries (see Figure 5.2). The direction of skills policies is set by the president and the government through the Prime Minister Office. As described in Chapter 2, the Ministry of Labour and Social Protection of the Population (MLSPP) leads national policy formulation related to skills activation through active labour market programmes. Within the MLSPP, the Workforce Development Centre (WDC) is in charge of providing information and analytical support for public policies to regulate the labour market and implement active measures to promote employment, methodological support for local employment authorities and employment centres. As discussed in Chapter 3, the Ministry of Education and Science (MOES) is responsible for implementing a unified state policy in the field of education, while the Ministry of National Economy (MNE) leads and co-ordinates policies to support industrial development, which can contribute to increasing the intensity of skills use in workplaces.

Figure 5.2. Overview of Kazakhstan's governmental bodies involved in skills policies



Note: Solid line arrows indicate the hierarchy of decision making within the skills system. For instance, the Prime Minister's Office sets policy priorities for the MLSPP and the MOES. Dotted lines indicate a mutual transfer of information between two bodies, which is required to achieve co-ordination and co-operation in policy making. For instance, all ministries participate in the National Council for Development of Social and Labour Sector (NCDSLS), feeding and receiving information that is important to align their policies.
Source: OECD elaboration based on legislative documents and OECD consultations in Kazakhstan.

The MLSPP supervises the design and implementation of the National Qualifications System (NQS) in co-operation with the MOES, other ministries and social partners. The Prime Minister Office is in charge of co-ordinating the development of the NQS through the National Council for Development of Social and Labour Sector (NCDSLS) established in December 2019, which is chaired by the deputy prime minister and includes vice ministers from all ministries. According to legislation, this council should also be responsible for co-ordination in the spheres of social protection of the population and in the development of the labour market.

As described in Chapter 1, the different ministries develop state programmes to deliver the objectives set by the president and the government through the Kazakhstan 2050 strategy. For instance, the MLSPP has taken the lead on the State Programme of Productive Employment and Mass Entrepreneurship Development 2017-2021 (*Enbek*) to promote skills activation, especially among vulnerable groups (see Chapter 2). The Ministry of Finance (MF) is responsible for funding the national programmes and for approving annual budgets related to education and skills policies. As well as implementing policies to support industrial development, the MNE co-ordinates the development of the state budget and oversees the co-ordination and monitoring of the national programmes.

At the local level, Kazakhstan is divided into 14 regions (*oblystar*), which are further split into 177 districts (*akimats*). Subnational authorities consist of local branches of the MLSPP and MOES and local representative bodies (*maslikhats*), and are mainly responsible for implementing policies as specified in the state programmes. The Kazakhstan 2050 strategy foresees the need to decentralise decision making from central to local government to improve accountability and better reflect regional differences. However, according to stakeholders, limited progress has been made on this decentralisation agenda.

Engaging stakeholders throughout the policy cycle

As in other countries, non-governmental stakeholders in Kazakhstan, such as representatives of civic society, employers and trade unions, play an important role in skills policies.

Since 2019, representatives from local communities, non-governmental organisations (NGOs) and media meet in the National Council of Public Trust to voice public opinion or to provide recommendations on ongoing reforms related to skills policy development, as well as other policy areas, at the presidential level.

The role of employers and trade unions in policy development is recognised in legislation. The National Chamber of Entrepreneurs (NCE or *Atameken*) accredits industry associations that can officially engage with government ministries on behalf of their members. These industry associations mainly represent the interests of large enterprises. According to the existing legislation, trade unions can engage in policy development by participating in consultations with government officials and employers at the national, regional and sectoral levels. At the national level, according to legislation, consultations on policy development should happen within the Tripartite Republican Commission, which includes no more than seven representatives of the Kazakhstan Government, trade unions and employers. Representatives from the NCE, the Federation of Trade Unions (FTU) and sectoral associations also sit in the recently established NCDSLS.

Employers play an important role in policy implementation, especially in vocational and education training (VET) and policies to promote entrepreneurship and skills use in enterprises. The NCE takes part in the accreditation of VET institutions, conducts independent qualification certification and plays an important role in the development of education materials and curricular framework for VET. The NCE also supports the MNE in the implementation of policies to promote innovation and growth by facilitating interactions between MNE and enterprises at the national and regional levels (see Chapter 3).

To strengthen employer involvement in the education and training system, Kazakhstan has taken two additional steps in the last few years. First, the MOES and MLSPP signed a memorandum of understanding with the NCE in 2014, which made it possible to establish dual education programmes and employer-led VET training centres and schools. Second, the Government of Kazakhstan has passed legislation to introduce public-private partnerships (PPPs), which have been found to be an effective way to facilitate co-operation between employers and educational institutions on skills development, especially in the case of VET and adult learning (ETF, 2020[5]). For the purpose of this report, PPPs indicate mechanisms for co-ordinating action and sharing responsibility between public and private stakeholders in skills, with a view to formulating, designing, financing, managing or sustaining engagements of common interest (ETF, 2020[5]). Kazakhstan's law on public-private partnership (with amendments and additions as of 3 April 2019) sets the rights and obligations of public and private partners, state regulation in the field of PPPs, forms of participation in PPPs, general provisions by definition of a private partner and features of legal regulation.

As in other countries, employers also play a crucial role in the development of the NQS (see Box 5.1 for a definition). As well as in the NCDSLS, employer representatives sit in the sector skills councils (SSCs), which are in charge of developing Sectoral Qualification Frameworks (SQFs). As in many other countries, Kazakhstan has developed a National Qualifications Framework (NQF) to help employers and other stakeholders develop SQFs, occupational standards and educational programmes. The NQF is aligned to the European Qualifications Framework (EQF) and includes eight levels. As in the EQF, outcomes are divided into three groups: knowledge, abilities, competencies and ability to describe theoretical knowledge; practical and technical skills; and social competencies.

Box 5.1. Defining the National Qualifications System

In the context of this report, the NQS refers to all the structures and activities that lead to the award of a qualification, including, among other things, comprehensive institutional arrangements. Such activities are related to recognition of learning outcomes and other mechanisms that link education and training to the labour market and civil society. Other activities of the NQF include the definition of qualification policy, training design and implementation, funding, quality assurance; assessment, validation and certification of learning outcomes. The NQF is an instrument for the development and classification of qualifications (e.g. at national or sectoral level) according to a set of criteria (e.g. using descriptors) applicable to specified levels of learning outcomes.

Source: Cedefop (2011[6]), *Glossary Quality in Education and Training*, https://www.cedefop.europa.eu/files/4106_en.pdf.

Aligning and co-ordinating financing arrangements

In Kazakhstan, public expenditure accounts for a substantial share of total expenditure on education policies. According to data from the World Bank, public expenditure accounted for 85% of spending on primary, secondary and tertiary education in 2018 (World Bank, 2020[7]). The allocations of public expenditure across different ministries are conducted through the Ministry of Finance's Budget Committee. The Budget Committee approves state and programme budgets (such as for *Enbek* programme) on an annual basis, with a three-year rolling forecast. For education policies, the MOES distributes the funding according to funding formulas and state grants, but the process differs across level of education, as in other countries. For primary, secondary and VET, the MOES distributes funding to local authorities, which then allocates it to the institutions. For tertiary education, the MOES distributes the funding directly to institutions through a funding formula and to students through state scholarships.

There is limited information on the financing of adult learning opportunities (see Chapter 3). As described in Chapters 2 and 3, the MLSPP funds the *Enbek* programme, which provides learning opportunities for vulnerable groups, such as the unemployed, workers younger than 29, self-employed and individuals with no formal education, whereas companies are responsible for organising their own training depending on the size and capacity of their business. Large firms, which account for more than 50% of total formal employment, often establish their own training centres to meet the sector's needs at their own expense, whereas smaller firms often struggle (see Chapter 3). As discussed in Chapter 2, local authorities receive funding from the MLSPP to implement ALMPs. The amount of the transfer is proportional to the size of the local active populations but is often adjusted to reflect specific regional development priorities.

Performance in the governance of its skills system

Promoting co-operation and collaboration across the whole of government

Effective horizontal and vertical co-operation and collaboration arrangements are crucial to ensure that countries develop and implement policies that are coherent, mutually reinforcing (i.e. complementary to each other) and sufficiently flexible to be able to deal with new challenges (OECD, 2020[1]). Even if effective collaboration and co-operation arrangements are in place, countries also need effective monitoring and evaluation mechanisms in place to assess the functioning of the skills system (OECD, 2020[1]).

Kazakhstan has room for improvement in both dimensions. First, as in other formerly centrally planned economies, Kazakhstan has inherited a top-down governance model that leaves little room for extensive horizontal co-ordination in policy development and implementation (OECD/The World Bank, 2015[8]; ETF, 2020[9]). In the last few years, there has been a transition towards a more inclusive governance model with

increasing exchange and dialogue among government ministries and between central and local government (UNESCO, 2020[10]). However, there are no systemic institutional arrangements to guide horizontal co-operation and collaboration on skills policies. Co-operation and collaboration seem to take place on an ad hoc basis through formal mechanisms such as memorandums, based on synergies created by certain projects or in the context of ambitious policy goals, such as the development of the dual VET system. The recent introduction of the NCDSLS could increase co-ordination and co-operation among ministries, but it will require some adjustments (see Opportunity 1). Similarly, there are no effective mechanisms for vertical co-ordination and co-operation between central and local government. This might help explain why some government programmes, such as the *Enbek* programme often fail to take into account the needs of more remote regions (see Chapters 2 and 3).

These insights are corroborated by the work of the European Training Foundation (ETF), which has undertaken considerable analysis on the governance of the VET system (ETF, 2019[11]). As part of its ongoing work with partner countries, ETF governance experts have assessed the strength of horizontal and vertical governance arrangements for the VET system for four countries in Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan). The ETF framework ranks the performance of countries across four categories: “low”, “medium”, “high” or “outstanding”. Kazakhstan scored medium on both dimensions, while the other three countries scored low. This suggests that, although Kazakhstan has considerable room for improving VET horizontal and vertical governance, it could still be considered as a leading performer in the region (ETF, 2019[11]).

Second, when it comes to assessment and monitoring practices, Kazakhstan has room for improvement. There are limited resources for the assessment and monitoring of government policies, and very few evaluations are carried out across the different areas of the skills system. As remarked in Chapter 2, evaluations on the impact of ALMPs are not common in Kazakhstan, making it difficult to understand which programmes deliver the best value for money. Similarly, there is limited evidence on the effectiveness of different adult learning programmes (see Chapter 3). The work by the ETF also confirms that the lack of systematic monitoring and assessment applies to VET policies (ETF, 2020[9]). Kazakhstan has also struggled in designing an effective system of quality assurance for non-formal educational institutions (see Chapter 3), schools, VET colleges and HE institutions (OECD, 2017[12]; ETF, 2020[9]; OECD, 2020[13]).

Engaging stakeholders throughout the policy cycle

Engaging non-governmental stakeholders is an effective instrument to support policy makers in dealing with the inherent complexities of skills policies. Stakeholders contribute valuable information to the development of skills policies that is difficult for policy makers to access themselves. For instance, non-government stakeholders have experience regarding the real-world effects of policies and regulations, which might be quite different from the steering effects that governmental policy makers initially intended (OECD, 2020[1]). Engaging stakeholders in policy development can also contribute to increased trust and transparency in decision making (OECD, 2020[1]). Stakeholders can then play an important role in supporting policy implementation. For example, employers can provide adult learning opportunities in the workplace (see Chapter 3) or apprenticeships to young people through dual education (OECD, 2020[1]).

Engaging non-governmental stakeholders, such as employers and trade unions, is particularly important to support the development of the NQS because they can provide information on what skills are required across different qualifications and occupations (ETF, 2017[14]). The analysis gathered by the OECD team suggests that Kazakhstan should better co-ordinate stakeholder engagement in the development of the NQS.

Fuelled by the need to develop high-quality qualifications that could meet labour market demand, Kazakhstan has made substantial progress in the development of the NQS over the past decade. With support from the World Bank, Kazakhstan launched projects for the targeted development of occupational standards, which led to the creation of around 36 SQFs (UNESCO Institute for Lifelong Learning, ETF and

Cedefop, 2015[15]). These SQFs have been consolidated into the national system, however the system is still fragmented and not yet fully utilised. This fragmentation contributes to weak linkages among the VET and HE sectors in the Kazakh NQF. The levels 6-8 form a sub-system managed by HE institutions, which are bound to implement the Qualifications Framework for the European Higher Education Area (QF-EHEA). This is necessary as Kazakhstan joined the Bologna process in 2011 (UNESCO Institute for Lifelong Learning, ETF and Cedefop, 2015[15]).

More broadly, Kazakhstan has the potential to improve stakeholder engagement throughout the policy cycle, both in policy development and implementation.

Kazakhstan has already made progress in strengthening stakeholder engagement in policy development in recent years (UNESCO, 2020[10]). It has made increasing use of dialogue and stakeholder co-operation practices, engaging civil society and citizens in public consultations (UNESCO, 2020[10]). For example, the National Council of Public Trust meets regularly to discuss ongoing reforms and offer new initiatives related to skills policies, as well as other policy areas. A meeting in June 2019 was focused on discussion around human capital development and further reformation of the education sector (Akorda, 2020[16]).

Employers and trade unions have also been increasingly active trying to shape the direction and implementation of skills policies. According to the consultations conducted by the OECD team during the OECD Skills Strategy project, the NCE has a strong reputation and is actively involved in the policy debate on developing and using skills. The OECD team also found that trade unions have a strong willingness and motivation to become more involved in the skills policy debate. For example, the latest strategy by the FTU places a strong emphasis on improving co-operation with government and employers in the development of the NQS and ensuring that education meets the needs of the labour market.

However, there seem to be two barriers to creating effective stakeholder engagement in policy development. First, the approach to stakeholder engagement to inform policy development needs to be more unified and systematic, especially in the case of employers and trade unions. Discussions with employers and trade unions seem to happen on an ad hoc basis, without a coherent and structured process. The recent introduction of the NCDSLS could provide a platform to engage employers and trade unions in policy development, but it will require some adjustments (see Opportunity 1). Second, policy makers in ministries need to collectively shift their mindsets when it comes to their understanding of the role of stakeholders and how best to engage with them. Specifically, they need to transition from viewing stakeholder perspectives as external demands that need to be managed to viewing them as contributions made in the common public interest. As well as generating better policy outcomes, this could also contribute to improving the transparency and accountability of skills policies, which has been signalled as an issue by many active stakeholders in the country.

When it comes to improving stakeholder engagement in policy implementation, Kazakhstan could strengthen employer involvement in the provision of VET and adult learning opportunities (see Chapter 3). As discussed in Chapter 3, large employers could strengthen the intensity of training and better incorporate foundational and soft skills in their training programmes, whereas more small and medium-sized enterprises (SMEs) could engage in training. In the case of VET, there is potential to expand the role of dual education. Following the memorandum of understanding signed in 2014, Kazakhstan has started to make progress in the implementation of the dual system of technical education. However, so far only 10% of VET students are enrolled on a dual track, which is still far from the objective of creating “a core of a national system of dual technical and professional education” stated in the Kazakhstan 2050 strategy (ETF, 2020[9]). PPPs could play an important role in making further progress in these two areas by offering a framework to organise co-operation between public and private actors (ETF, 2020[5]).

Aligning and co-ordinating financing arrangements

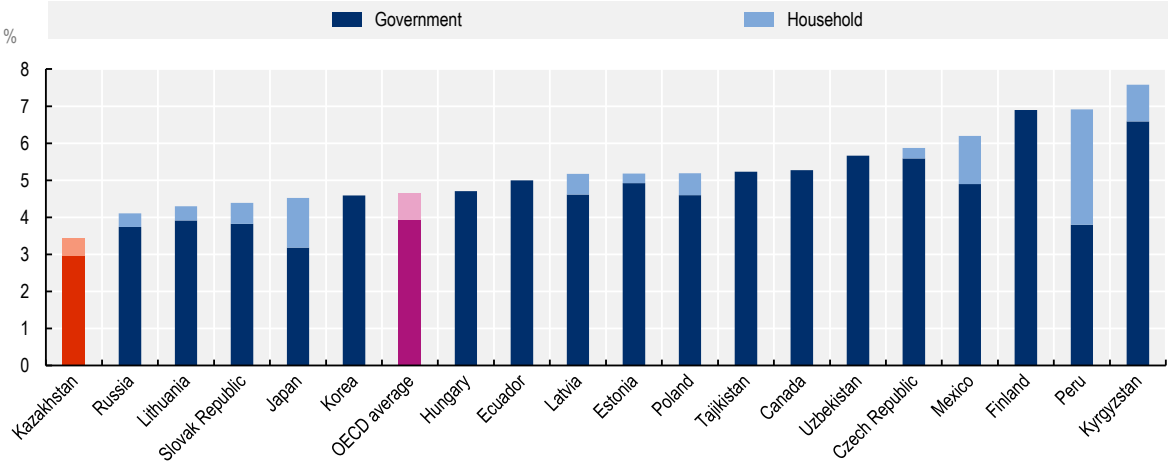
Aligning and co-ordinating financing arrangements is crucial for an effective skills policy. First, countries should provide adequate resources for skills policies by setting long-term budgetary goals and distributing

them effectively. When distributing these resources, they then need to bear in mind equity, as well as efficiency considerations. Second, countries should diversify financing arrangements by tapping into multiple sources of funding, for instance, from employers, to complement public funding raised from taxation (OECD, 2020[1]).

Kazakhstan does not seem to provide sufficient resources to primary, secondary and tertiary institutions when compared to neighbouring countries, other upper middle income countries and top-performing OECD countries (see Figure 5.3). According to World Bank data, Kazakhstan spends approximately 3.4% of its gross domestic product (GDP) on primary, secondary and tertiary education. This is below the OECD average (4.6%), neighbouring countries such as Uzbekistan (5.7%) and Tajikistan (5.2%) and upper middle income countries such as Mexico (6.2%) and Peru (6.9%). Across countries, there is substantial variation in the relative contributions from government and households. Kazakhstan seems to perform broadly around the average for spending by households, whereas government spending is below every country in the comparison group.

Figure 5.3. Financing of primary, secondary and tertiary education

Initial funding of education as a percentage of GDP, by source (2016 or latest available year)



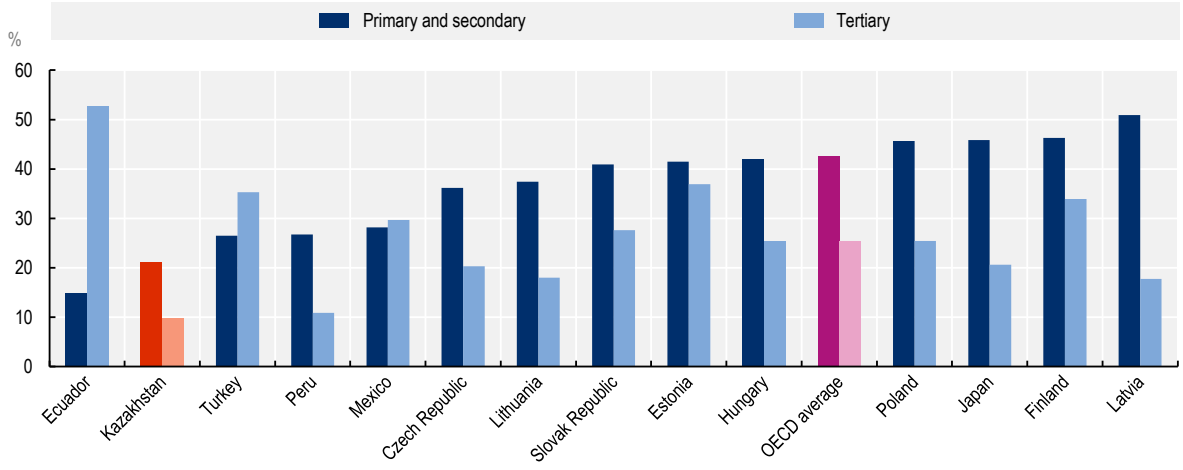
Note: The comparison group includes neighbouring countries (Kyrgyzstan, Tajikistan, Uzbekistan), upper middle income countries participating in the Survey of Adult Skills, a product of the Programme for the International Assessment of Adult Competencies (PIAAC) (Ecuador, Mexico, Peru, the Russian Federation [hereafter "Russia"] and Turkey), Eastern European countries (the four Visengrad countries and the three Baltic countries), and a few large economies that are top performers in the Programme for International Student Assessment (PISA) (Canada, Estonia, Finland, Japan and Korea).
For PIAAC data from Russia: The sample for the Russian Federation does not include the population of the Moscow municipal area. The data published, therefore, do not represent the entire resident population aged 16-65 in the Russian Federation but rather the population of the Russian Federation excluding the population residing in the Moscow municipal area.
For Ecuador and Tajikistan, data are from 2015; for Estonia, data on household are from 2015; for Canada, data are from 2011. Countries with no data on initial household funding are missing.
Source: OECD elaboration based on World Bank data (2020[7]), *Education Statistics - All Indicators*, https://databank.worldbank.org/source/education-statistics-%5e-all-indicators.

StatLink https://doi.org/10.1787/888934233796

This level of relative underspending on education also remains when government expenditure per student is used as a measure. Kazakhstan spends less per student (as percentage of GDP per capita) than the OECD average, neighbouring countries and upper middle income countries (excluding Ecuador), both across primary and secondary education, and tertiary education (see Figure 5.4).

Figure 5.4. Public financing of education across different education levels

Government expenditure per student, primary and secondary, and tertiary, as percentage of GDP per capita (2016 or latest available year)



Note: The comparison group includes upper middle income countries participating in the Survey of Adult Skills (PIAAC) (Ecuador, Mexico, Peru and Turkey), Eastern European countries (the four Visengrad countries and the three Baltic countries), and a few large economies that are top performers in PISA (Estonia, Finland and Japan).
For Ecuador, data are from 2014.
Source: OECD elaboration based on World Bank data, (2020[71]), *Education Statistics - All Indicators*, https://databank.worldbank.org/source/education-statistics-%5e-all-indicators.

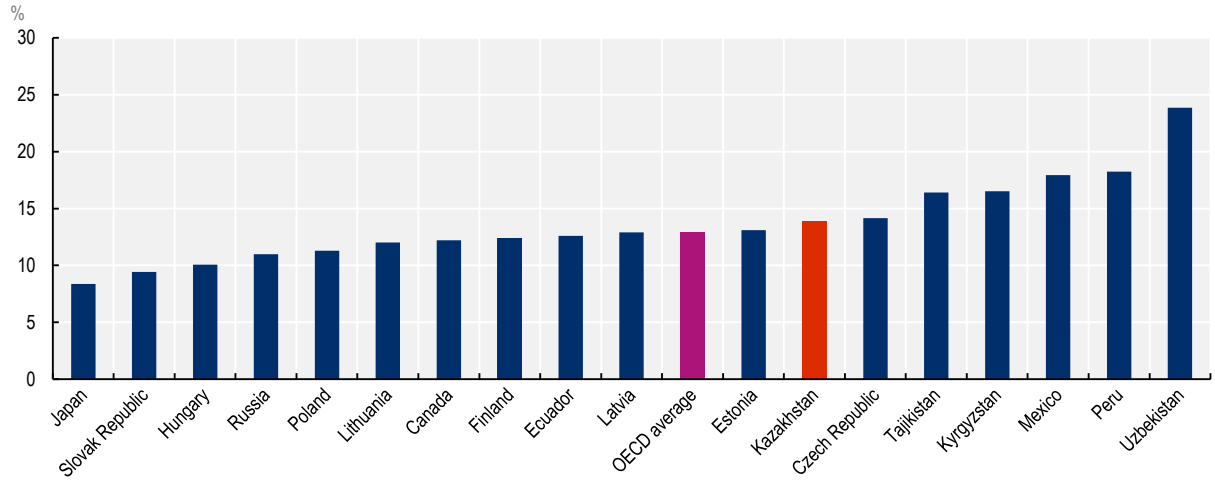
StatLink https://doi.org/10.1787/888934233815

When it comes to adult learning, as discussed in Chapter 3, the evidence is more limited. Across OECD countries, employers account for a large share of adult learning opportunities. The available evidence suggests that both large enterprises and SMEs under-invest in training, compared to upper middle income and OECD countries (see Chapter 3). Similarly, as described in Chapter 2, Kazakhstan seems to under-invest in ALMPs, especially in the provision of training opportunities.

Increasing the funding for skills policies will likely depend on tapping into multiple sources or raising additional tax revenues. Kazakhstan is already spending a substantial proportion of total government expenditure on primary, secondary and tertiary education (see Figure 5.5). This implies that there might be limited scope to shift resources away from other policy areas towards skills policies. To some extent, improving the funding for skills policies will depend on increasing financial contributions from employers by strengthening the use of financial incentive schemes. The evidence gathered during the OECD Skills Strategy project suggests that Kazakhstan is making limited use of financial incentives, such as tax deductions, subsidies and levies, which can help increase investment from employers on skills development.

Figure 5.5. Government expenditure on public education as a percentage of total expenditure

Total government expenditure on education, as percentage of government expenditure (2016 or latest available year)



Note: The comparison group includes neighbouring countries (Kyrgyzstan, Tajikistan, Uzbekistan), upper middle income countries participating in the Survey of Adult Skills (PIAAC) (Ecuador, Mexico, Peru and Russia), Eastern European countries (the four Visengrad countries and the three Baltic countries), and a few large economies that are top performers in PISA (Canada, Finland and Japan).
For Ecuador, data are from 2014; for Canada, data are from 2011; for Tajikistan, data are from 2015.
For PIAAC data from Russia, see the note under Figure 5.3.
Source: OECD elaboration based on World Bank data (2020[7]), *Education Statistics - All Indicators*, https://databank.worldbank.org/source/education-statistics-%5e-all-indicators.

StatLink https://doi.org/10.1787/888934233834

Opportunities to strengthen the governance of the skills system in Kazakhstan

This section describes three opportunities to strengthen the governance of the skills system in Kazakhstan. It is based on input from literature, desk research, discussions with Kazakhstan's national project team, discussions with stakeholders in workshops in Nur-Sultan and Almaty, as well as virtual meetings involving more than 100 stakeholders. In light of this evidence, the following opportunities are considered to be the most relevant for the specific context in Kazakhstan to strengthen the governance of its skills system:

- Opportunity 1: Strengthening co-ordination and co-operation across the whole of government
- Opportunity 2: Strengthening stakeholder engagement in skills policies
- Opportunity 3: Better aligning and co-ordinating financing arrangements.

Opportunity 1: Strengthening co-ordination and co-operation across the whole of government

Strong governance arrangements first require effective co-ordination and co-operation across the whole of government. As discussed in the performance section, horizontal co-ordination and co-operation on skills policies at the central government level in Kazakhstan are fragmented and tend to rely on formal mechanisms, such as memorandums. Kazakhstan has also faced difficulties in monitoring and evaluating the functioning of the skills system. Building on these findings, this opportunity first explores how to improve horizontal and vertical co-ordination and co-operation on skills policies. Then, it considers how Kazakhstan

can implement better monitoring and evaluation mechanisms, with regard to the effectiveness of skills policies and the quality of education and training institutions.

Improving co-operation and collaboration on skills policies

Ministers and government agencies in Kazakhstan have shown an increasing willingness to strengthen co-operation and collaboration in the design and implementation of skills policies. As seen in the description of current arrangements, for instance, the MLSPP and MOES have signed a memorandum to guide co-operation on the provision of VET. There has also been some progress in inter-ministerial collaboration in the development of the NQS (see Opportunity 2).

However, in at least three important skills policy areas, co-operation and collaboration are not in place. Adult learning policies are currently implemented in Kazakhstan by the MOES, the MLSPP and the MNE. The MOES is responsible for HE and VET, the MLSPP oversees training opportunities offered within active labour market policies, and the MNE and the NCE are responsible for training opportunities for SMEs (see Chapter 3). Large firms also play an important role by running private, stand-alone centres for their employees (see Chapter 3). There is currently no formal mechanism to guide co-operation and collaboration on adult learning policies, leading to potential duplication and unexploited synergies between different initiatives. The second area is the production and dissemination of information on labour market and skills, including information on current and future labour market needs from skills assessment and anticipation (SAA) exercises, as well as study and career opportunities for individuals (see Chapter 4). Currently, the production of SAA tools is under the responsibility of the MLSPP. According to stakeholders consulted during the missions, other governmental bodies that may require the use of forecasts to inform policy development, such as the MOES, are not involved in their governance and do not have access to the underlying data. Similarly, there is little co-ordination on strategies to disseminate information on the labour market and skills between the MLSPP, the MOES and other relevant governmental actors, such as education and training institutions or local government bodies. The third area is the assessment and monitoring of skills policies, which is discussed in depth in the following section.

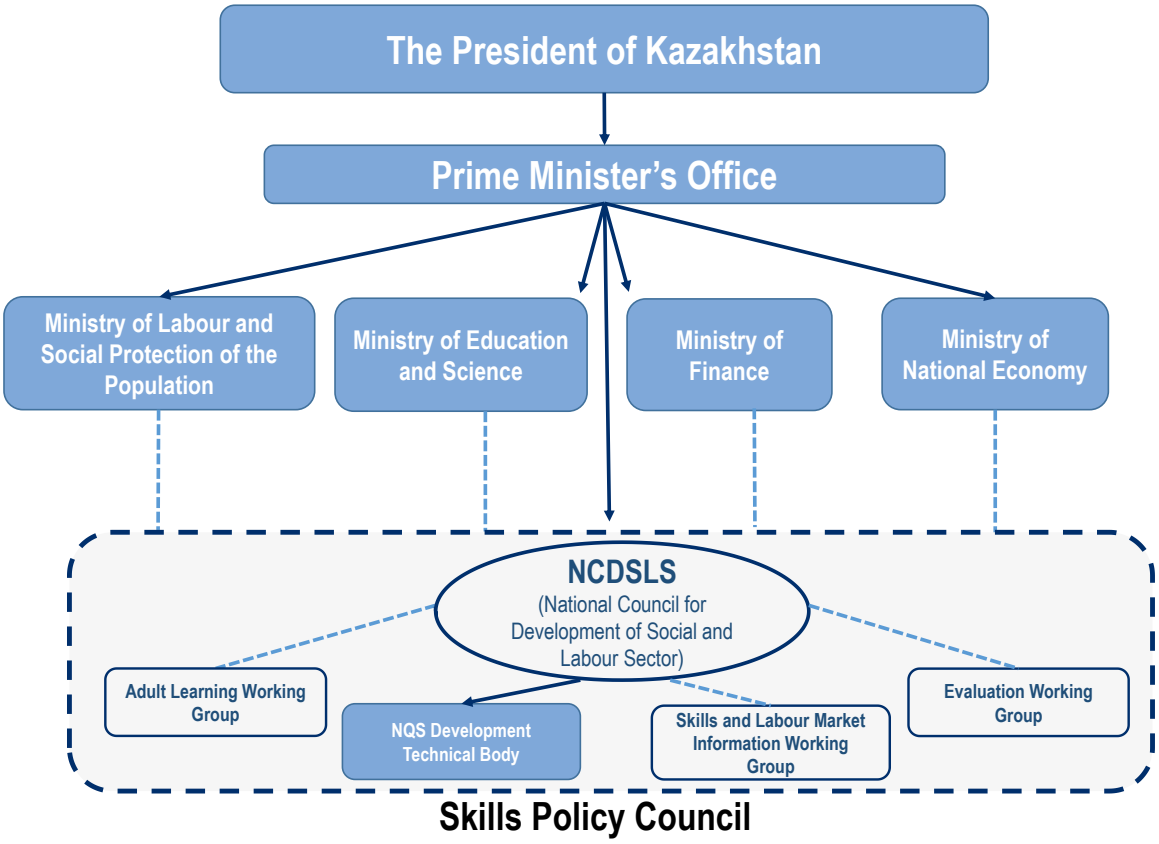
In principle, the recent introduction of the NCDSLS could foster horizontal co-operation in these three areas and across skills policies broadly. However, its current set-up is not fit for purpose for two reasons. First, its remit only covers explicitly the development of the NQS, whereas other policy areas where co-ordination is missing, such as adult learning and the production of SAA tools, are not mentioned in the underlying legislation. Second, the council lacks mechanisms to ensure that co-ordination at the vice-ministerial level translates in co-ordination and co-operation among policy makers involved in policy design and implementation.

To overcome these shortcomings, Kazakhstan could transform the NCDSLS into a Skills Policy Council, as, for example, in Norway (see Box 5.2), by taking two additional steps. First, Kazakhstan should clarify which policy areas, besides the development of the NQS, should be covered by the remit of the council, by conducting a review of institutional arrangements (RIA), which is a structured process for assessing the capacity of different ministers to implement the specific measures assigned to them (ETF, 2014[17]). The RIA could help clarify existing overlaps in goals and responsibilities across ministers involved in skills policies, providing useful evidence on areas where co-ordination should be strengthened. The RIA should be a collaborative effort, involving officials from central government, experts and stakeholders. This means that the process underlying the RIA could lead to building a clearer vision and a consensus on how to modernise governance arrangements in the country.

Second, following the RIA results, Kazakhstan should establish inter-ministerial working groups or technical bodies to ensure that high-level strategic co-ordination at the vice-ministerial level can be complemented by co-ordination and co-operation among policy makers involved in policy design and implementation. Based on the evidence gathered during this project, Kazakhstan could introduce three separate inter-ministerial working groups, responsible for: 1) adult learning policies (see Chapter 3); 2) the

production and dissemination of information on the labour market and skills (see Chapter 4); 3) monitoring skills policies (see the following section). Kazakhstan could also introduce a technical body responsible for the development of the NQS (see Opportunity 2). The three inter-ministerial working groups should share information with the NCDSLS to help prepare the meetings and receive feedback from the NCDSLS on their initiatives, whereas the technical body should report to the NCDSLS directly (see Opportunity 2). These proposed arrangements are shown in Figure 5.6. Clearly, the results of the RIA might provide evidence to further refine these proposed arrangements.

Figure 5.6. Overview of new potential arrangements for the governance of skills policies at the ministerial level in Kazakhstan



Note: Solid line arrows indicate the hierarchy of decision making within the skills system. For instance, the Prime Minister's Office sets policy priorities for the MLSPP and the MOES. Dotted lines indicate a mutual transfer of information between two bodies, which is required to achieve co-ordination and co-operation in policy making. For instance, all ministries participate in the NCDSLS, feeding and receiving information which is important to align their policies.
Source: Internal analysis by the OECD team, based on legislative documents and stakeholder feedback.

As well as improving horizontal co-ordination and co-operation at the ministerial level, Kazakhstan should increase vertical co-ordination and co-operation on skills policies between central and local government. While some skills policies are best overseen and designed at a central level, such as the development of the NQS, other initiatives, particularly those related to the implementation of education and training programmes, could benefit from being tailored to local needs. Kazakhstan exhibits substantial variation in the levels of GDP per capita and skill and labour market outcomes by region. The latest PISA data show large regional differences in reading performance, with more rural, poorer regions attaining scores more than 40 points lower than urban and richer regions (OECD, 2020[13]). These differences are very large, as

one year of schooling on average across OECD countries is equal to 40 points (OECD, 2019[18]). Similarly, as shown in Chapter 3, there are significant differences in the proportion of low achievers in reading, numeracy and digital skills across adults in urban and rural areas. These gaps in skills outcomes also mirror divergences in skills activation and labour market performance (see Chapter 2). However, the current design and implementation of skills policies do not fully reflect these regional differences. For instance, as discussed in Chapter 3, according to stakeholders consulted during the OECD Skills Strategy project, the *Enbek* programme has not managed to support training opportunities aligned with regional needs.

To a significant extent, this lack of co-ordination and co-operation is the result of the current governance structure, in which regional authorities are mainly required to implement priorities and policies designed by the central government. Further decentralisation as foreseen in the Kazakhstan 2050 strategy could contribute to improving the effectiveness and flexibility of skills policies. For example, the local representative bodies (*maslikhats)* could gradually acquire more responsibility in designing and overseeing skills policies.

To make progress in the decentralisation agenda, Kazakhstan could conduct pilot projects to deliver regional skills strategies, for instance, as in Scotland (United Kingdom) or Sweden (see Box 5.2). The creation of the regional skills strategies could be overseen by regional skills hubs, involving local government bodies, local branches of the MLSPP and MOES, the NCE and educational institutions. More broadly, Kazakhstan could benefit from the experiences of Ukraine, which has been working with the Swedish Association of Local Authorities and Regions (SALAR) to pursue the decentralisation agenda (see Box 5.2).

Box 5.2. Relevant international examples: Improving co-operation and collaboration on skills policies

Establishing inter-ministerial committees: An example from Norway

In order to improve governance arrangements in **Norway**, the Norwegian Strategy for Skills Policy 2017-2021 (Nasjonal Kompetansepolitisk Strategi) included the implementation of the Skills Policy Council. According to its mandate, the council's purpose is to implement the strategy and to promote co-operation between the involved stakeholders. The governmental stakeholders include all ministries involved in skills policy (Ministry of Labour and Social Affairs; the Ministry of Local Government and Modernisation; the Ministry of Education and Research; the Ministry of Trade, Industry and Fisheries; the Sami parliament), as well as Skills Norway – an arms-length body specialised in lifelong learning. Including non-governmental stakeholders (e.g. social partners), the Skills Policy Council has 15 members. The council's activities include regular discussions and advice on current skills policy issues, regular reports on the strategy partners' own policy measures to implement the strategy, as well as potential revisions to the strategy if needed. High-level discussions at ministerial level are supplemented by working-level discussions among civil servants, thereby ensuring that skills are on the agenda of decision makers, and that concrete outputs in terms of policy making are met.

Regional skills strategies: Examples from Scotland and Sweden

Many countries have developed regional skills strategies as part of their local development plans. In **Scotland**, the national skills body – Skills Development Scotland (SDS) – has produced a series of regional skills strategies to tailor skills development more closely to local labour market conditions. The Regional Skills Strategy for Aberdeen City & Shire, for example, is grounded firmly in the need to diversify the region away from the oil and gas sector, which is suffering an economic downturn that is likely to be permanent. The strategy has been developed to work alongside and support other strategies for the area, including the Regional Economic Strategy and the signed Aberdeen City Region Deal. SDS consulted a range of local partners and stakeholders to formulate the strategy, including local government universities and chambers of commerce.

In **Sweden**, regional smart specialisation strategies play an important role in supporting local research and innovation efforts. The strategies follow the European Smart Specialisation Platform guide by including analysis, monitoring and assessment, implementation procedures, priorities and an overarching vision. Industry, academy and civil society contributed to the strategies and helped identify priority sectors in which the region has a competitive advantage and where efforts should focus. A range of thematic programmes is linked to these priority areas where regional stakeholders can seek funding for collaborative projects and research and innovation milieus, as well as test-beds and demonstration projects.

Bringing forward the decentralisation agenda: The Swedish-Ukraine co-operation

The Support to Decentralisation in Ukraine initiative (DSP) is an innovative multi-year programme of support from Sweden to help improve and deliver Ukraine's decentralisation agenda. **Sweden** has a long history of effective decentralisation within the education sector, which it can draw on to provide support for Ukraine. The DSP is run by Sveriges Kommuner och Landsting (SKL) International, which is overseen by the Swedish Association of Local Authorities and Regions (SALAR) and is funded by Swedish and international aid agencies. SKL International focuses on the development of well-functioning local and regional administrations abroad. In **Ukraine**, the DSP is centred around improving fiscal decentralisation, education decentralisation, reform process management and co-ordination, and how to successfully communicate these reforms to stakeholders and the wider public. A joint Swedish-Ukrainian Secretariat was set up in Kiev to work closely with Ukrainian ministries to ensure the project was capable of responding to emerging needs and priorities for the Ukrainian government. The project has helped create the legal basis for decentralised education through input in drafting the Framework Law on Education; engaged in capacity building at the MES Institute for Education Analytics; and launched a serious of regional pilots to share best practices with Ukrainian counterparts.

Source: Skills Development Scotland (2018[19]), *Regional Skills Strategy Aberdeen City & Shire*, https://www.skillsdevelopmentscotland.co.uk/media/44785/aberdeen_city_and_shire_regional_skills_strategy.pdf; OECD (2017[20]), *Education Policy Outlook: Sweden*, http://www.oecd.org/education/Education-Policy-Outlook-Country-Profile-Sweden.pdf; EURYDICE (2020[21]), *Sweden: Organisation of the Education System and of its Structure*, https://eacea.ec.europa.eu/national-policies/eurydice/content/organisation-education-system-and-its-structure-80_en; Västra Götalandsregionen (2016[22]), *Smart Specialisation in Västra Götaland*, https://s3platform.jrc.ec.europa.eu/documents/20182/232763/SE_V%C3%A4stra+G%C3%B6taland_RIS3_Final.pdf/700f7d05-afb1-4d13-9abb-94bb3e38a484; SKL International (2020[23]), *Ukraine – Support to Decentralisation*, https://sklinternational.se/projects/projekt/ukrainesupporttodecentralization.739.html.

Recommendations for improving co-operation and collaboration on skills policies

4.1. **Strengthen the remit of the National Council for Development of Social and Labour Sector by specifying a clearly defined mandate and introducing a combination of inter-ministerial working groups and technical bodies.** Kazakhstan could transform the NCDSLS into a Skills Policy Council (e.g. as in Norway). The Government of Kazakhstan should launch a review of institutional arrangements (RIA) to clarify existing overlaps in goals and responsibilities across ministries involved in skills policies specifically. The Government of Kazakhstan could then introduce inter-ministerial working groups or technical bodies to promote co-ordination and co-operation among policy makers involved in policy design and implementation. Based on the evidence gathered during the OECD Skills Strategy project, Kazakhstan could introduce three separate inter-ministerial working groups responsible for: 1) adult learning policies (see Chapter 3); 2) production and dissemination of information on the labour market and skills (see Chapter 4); 3) monitoring skills policies (see the following section). Kazakhstan should also establish a technical body responsible for co-ordinating the development of the NQS (see Opportunity 2). The three inter-ministerial working groups should share information with the NCDSLS to help prepare the meetings and receive feedback from the NCDSLS on their initiatives, whereas the technical agency should report to the NCDSLS directly (see Opportunity 2).

4.2. **Gradually increase the responsibilities and capacities of local government in delivering skills policies, starting with the launch of regional skills strategies.** In the short term, the Government of Kazakhstan could form regional skills hubs to pilot regional skills strategies (e.g. as in Scotland or Sweden). The hubs could be led by a local co-ordinator, who would be responsible for liaising with the central government to ensure alignment with central government priorities. The hubs could involve representatives from local government bodies, local branches of the MLSPP and MOES, the NCE and educational institutions, as in Sweden and Scotland. To produce a clear roadmap for the decentralisation agenda, the Government of Kazakhstan could also consider starting an international collaboration with a country that has undertaken similar reforms (e.g. as between Ukraine and Sweden).

Implementing better monitoring and evaluation mechanisms

Previous chapters in this report have highlighted that Kazakhstan has substantial room for improvement in the evaluation of skills policies. As foreshadowed in the performance section, several stakeholders reported that very limited evaluations of the impact of active labour market programmes are carried out in Kazakhstan (see Chapter 2). Moreover, even when the evaluations are carried out, the results are unlikely to be used to inform relevant policies to facilitate progress towards good practices. As discussed in Chapter 3, there is also limited evidence on the outcomes of different adult learning programmes. For instance, it is not clear whether short-term courses delivered with the *Enbek* programme result in actual skills gains for participants.

To some extent, limited evaluation might depend on the lack of easily accessible data on labour market and skills policies (see Chapter 4). However, even as more data become available, it would be useful to develop a common framework to assess and evaluate the effectiveness of skills policies. This common framework can help policy makers monitor and evaluate skills policies by specifying principles and methods that they should rely upon. An example from OECD countries are the resources, information and tools produced by the federal government in Canada (see Box 5.3). A similar harmonised framework could be

applied to all state programmes delivered within the context of the Kazakhstan 2050 strategy that focus on skills policies. To further increase co-operation among policy makers, the framework could be drafted by an inter-ministerial working group, as Brazil's Committee for Monitoring and Evaluation of Federal Public Policies does, for example (see Box 5.3). This inter-ministerial working group could become part of the Skills Policy Council and report back to the NCDSLS (see the previous section).

As well as implementing a common framework to evaluate government policies, Kazakhstan could make further progress in assessing and monitoring the quality of education and training institutions across the skills system. Chapter 3 highlights that Kazakhstan does not have a strong system of quality assurance in place for providers offering non-formal learning opportunities. Recent research by the OECD and the European Training Foundation suggests that the problem extends to compulsory education, VET and HE (OECD, 2017[12]; ETF, 2020[9]; OECD, 2020[13]).

According to the recent series of *OECD Education Policy Perspectives* on Kazakhstan, the country does not currently have an active school evaluation framework, which is a set of explicitly related policies that cover how school quality will be evaluated. The Committee for Quality Assurance in Education and Science in the MOES carries out school visits, but these are mainly concerned with evaluating compliance with legislative standards. In the past five years, Kazakhstan has developed a "school review", which focuses on assessing teaching and learning in schools and supporting school improvement. To help implement this new framework, the OECD has recommended establishing a separate school inspectorate, because schools currently regard the Committee for Quality Assurance in Education and Science with anxiety and do not like interacting with it for fear of reprisal (OECD, 2020[13]).

According to the OECD's *Higher Education in Kazakhstan 2017*, the system of external quality assurance fails to effectively monitor the conduct of HE institutions, due to high levels of fragmentation. In Kazakhstan, the quality of HE institutions and programmes is recognised by independent accreditation agencies (OECD, 2017[12]). The speed with which these agencies have accredited HE institutions and programmes, however, has raised concern about the thoroughness of the external quality checks being undertaken (OECD, 2017[12]). Accreditation agencies are not required to adopt uniform standards. While some agencies have high standards for the accreditation process, meeting European standards and guidelines, this is not necessarily the case for all agencies (OECD, 2017[12]). To help strengthen external quality assurance, the OECD HE review for Kazakhstan has recommended setting achievable and realistic targets and metrics for assessing the quality of different types of institutions (OECD, 2017[12]). These measures could be combined with initiatives to strengthen quality assurance at the institutional level, for instance, by conducting cyclical reviews of academic programmes (OECD, 2017[12]).

The situation is potentially more problematic in vocational education and training. According to the ETF Torino Process report, there is no specific quality assurance system for VET institutions (ETF, 2020[9]). Existing external quality assurance tools, such as obtaining accreditation with an agency to provide vocational training, are either too expensive, or they are no longer compulsory (ETF, 2020[9]). In light of these findings, the ETF has recommended upgrading the quality assurance system in VET (ETF, 2020[9]).

Implementing these recommendations is crucial to ensure that different segments of the skills system develop a strong quality assurance framework. However, they should not be implemented in isolation, as doing so risks leading to duplication of work and lack of policy coherence. Kazakhstan could consider introducing an intra-ministerial working group on quality assurance within the MOES, comprising policy makers involved in quality assurance in compulsory education, VET, HE and adult learning. The group could develop common principles for internal and external quality assurance standards and their implementation at the institutional level, as the National Center for Educational Quality Enhancement (NCEQE) in Georgia does (see Box 5.3).

Box 5.3. Relevant international examples: Implementing better monitoring and evaluation mechanisms

Improving monitoring and evaluation of government policies: Examples from Canada and Brazil

In **Canada**, the Results Division of the Treasury Board of Canada Secretariat is responsible for evaluation activities, under the 2016 Policy on Results. The division offers useful resources, information and tools to government professionals and anyone else interested in evaluation at the federal level. Overall, the Treasury Board of Canada Secretariat has functional leadership regarding the implementation, use and development of evaluation practices across government. To support evaluation practices, the Results Division offers a number of useful guidelines, such as a "Guide to Rapid Impact Evaluation" (RIE), which provides a range of methods for conducting RIE and advice on when and how it can be used in government, as well as "Theory-Based Approaches to Evaluation: Concepts and Practices", which introduces key concepts of theory-based approaches to evaluation and their application to federal programmes.

In 2016, **Brazil** established the Committee for Monitoring and Evaluation of Federal Public Policies (CMAP) with the objective of encouraging the use of evaluation results to improve public policy outcomes and performance, the allocation of resources, and the quality of public spending. The committee involves representatives from various ministries, who meet periodically to monitor and evaluate the public policies selected by CMAP and accordingly propose alternative designs and adjustments to them. All policy makers in charge of the evaluated policies are invited to participate in CMAP's evaluation activities.

Quality assurance systems: An example from Georgia

In 2010, **Georgia** established the National Center for Educational Quality Enhancement (NCEQE), which is the only authorised quality assurance agency in the country. NCEQE implements and develops external and internal quality assurance mechanisms, supports the creation of educational programmes, and provides relevant recommendations for HE institutions. The NCEQE develops the education quality concept, creates and maintains up-to-date quality assurance standards and arranges their proper implementation on both the institutional and programme level.

Source: Centre of Excellence for Evaluation of the Treasury Board of Canada Secretariat (2020[24]), *Guide to Rapid Impact Evaluation*, https://www.canada.ca/en/treasury-board-secretariat/services/audit-evaluation/evaluation-government-canada/guide-rapid-impact-evaluation.html; Centre of Excellence for Evaluation of the Treasury Board of Canada Secretariat (2020[25]), *Theory-Based Approaches to Evaluation: Concepts and Practices*, https://www.canada.ca/en/treasury-board-secretariat/services/audit-evaluation/centre-excellence-evaluation/theory-based-approaches-evaluation-concepts-practices.html; Treasury Board of Canada Secretariat (2016[26]), *Policy on Results*, https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=31300; OECD (2020[27]), *Improving Governance with Policy Evaluation: Lessons From Country Experiences*, https://dx.doi.org/10.1787/89b1577d-en; National Center for Educational Quality Enhancement (2020[28]), *About Us*, https://eqe.ge/eng/static/5/about-us.

Recommendations for implementing better monitoring and assessment mechanisms

4.3. **Establish a common evaluation and assessment framework for skills policies to help inform future strategies via an inter-ministerial working group.** The Government of Kazakhstan should form an inter-ministerial working group to develop a framework to monitor and evaluate skills policies. The framework should specify principles and methods to be used in the evaluations of state programmes linked to the Kazakhstan 2050 strategy. The inter-ministerial working group could become part of the Skills Policy Council (see the previous section) and should share information on the development of the framework with the NCDSLS and receive feedback to further strengthen it.

4.4. **Develop common principles for the quality assurance of educational institutions and training providers via an intra-ministerial working group within the Ministry of Education and Science.** The MOES should introduce an intra-ministerial working group responsible for developing common principles for internal and external quality assurance standards and their implementation at the institutional level in compulsory education, VET, HE and adult learning (see Chapter 3). The working group should actively engage with educational institutions and other relevant stakeholders, such as employers, to gather their perspectives on the common principles.

Opportunity 2: Strengthening stakeholder engagement in skills policies

Improving horizontal and vertical co-ordination and co-operation across governmental actors is but one path to strong governance of skills policies. As foreshadowed in the performance section, Kazakhstan also needs to better co-ordinate stakeholder engagement to make further progress in the development of the NQS, which is considered a policy priority by the government. More broadly, Kazakhstan can benefit from more systematically involving employers and trade unions in policy development and implementation, while making further progress in engaging representatives from civic society in the debate on skills policies. In light of these insights, this opportunity first explores how to strengthen stakeholder engagement in the development of the NQS. Then, it considers how to improve stakeholder engagement throughout the policy cycle.

Strengthening stakeholder engagement in the development of the National Qualifications System

Developing the NQS requires a substantial degree of stakeholder engagement because social partners need to feed detailed information on what skills are required across different qualifications and occupations (ETF, 2017[14]).

Kazakhstan has made some progress in developing the NQS. Under the leadership of the NCE, sectoral associations have been quite active in developing occupational standards and qualification frameworks. As discussed in the performance section, a large number of sectoral standards and frameworks have been developed. However, according to stakeholders consulted during the OECD Skills Strategy project, there is no national register or database that centralises them, and there has been little oversight to reduce duplication and overlaps. Better co-ordination of the stakeholder engagement process is crucial to ensure that the frameworks and standards are merged into a coherent NQS with aligned educational programmes.

Kazakhstan has already taken three additional steps to make further progress in the development of the NQS. First, the MLSPP has developed a step-by-step roadmap (Roadmap for Development of National Qualifications System 2019-2025), which outlines specific actions, responsible parties and deadlines for the development of the NQS (Government of Kazakhstan, 2019[29]). Second, following the roadmap, Kazakhstan has introduced the NCDSLS, which, as foreshadowed in the description of current arrangements and Opportunity 1, could strengthen co-ordination in the development of the NQS at the vice-ministerial level. Third, the MOES, the MLSPP and the NCE committed to increasing their co-operation efforts via a memorandum signed in February 2020. The memorandum commits the three parties to developing and implementing a joint list of educational programmes and standard curricula based on approved occupational standards. To help translate this memorandum into action, the MOES and the MLSPP have also agreed to establish joint working groups and share information on standards and learning outcomes.

The roadmap has contributed to revamping the progress of NQS development, but Kazakhstan has struggled to implement some of its actions successfully. The MLSPP could not continue to co-ordinate the implementation of the roadmap in 2020, due to its critical shift in focus to develop an effective social policy response to the coronavirus (COVID-19) crisis. As a result, stakeholders involved in the NQS development do not yet have a common vision and are not yet working towards a clear set of objectives.

Going forward, the introduction of the NCDSLS and the memorandum are unlikely to be sufficient to strengthen co-ordination across stakeholders. The consolidation of the NQS is a time-consuming and complex process, which requires close interactions between experts from different fields, for instance, to review, update and merge different Sectoral Qualification Frameworks (ETF, 2017[14]). As discussed in Opportunity 1, the NCDSLS can only provide high-level strategic co-ordination at the vice-ministerial level. The joint working groups formed by MOES and the MLSPP could provide valuable input, but are unlikely to have the capacity to co-ordinate the whole process.

To strengthen co-ordination on the NQS development in the short term, Kazakhstan could establish a technical body reporting directly to the NCDSLS. Many countries have taken a similar route to finalise the development of the NQS (see Box 5.4). The technical body should include full-time staff, potentially on secondment, with different backgrounds (e.g. with experience in government or industry). The co-ordinator could be a skills policy expert with some managerial experience, reporting directly to the Deputy Prime Minister. The co-ordinator should start by revising the existing roadmap and allocating responsibilities across different stakeholders.

As well as introducing a technical agency to co-ordinate the NQS development, Kazakhstan should review the roles, composition and functioning of the sector skills councils. The OECD team could not gather sufficient evidence to assess their institutional performance. According to stakeholders, the functioning of SSCs is not a transparent system, and almost no information is available to the general public about how they operate and what outcomes they generate. The limited feedback that the OECD was able to gather suggests that their effectiveness and capacities vary across sectors. These councils could be a useful platform to co-ordinate stakeholder feedback on the development of the qualification framework by reviewing and updating occupational standards. They could also be involved in forecasting or validating forecasts from SAA tools (see Chapter 4) and in providing input on state programmes and specific policy initiatives (see the following section).

Box 5.4. Relevant international examples: Strengthening stakeholder engagement in the development of the NQS

Setting up agencies to co-ordinate the NQS: Examples from Estonia and South Africa

Many OECD countries and other countries have set up agencies or technical bodies to supervise and co-ordinate the development of their national qualifications systems.

The occupational qualification system in **Estonia** is developed and administrated by a private legal entity – the Estonian Qualifications Authority (EQA). The EQA was established in 2001 to develop a competence-based professional qualifications system. In 2010, by decision of the Ministry of Education, the Qualifications Authority was nominated as the national qualifications framework co-ordination point to ensure the involvement of stakeholders and the transparency of the process; implement principles ensuring quality of the referencing process agreed in Europe; and inform all stakeholders and the public about developments involving the Estonian qualifications framework. The EQA co-ordinates the 14 sector skills councils and provides technical support. Typically, the following institutions are represented in sector skills councils: employers' organisations; trade unions; professional associations; education and training institutions; and responsible government institutions. They are responsible for preparing, amending, renewing or approving professional standards, and for deciding on the linking of occupational qualifications to the NQF.

In **South Africa**, the South African Qualifications Authority (SAQA) is the oversight body of the South African National Qualifications Framework. SAQA is responsible for developing and implementing NQF policies and criteria. It also runs the National Learners' Records Database and is responsible for informing the public about any changes to the NQF. Quality assurance is implemented in practice through Education and Training Quality Assurance bodies (ETQAs). These are accredited by SAQA to monitor and audit the provision, assessment and achievement of specified standards and/or qualifications in their sector of operation for a particular set of NQF qualifications and standards. ETQAs are then able to accredit learning providers to develop, deliver and evaluate learning programmes.

Source: Estonian Qualifications Authority (2020[30]), *Estonian Qualifications Authority*, https://www.kutsekoda.ee/en/; SAQA (2020[31]), *What is the South African Qualifications Authority?*, https://www.saqa.org.za/about-saqa.

Recommendations for strengthening stakeholder engagement in the development of the National Qualifications System

4.5. **Introduce a technical body to co-ordinate the development of the NQS.** The Government of Kazakhstan should introduce a technical body to co-ordinate the development of the NQS, which would report directly to the NCDSLS. The body should be led by a co-ordinator with some managerial experience, who could report directly to the Deputy Prime Minister. The co-ordinator should start by revising the existing roadmap for the development of the NQS. The roadmap should specify the roles and responsibilities of different actors, such as the MOES, the MLSPP, the NCE and the SSCs.

4.6. **Review the functioning of the sector skills councils to ensure that they have sufficient resources and capacities to support the development of the NQS.** The NCDSLS, and if introduced, the technical body responsible for the NQS development should conduct a thorough review of the SSCs to assess whether their composition and resources are sufficient to gather information from employers and stakeholders in the development.

Improving stakeholder engagement throughout the policy cycle

Kazakhstan could strengthen stakeholder engagement beyond the development of the NQS, both in the case of policy development and implementation.

With regard to policy development, the current mechanisms to gather inputs from stakeholders are not sufficiently systematic. The recent introduction of the National Council of Public Trust could provide a useful framework to gather input from representatives of civic society in the development of skills policies at the presidential level. However, Kazakhstan does not seem to have well-functioning mechanisms to involve employers and trade unions in similar discussions. According to stakeholders consulted during the OECD Skills Policy project, the Tripartite Republican Commission does not play an active role in shaping policy discussions. Some active stakeholders had never heard of its existence. More broadly, when it comes to the development of the state programmes or other specific policy initiatives, there are no well-defined arrangements to engage employers, trade unions or civic society alike. Employers are represented by the NCE, which is designed to enhance the negotiation power of business with the Government of Kazakhstan and public authorities, but the process of development and implementation of existing programmes does not generally include consultations with non-governmental actors. According to stakeholders consulted during the project, engagement has an ad hoc nature, and the level of influence is low.

The introduction of the NCDSLS could allow Kazakhstan to make some progress on this front. The “Order of the Prime Minister of the Republic of Kazakhstan from 19 December 2019 No. 226-r” provides a legal basis for the involvement of stakeholders in the NCDSLS with the NCE, the Federation of Trade Unions, and various oil, gas and energy companies represented.

The position of external stakeholders in the NCDSLS can, however, be strengthened in three ways. First, a broader range of external stakeholders could sit in the council, including other sectors such as the service industry, regional representatives and social partners who work in skills-related fields. Second, the council meets on an ad hoc basis whenever there is the need, but Kazakhstan could consider mandating meetings to be held on a regular basis (such as every quarter) to ensure that external stakeholders have a regular forum to express their opinions. Third, Kazakhstan should ensure that relevant legal documents, minutes from previous meetings, and topics for discussion in the upcoming meeting are circulated in advance, so stakeholders have time to gather input from their organisations and prepare their stance on suggested reforms.

Kazakhstan could also consider strengthening the role of the Tripartite Republican Commission to increase engagement at the presidential level. In the case of the state programmes and more specific policy initiatives, Kazakhstan could consider gradually strengthening the remit of the SSCs, building on the experiences of OECD and other countries, such as Australia and South Africa (see Box 5.5).

Strengthening institutional arrangements needs to be complemented by a shift in the culture of government officials. As noted in the performance section, in the consultations during the OECD Skills Strategy project, it emerged too frequently that government officials view stakeholder concerns as external concerns. To facilitate this cultural shift, Kazakhstan could consider developing a digital platform to promote exchange on skills policies between the central government and external stakeholders, as Estonia has done with the Electronic Co-ordination System for Draft Legislation (see Box 5.5). This could also contribute to increasing transparency of the policy-making process and increase trust in government policies, which has been signalled by many stakeholders as important to tackle.

In the case of policy implementation, as explained in the performance section, Kazakhstan needs to strengthen employer involvement in the provision of dual education and adult learning (see Chapter 3). Public-private partnerships could play an important role in making progress in these two areas. For example, PPP frameworks could be used to create employer-led associations to organise apprenticeships, as seen in Norway (see Box 5.5), or to set up local training networks to increase access to training opportunities among SMEs (see Chapter 3). PPPs could also facilitate co-operation between public and private employment agencies in the provision of career guidance and job-matching services for the unemployed (see Chapter 2).

As outlined in the section on current arrangements, Kazakhstan has taken important steps to establish a PPP framework. The work by the ETF highlights that the Government of Kazakhstan considers PPPs as an effective mechanism for delegating responsibilities on policy implementation to the private sector (ETF, 2020[5]). Kazakhstan has also established the PPP Project Support Centre under the MNE to support the implementation of PPP projects. The team of professional experts and analysts in the field of PPP has implemented more than 30 unique PPP projects to date. The PPP Project Support Centre implements projects in such areas as education, health, energy, culture and sports, housing and social facilities, telecommunications, transport and infrastructure, and others. In the field of education, 271 contracts have been concluded for KZT 74 billion (ETF, 2020[5]).

Kazakhstan can strengthen the adoption of PPPs for skills development in two ways. First, Kazakhstan could improve the legislative framework. The current law on PPPs only sets the rights and obligations of public and private partners in relation to broad objectives, such as creating the conditions for effective interactions between the public and private partners and improving availability and quality of goods, works and services. However, ETF's recently published report, *Public-Private Partnerships for Skills Development*, which reviewed good practices across more than ten countries, suggests that a specific bylaw could foster the adoption of PPPs for skills development (ETF, 2020[5]). Skills-orientated PPPs require a relatively unique set of legislative requirements in order to balance the risk and responsibility of providing social services. To strengthen the legislative framework, Kazakhstan could introduce a bylaw specifying the responsibilities of public and private partners for PPPs that focus on the provision of education and training, such as employer-led associations might organise apprenticeships or local training networks (see Chapter 3).

Second, Kazakhstan can disseminate good practices to implement PPPs for skills development. According to stakeholders, there is limited awareness among public and private actors on how to establish a successful PPP for skills development. To help build awareness about good practices, Kazakhstan could build an online platform that provides information on important principles that stakeholders should follow in implementing PPPs for skills development and shows successful examples of PPP projects. The platform could potentially rely on principles and good practices gathered by the ETF during its project on "Public Private Partnerships: Success factor for skills development" (ETF, 2019[32]) According to the ETF, for instance, a successful PPP for skills development requires an actor to set clear objectives in the partnership, establish how risks should be balanced, and set criteria on how to allocate and transfer responsibilities among private and public actors (ETF, 2019[32]).

Box 5.5. Relevant international examples: Improving stakeholder engagement throughout the policy cycle

Using industry-specific skills councils to increase stakeholder engagement: Examples from South Africa and Australia

In **South Africa**, stakeholder engagement has been strengthened through the creation of Skills Education Training Authorities (SETAs). There are currently 21 SETAs, each one dealing with a distinct sector of the economy, such as banking or safety and security. Their main role is to implement the National Skills Development Strategy in their sector. They manage the skills development levy that companies are required to pay and use that money to fund training and skills development programmes. This can include supporting the development of learning materials, establishing apprenticeships, identifying workplaces that could be used for practical workplace experience, and accrediting education and training providers. Every SETA brings together stakeholders from across that sector in order to make informed decisions. As a result, each SETA includes professional bodies, associations and bargaining councils, NGOs, private providers, independent schools and school governing bodies, and government departments.

Similarly, in **Australia**, stakeholders are engaged in Industry Reference Committees (IRCs), where industries can outline their skills requirements and develop and review training packages. They are responsible for gathering and collating information on the challenges, opportunities and trends in their sectors, and they act as a forum for sectors to ensure that training opportunities meet the needs of employers, employees, training providers and people seeking training qualifications. Each committee is made up of a diverse group of stakeholders with industry links, including big employers, small enterprises and trade unions. Each IRC is also supported by a Skills Service Organisation (SSO) to help them in their work. These are independent, professional service organisations that can help IRCs evaluate training needs. IRCs then go on to advise the Australian Industry and Skills Committee (AISC) about the skills needs of their industry sector. AISC itself recommends national training package products to the National Skills Council for endorsement and uses the input from IRCs to advise the Government of Australia on the quality, relevance and responsiveness of Australia's VET sector.

Online tools for engaging with stakeholders: An example from Estonia

The Government of **Estonia** places a strong focus on accessibility and transparency of regulatory policy. A range of online tools are used to engage with stakeholders in regulation making, including an online list of laws to be prepared, modified, reformed or repealed, the Electronic Coordination System for Draft Legislation (EIS), an interactive website for public consultations and an official online State Gazette. EIS tracks the development of all Estonian and EU draft legal acts and makes available RIAs and documents of legislative intent (describing the problem to be addressed, analysing policy options and determining initial likely impacts). EIS is the official system used for inter-ministerial consultations, public consultations at an early stage in the legislative development process on the basis of legislative intent documents, and public consultations at a later stage on draft regulations. EIS allows any member of the general public to follow the development of a draft legal act, search for documents in the system, and give his/her opinion on the documents open for public consultation. Input from stakeholders (e.g. formal letters with stakeholder feedback, proposals, etc.) can be sent directly or uploaded by a responsible ministry to EIS.

Using PPPs to engage employers in policy implementation: An example from the oil sector in Norway

In **Norway**, the oil and gas sector has established an Education Office of Oil-Related Trades (OOF) to facilitate the organisation of apprenticeship schemes via a PPP project. OOF is a private association with 37 oil, gas and ship-owner companies participating. It is a co-operative effort that enables active participation from all relevant stakeholders, as well as ensuring that the cost and risk of providing for apprenticeships are pooled. OOF organises a close tripartite dialogue with oil companies, vocational schools and local government to provide these apprenticeships. It is also responsible for the training content and quality of apprenticeships, and supervises and evaluates the apprentices. To help it fulfil its responsibilities, the Government of Norway provides subsidies to OOF. OOF represents one way to involve stakeholders in the provision of apprenticeships, whereby private companies are able to take the lead in determining how apprenticeships are conducted in their sector.

Source: Skills Academy (2020[33]), *SETAs*, https://www.skillsacademy.co.za/list-of-setas/; eMatla Solutions (2020[34]), *Banking Sector Education and Training Authority*, https://ematlasolutions.co.za/banking-sector-education-and-training-authority/; Australian Industry and Skills Committee (2020[35]), *What is an IRC?,* https://www.aisc.net.au/content/what-irc; Australian Industry Standards (2020[36]), *Industry Reference Committees*, https://www.australianindustrystandards.org.au/committees/; OECD (2016[37]), "Online tools for engaging with stakeholders (Estonia)", http://www.oecd.org/gov/regulatory-policy/EST-Online-Tools.pdf; ETF (2020[5]). *Public-Private Partnerships for Skills Development: A Comparative Analysis from the Governance Perspective*, https://www.etf.europa.eu/en/publications-and-resources/publications/public-private-partnerships-skills-development-governance.

Recommendations for improving stakeholder engagement throughout the policy cycle

4.7. **Strengthen mechanisms to engage stakeholders in policy development, for instance, by improving stakeholder participation in the National Council for Development of the Social and Labour Sector.** The Government of Kazakhstan needs to ensure that the format and frequency of meetings within the NCDSLS allow representatives of employers and trade unions to channel their feedback on policy development by incorporating a broader array of stakeholders in the council, ensuring meetings are held on a regular basis, and circulating relevant material to stakeholders in advance of discussions. The Government of Kazakhstan could also consider increasing the role and powers of the Tripartite Republican Commission to increase engagement of employers and trade unions at the presidential level. For state programmes and more specific policy initiatives, the Government of Kazakhstan could consider gradually strengthening the remit of the SSCs to provide information to ministers and inter-ministerial working groups (see Opportunity 1) on the development of state programmes and specific policy initiatives, for instance regarding adult learning, SAA tools or VET. The ministries and inter-ministerial working groups (see Opportunity 1) should develop and implement clear guidelines and practices on how to engage with the SSCs, as well as other external stakeholders.

4.8. **Develop a single digital platform to promote exchange on skills policies between the central government and external stakeholders.** Ministries involved in skills policies should work together on the development of a single digital platform to promote dialogue between policy makers and stakeholders. The development of the platform could be overseen by the NCDSLS within the newly introduced Skills Policy Council (see Opportunity 1). The platform could be used to pool different documents and legislation, run consultations on the effectiveness of existing policies and organise seminars and events to share new policy initiatives with the wider public.

4.9. Strengthen the adoption of public-private partnerships to improve employer involvement in the provision of education and training by improving the legislative framework and disseminating good practices. The Government of Kazakhstan should introduce a bylaw to specify the allocation of roles and responsibilities for PPPs that focus on the provision of education and training, e.g. employer-led associations might organise apprenticeships or local training networks. The PPP Project Support Centre under the MNE, in collaboration with the MOES and the MLSPP, could launch a platform to disseminate good practices. This platform could provide information on important principles that stakeholders should follow in implementing PPPs, and show successful examples of PPP projects, both from Kazakhstan and abroad.

Opportunity 3: Better aligning and co-ordinating financing arrangements

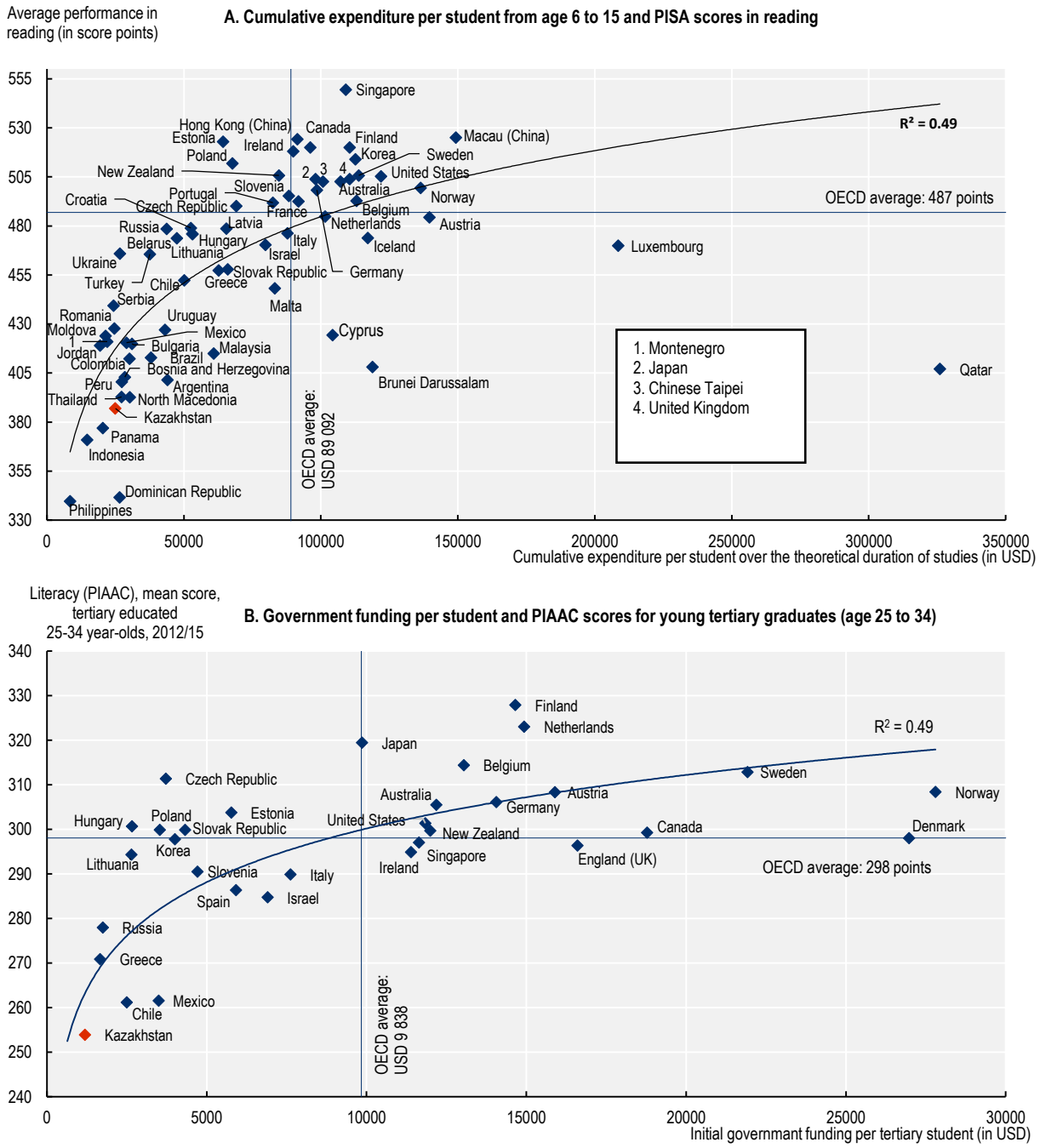
Effective co-ordination and co-operation across government and with stakeholders need to be supported by strong financing arrangements. As discussed in the performance section, Kazakhstan does not seem to provide sufficient public funding to education, when compared to neighbouring countries, other upper middle income countries and top-performing OECD countries. In spite of these comparatively low levels of public investment, Kazakhstan has made limited use of financial incentives, such as tax deductions, subsidies and levies, which can help increase investment from employers on skills development. Building on these findings, this opportunity explores how to strengthen public funding arrangements for skills policies. Then, it discusses how to better use incentives to engage the private sector in skills development.

Strengthening public funding arrangements for skills policies

As discussed in the performance section, Kazakhstan's relative underperformance in providing public funding to education applies whether education spending is measured as a percentage of GDP or as expenditure on education per student, and to different education levels, such as compulsory and tertiary education.

The international evidence suggests that in Kazakhstan's case, increasing the share of government funding for education policies could result in better skills outcomes for youth, which lag behind other countries (see Chapter 1). Across countries, there is a positive relationship between expenditure per student and skills outcomes, both for compulsory education and tertiary education, but only up to a threshold. Such a threshold is approximately equal to USD 50 000 (per student and in cumulative expenditure) for students from age 6 to 15, and USD 5 000 in government funding for tertiary education (see Figure 5.7) (OECD, 2019[18]; OECD, 2019[38]; World Bank, 2020[7]). After this threshold, the relationship between the amount invested in education and student performance weakens, and how resources are allocated becomes more important. Kazakhstan lies significantly below this funding threshold, both in primary and secondary education and in tertiary education, implying that there might be substantial benefits in increasing public funding for education policies.

Figure 5.7. Correlations between spending on education and performance



Note: Panel A shows the correlation between cumulative expenditure per student from age 6 to 15 and average PISA scores in reading for 2018. Panel B shows the correlation between tertiary government funding per student and PIAAC scores for young tertiary graduates (age 25 to 34) in the latest PIAAC round. For PIAAC data from Russia, see the note under Figure 5.3.

Source: OECD (2019[18]), PISA 2018 Results (Volume I): What Students Know and Can Do, https://dx.doi.org/10.1787/5f07c754-en; OECD (2019[38]), Survey of Adult Skills Database (PIAAC, 2012, 2015, 2017), https://www.oecd.org/skills/piaac/; OECD elaboration of the World Bank data (2020[7]), Education Statistics - All Indicators, https://databank.worldbank.org/source/education-statistics-%5e-all-indicators.

StatLink https://doi.org/10.1787/888934233853

As discussed in the performance section, it is unlikely that a substantial increase in funding could happen by shifting resources away from other policy areas. However, Kazakhstan could, for example, rely on contributions from employers, gathered through a training levy, to increase funding in VET (see the following section). However, the funds gathered through training levies are not typically used to finance general education programmes in primary, secondary and tertiary education (OECD, 2017[39]). To increase funding for these general programmes, Kazakhstan could first consider whether at least some resources could be re-allocated from other policy areas. Further increases in funding for these general programmes will depend on raising additional tax revenue, for instance, through direct and indirect taxes. Given the substantial impact of the COVID-19 pandemic, it might be appropriate to wait until the economy starts to recover before pursuing this avenue.

Box 5.6. Relevant international examples: Strengthening public funding arrangements for skills policies

Reforming the financing of HE institutions: An example from Poland

In **Poland**, recent reforms in funding have introduced changes that should improve incentives for aligning the educational offering for VET and HE institutions.

Since 2019, the VET funding algorithm reflects the demand for specific occupations in the region and training costs for specific jobs. To monitor the demand for different occupations, the Ministry of National Education creates a shortlist of shortage occupations, consolidating different data from skills assessment and anticipation tools. These shortage occupations receive more funding. As a result of these two adjustments, there are sizable differences in funding across fields of study. For example, for a graduate in mechatronics, a school receives, all else being equal in the funding formula, approximately 80% more funding than graduates pursuing other fields of study. These reforms have introduced some positive changes in the funding system, but they will need to be adequately supported and monitored.

In HE, Poland has introduced different formulas for professional and academic HE institutions. Before the reforms, both received their core funding (*dotacja podstawowa)* on the basis of student enrolment and staff costs (80%), scientific activity (10%) and internationalisation (10%). Under the new regime, both professional and academic HE institutions will continue to receive the majority of their core funding on the basis of student enrolment and staff costs (90% in the case of professional HE institutions and 60% in the case of academic HE institutions). Professional HE institutions will now receive the remainder on the basis of the relative unemployment rate among their graduates (5%) and the external income they generate (5%). Academic HE institutions will receive the rest of their funding on the basis of the quality of their scientific research (25%), their research and development (R&D) spending (10%) and internationalisation (5%). The proportion of funding conditional on employability outcomes for professional HE institutions is broadly in line with comparable institutions in other OECD countries. For example, polytechnics in Finland receive approximately 3% of funding based on graduate employment rates.

Source: OECD (2019[40]), *OECD Skills Strategy Poland: Assessment and Recommendations*, https://dx.doi.org/10.1787/b377fbcc-en.

As well as increasing public spending on education policies, Kazakhstan should consider improving the efficiency and equity of public funding allocations across the skills system. As highlighted in the performance section, Chapter 2 provides specific recommendations on the financing of ALMPs, whereas Chapter 3 provides recommendations on financing incentives for adult learning opportunities among individuals and enterprises. The United Nations International Children's Emergency Fund (UNICEF), the ETF and the OECD have already reviewed financing arrangements for compulsory education, VET and HE in depth (Clarke, 2018[41]; ETF, 2020[9]; OECD, 2020[42]).

A report by UNICEF has broadly endorsed the per capita funding formula introduced in 2016 for compulsory education but has recommended adjusting some coefficients to ensure that smaller schools and schools with a lower class size receive sufficient funding (Clarke, 2018[41]). In the case of VET, the ETF has recommended diversifying the streams of VET funding to better reflect different regional needs (ETF, 2020[9]). When it comes to tertiary education, the *OECD Education Policy Perspectives* section on Kazakhstan has recommended providing additional financial resources alongside state scholarships, such as student loan schemes, so students are not wholly dependent on the outcome of the Unified National Test (UNT) exam to be able to afford higher education (OECD, 2020[42]).

Kazakhstan should now make further progress in implementing these recommendations. As more data on labour market and skill needs become available (see Chapter 4), Kazakhstan could also consider modifying funding arrangements in VET and HE, so that institutions become more responsive to labour market needs. The experiences of Poland could be useful in this respect (see Box 5.6).

Recommendations for strengthening public funding arrangements for skills policies

4.10. Increase public funding in primary, secondary and tertiary education to improve skills outcomes of youth, by reallocating funding from other policy areas, raising additional tax revenue and increasing contributions from employers. The Government of Kazakhstan should increase funding allocations to primary, secondary and tertiary education. Contributions from employers gathered through a training levy (see the following section) could be used to increase spending in VET. To increase spending for general programmes across primary, secondary and tertiary education, the MF should start by reviewing whether there are any resources that can be reallocated from other policy areas. Depending on the results of this exercise, the Government of Kazakhstan should then consider raising additional revenue through taxation.

Better using incentives to engage the private sector in skills development

As foreshadowed in the performance section, Kazakhstan could make better use of financial incentives to engage the private sector in developing skills. Across OECD countries, a variety of financial incentives are used to expand the role of employers in funding and delivering skills policies (see Table 5.1). The vast majority of incentives come in the form of direct subsidies (OECD, 2017[39]). Training levies are less commonly used, and tax incentives and public procurement are relatively uncommon (OECD, 2017[39]). Although payback clauses can be found in most European countries, it is not clear to what extent they are being used or enforced (OECD, 2017[39]). International experience suggests that different schemes have potential advantages and disadvantages (see Table 5.1). Generally speaking, it is important to carefully assess different options (e.g. cost-efficiency) and strongly co-ordinate policy dialogue with potential partners to identify the most suitable solution.

Kazakhstan has so far made limited use of these financial incentive schemes. The only financing incentive schemes the OECD team were able to identify during the stakeholder consultations were a tax exemption for education and training of employees, specifically targeting subsoil users, and subsidies for more vulnerable individuals (including workers made redundant) in the framework of the *Enbek* programme (see Chapter 3 for details).

Table 5.1. Mechanisms to increase employer engagement in skills policies

Incentive	Description	Potential advantages	Potential disadvantages
Subsidies	Schemes that decrease costs of participation through a direct transfer of money to the employer (e.g. through a voucher) or the training provider	• Direct, as well as highly flexible (i.e. possibility of targeting specific groups or outcomes)	• Targeting generally increases administrative costs for government and participants • Without targeting, deadweight losses can be high
Tax incentives	Tax allowances (i.e. deductions from taxable income); tax exemptions (income that is exempted from the taxable base); tax deferrals (the postponement of tax payments); tax relief (lower rates for some taxpayers or activities)	• Administrative costs lower than other schemes due to reliance on existing tax infrastructure	• Monitoring can be difficult and costly • They tend to result in large deadweight losses because they are a relatively blunt measure
Training levies/funds	Used in some countries as a way to pool resources from employers and earmark them for expenditure on education and training	• Help overcome "poaching" concerns • Allow increased contributions by employers	• Buy-in from employers is critical for the success of levy-like schemes • Large employers might benefit disproportionately from them • Employers could spend money on training without too much thought, resulting in low-quality provision
Payback clauses	Contractual arrangements that permit employers to recover at least part of their investment in training in the event that the trained employee leaves soon afterwards	• Reduce the risk of a loss of investment in training	• Well suited for employees enrolling in formal education and training programmes, but not so for those engaging in non-formal learning • Less suitable for small companies that do not tend to invest in expensive training
Public procurement	Making the award of public contracts to firms conditional on the provision of certain types of training	• Not costly for the government to provide	• It shifts the burden of training provision onto the employers • It might "distort" the procurement process in an unforeseen way

Source: OECD (2017[39]), *Financial Incentives for Steering Education and Training*, https://dx.doi.org/10.1787/9789264272415-en.

Among the different incentives, Kazakhstan should give priority to the introduction of a training levy. As discussed in the previous section, Kazakhstan is already investing a substantial proportion of total government expenditure in education policies, implying that further increasing spending might be difficult. Introducing a training levy could help raise additional resources, which could be earmarked for expenditure on VET (see the previous section), ALMPs (see Chapter 2) and training in enterprises (see Chapter 3). Kazakhstan could learn from the experiences of a number of OECD countries to understand how to introduce a training levy (see Table 5.2). Among these different schemes, Kazakhstan could closely consider Brazil's Systema S and Hungary's training fund (see Box 5.7). These levies have the advantage of being hybrid schemes. The contributions are collected centrally but are then allocated to different funding purposes, which may suit Kazakhstan's need to increase spending across different policy areas.

Implementing a training levy successfully will require employer-buy-in. A detailed review of training levy schemes by the World Bank has concluded that extensive consultations and consensus with employers on the need and benefits are essential before introducing a levy scheme (Johanson, 2009[43]). Countries that allocate a leading role to employers, such as Brazil, tend to be successful, whereas over-control by government can have deleterious results (Johanson, 2009[43]).

In Kazakhstan's case, employers should be closely involved in discussions on which initiatives should be financed with the additional revenue because there are numerous options on the table. An obvious choice might be to use some of the funding to finance learning opportunities in the VET system, consistent with other countries, such as Hungary and Brazil. The funding from the levy could also be important to expand the role of dual education. Kazakhstan could consider introducing subsidies to encourage firms to deliver apprenticeships. The grants could be offered directly to enterprises and/or could be used to finance the

creation of employer-led associations established through a PPP, such as the OOF in Norway, which can support employers in operating the system (see Box 5.5). Kazakhstan could also learn from the experiences of Austria to make progress on this front (see Box 5.7).

Table 5.2. Different training levy schemes

	Description	Advantages	Disadvantages	Country examples
Revenue-generating schemes	Employer contributions are used to finance general training programmes	• Raise funds for publicly provided training	• No incentive for firms to invest in training as contributions cannot be claimed back	Brazil (Systema S) Hungary (National Employment Fund)
Levy-grant schemes	Payroll contributions are collected from employers and distributed as grants	• Higher grants can be given to firms with higher training expenses • Grants can be made conditional on training-specific skills relevant for the labour market	• Require many case-by-case decisions, higher administrative costs	Denmark (Kompetenceudviklingsfonde) Greece Italy (Intersectoral training fund) Korea Poland (Krajowy Fundusz Szkoleniowy) United States (Arizona Job Training Tax)
Levy-exemption schemes	Employers are required to dedicate at least a certain percentage (e.g. 1%) of payroll towards training or submit the equivalent to the government	• Cost of training for the employer is zero up to the amount of tax liability	• Employers may opt out of training as it is easier to pay the levy than provide training	Greece (ELEKP training fund) Hungary (compulsory VET levy) Scotland (FWDF)
Cost-reimbursement schemes	Firms pay a compulsory levy but can claim expenses back for any training costs incurred during the year	• Lower administrative burden • Employers have greater freedom in planning training	• In order to get money back, employers may spend money on any type of training, regardless of quality	Belgium Denmark (Reimbursement Fund) France (Contribution à la formation professionnelle continue)

Note: Countries often have hybrid schemes with funds raised through levies and distributed through grants and direct subsidies.
Source: OECD (2017[39]), *Financial Incentives for Steering Education and Training*, https://dx.doi.org/10.1787/9789264272415-en; Müller, N. and F. Behringer (2012[44]), "Subsidies and Levies as Policy Instruments to Encourage Employer- Provided Training", https://doi.org/10.1787/5k97b083v1vb-en.

Box 5.7. Relevant international examples: Better using incentives to engage the private sector in skills development

Revenue-generating and levy-grant schemes: Examples from Hungary and Brazil

In **Hungary**, companies are obliged to pay 1.5% of their payroll (a contribution called the *szakképzési hozzájárulás*) into a training fund. Different methods exist to distribute funds gathered through such a fund, and Hungary's approach is a hybrid between a revenue-generating scheme and levy-grant scheme. In a revenue-generating scheme, employer contributions are used to finance general training programmes, whereas in a levy-grant scheme, payroll contributions are collected from employers and redistributed as grants for companies to engage in their own training. In Hungary, funds go towards a general training fund (the National Employment Fund), but a proportion can also be used by companies for internal training. The National Employment Fund is a ring-fenced training fund that can only be used to fund objectives related to VET and adult training. These funds can help support training providers, subsidise courses, and be used to develop vocational training opportunities. If companies hire individuals within more vulnerable groups such as career starters, beneficiaries of childcare support, and the long-term unemployed, they are exempt from paying the contribution for those individuals for up to two years.

In **Brazil**, a revenue-generating scheme is run to provide funding to technical schools in a system called Sistema S. This scheme requires that firms in each sector (agriculture, trade, manufacturing and transportation) transfer a share of their revenues to the institution supporting training in their area of activity. There are nine institutions in total organised at both the national and state level. The contribution required of firms differs depending on the sector and lies between 0.2% and 2.5%, with most paying between 1% and 1.5%, an amount in line with other revenue-generating schemes in different countries. There is now a requirement that some of these funds must be used by the institutions to provide free training to more vulnerable groups such as the unemployed. This levy ensures a reliable source of funding for the institutions and means that they can offer vocational education at secondary and tertiary levels, as well as short training courses. Due, in part, to the specialisation of the Sistema S schools, individuals aged 15-29 years old at these institutions receive a considerably higher wage return than those trained in other institutions: 28.3% versus 10.4%.

Incentivising the uptake of apprenticeships: An example from Austria

Austria runs a grant-based system to encourage employers to hire apprentices. The amount of grant received by the employer depends on the year of apprenticeship, with the subsidy decreasing with each year of apprenticeship (in the first year of apprenticeship, the employer receives the equivalent of three gross apprentice wages per apprentice; in the second year, the equivalent of two gross apprentice wages; and in the third year, the equivalent of one gross apprentice wage). Extra support is also available to employers offering apprenticeships, for the provision of additional training to apprentices and training of instructors, to employers whose apprentices excel on final assessment, and to employers whose apprentices face learning difficulties. Until 2008, the scheme relied on tax incentives, rather than grants. Tax incentives were abolished in 2008 and replaced by direct subsidies because the Ministry of Economics and Labour concluded that the tax incentive scheme failed to target companies that would benefit most from additional support for apprenticeships.

Source: OECD (2017[39]), *Financial Incentives for Steering Education and Training*, https://dx.doi.org/10.1787/9789264272415-en; Cedefop (2020[45]), *Financing Adult Learning Database*, https://www.cedefop.europa.eu/en/publications-and-resources/tools/financing-adult-learning-db/search/training-sub-fund-national-employment-fund-vocational; OECD (2018[46]), *Getting Skills Right: Brazil*, https://doi.org/10.1787/25206125; Kuczera, M. (2017[47]), "Incentives for apprenticeship", https://doi.org/10.1787/55bb556d-en.

Recommendations for better using incentives to engage the private sector in skills development

4.11. **Introduce a training levy to increase the financial contribution of employers to VET, adult learning and ALMPs, following extensive consultations with employers.** The Government of Kazakhstan could introduce a hybrid scheme where the money is collected centrally, but then distributed across VET (see the previous section), ALMPs (see Chapter 2) and adult learning (see Chapter 3). The contributions should vary by firm size, with large employers contributing more than SMEs. Before implementing the levy, Kazakhstan should conduct extensive consultations with employers (e.g. through the NCE) to reach a consensus on the design.

4.12. **Introduce subsidies to encourage employers to hire apprentices within the dual VET system.** The Government of Kazakhstan could offer grants to employers directly and/or could offer grants to help establish employer-led associations that could help employers operate the system. These associations could be established via a PPP scheme (see Opportunity 2). The funding could come from the training levy.

Summary of policy recommendations

Table 5.3 summarises the recommendations for this chapter. Based on feedback from stakeholders and from the national project team, three recommendations have been selected that could be considered to have the highest priority based on potential impact and relevance in the current Kazakhstan context. To strengthen the governance of the skills system, the OECD recommends that Kazakhstan should:

- Strengthen the remit of the National Council for Development of Social and Labour Sector, by specifying a clearly defined mandate and introducing a combination of inter-ministerial working groups and technical bodies (Recommendation 4.1).
- Introduce a technical body to co-ordinate the development of the NQS (Recommendation 4.5).
- Introduce a training levy to increase the financial contribution of employers to VET, adult learning and ALMPs, following extensive consultations with employers (Recommendation 4.11).

Table 5.3. High-level overview of recommendations to strengthen the governance of the skills system in Kazakhstan

Policy directions	Recommendations	Responsible parties
Opportunity 1: Strengthening co-ordination and co-operation across the whole of government		
Improving co-operation and collaboration on skills policies	4.1. Strengthen the remit of the National Council for Development of Social and Labour Sector by specifying a clearly defined mandate and introducing a combination of inter-ministerial working groups and technical bodies.	• Government of Kazakhstan • NCDSLS • All ministries involved in skills policies (MLSPP, MOES, MF, MNE)
	4.2. Gradually increase the responsibilities and capacities of local government in delivering skills policies, starting with the launch of regional skills strategies.	• Government of Kazakhstan • Local government • Local branches of the MLSPP and MOES • NCE • Representatives of educational institutions
Implementing better monitoring and evaluation mechanisms	4.3. Establish a common evaluation and assessment framework for skills policies to help inform future strategies through an inter-ministerial working group.	• Government of Kazakhstan • All ministries involved in skills policies (MLSPP, MOES, MF, MNE)
	4.4. Develop common principles for the quality assurance of educational institutions and training providers via an intra-ministerial working group within the Ministry of Education and Science.	• MOES
Opportunity 2: Strengthening stakeholder engagement in skills policies		
Strengthening stakeholder engagement in the development of the National Qualifications System (NQS)	4.5. Introduce a technical body to co-ordinate the development of the NQS.	• Government of Kazakhstan • NCDSLS
	4.6. Review the functioning of the sector skills councils to ensure that they have sufficient resources and capacities to support the development of the NQS.	• NCDSLS • Technical body to co-ordinate the NQS development (if introduced)
Improving stakeholder engagement throughout the policy cycle	4.7. Strengthen mechanisms to engage stakeholders in policy development, for instance, by improving stakeholder participation in the National Council for Development of the Social and Labour Sector.	• Government of Kazakhstan • NCDSLS • Tripartite Republican Commission • Inter-ministerial working groups (if introduced) • All ministries involved in skills policies (MLSPP, MOES, MF, MNE)
	4.8. Develop a single digital platform to promote exchange on skills policies between the central government and external stakeholders.	• All ministries involved in skills policies (MLSPP, MOES, MF, MNE) • NCDSLS
	4.9. Strengthen the adoption of public-private partnerships to improve employer involvement in the provision of education and training by improving the legislative framework and disseminating good practices.	• Government of Kazakhstan • MNE • MLSPP • MOES
Opportunity 3: Better aligning and co-ordinating financing arrangements		
Strengthening public funding arrangements for skills policies	4.10. Increase public funding in primary, secondary and tertiary education to improve skills outcomes of youth, by reallocating funding from other policy areas, raising additional tax revenue and increasing contribution from employers.	• Government of Kazakhstan • MF
Better using incentives to engage the private sector in skills development	4.11. Introduce a training levy to increase the financial contribution of employers to VET, adult learning and ALMPs, following extensive consultations with employers.	• Government of Kazakhstan • Employer representatives (e.g. via the NCE)
	4.12. Introduce subsidies to encourage employers to hire apprentices within the dual VET system.	• Government of Kazakhstan • Employer representatives (e.g. via the NCE)

Note: NCDSLS is the National Council for Development of Social and Labour Sector; MLSPP is the Ministry of Labour and Social Protection of Population; MOES is the Ministry of Education and Science; MF is the Ministry of Finance; MNE is the Ministry of National Economy; and NCE is the National Chamber of Entrepreneurs.

References

Akorda (2020), *Глава государства принял участие в третьем заседании Национального совета общественного доверия [The Head of State took part in the third session of the National Council of Public Trust]*, https://www.akorda.kz/ru/events/glava-gosudarstva-prinyal-uchastie-v-tretem-zasedanii-nacionalnogo-soveta-obshchestvennogo-doveriya. [16]

Australian Industry and Skills Committee (2020), *What is an IRC?*, https://www.aisc.net.au/content/what-irc (accessed on 7 October 2020). [35]

Australian Industry Standards (2020), *Industry Reference Committees*, https://www.australianindustrystandards.org.au/committees (accessed on 1 October 2020). [36]

Cedefop (2020), *Financing adult learning database*, https://www.cedefop.europa.eu/en/publications-and-resources/tools/financing-adult-learning-db/search/training-sub-fund-national-employment-fund-vocational (accessed on 5 October 2020). [45]

Cedefop (2011), *Glossary Quality in Education and Training*, https://www.cedefop.europa.eu/files/4106_en.pdf. [6]

Centre of Excellence for Evaluation of the Treasury Board of Canada Secretariat (2020), *Guide to Rapid Impact Evaluation*, https://www.canada.ca/en/treasury-board-secretariat/services/audit-evaluation/evaluation-government-canada/guide-rapid-impact-evaluation.html (accessed on 7 October 2020). [24]

Centre of Excellence for Evaluation of the Treasury Board of Canada Secretariat (2020), *Theory-Based Approaches to Evaluation: Concepts and Practices*, https://www.canada.ca/en/treasury-board-secretariat/services/audit-evaluation/centre-excellence-evaluation/theory-based-approaches-evaluation-concepts-practices.html (accessed on 7 October 2020). [25]

Clarke, G. (2018), *A Review of Formula Funding*, UNICEF Kazakhstan, https://www.unicef.org/kazakhstan/en/reports/review-formula-funding (accessed on 7 October 2020). [41]

eMatla Solutions (2020), *Banking Sector Education and Training Authority*, https://ematlasolutions.co.za/banking-sector-education-and-training-authority/ (accessed on 7 October 2020). [34]

Estonian Qualifications Authority (2020), *Estonian Qualifications Authority*, https://www.kutsekoda.ee/en/ (accessed on 8 October 2020). [30]

ETF (2020), *Policies for Human Capital Development in Kazakhstan: An ETF Torino Process Assessment*, European Training Foundation, Turin, https://www.etf.europa.eu/en/publications-and-resources/publications/policies-human-capital-development-kazakhstan-etf-torino. [9]

ETF (2020), *Public Private Partnerships for Skills Development: A Comparative Study from a Governance Perspective – Volume I. Thematic overview*, European Training Foundation, Turin, http://dx.doi.org/10.2816/422369. [5]

ETF (2019), *Governance arrangements for vocational education and training in ETF partner countries: Analytical overview 2012–17*, European Training Foundation, Turin, http://hhttps://www.etf.europa.eu/en/publications-and-resources/publications/governance-arrangements-vocational-education-and-training. [11]

ETF (2019), *Public Private Partnerships: Success factor for skills development*, Workshop conclusions , 4-5 December, European Training Foundation, Turin, https://www.etf.europa.eu/en/news-and-events/news/public-private-partnerships-success-factor-skills-development. [32]

ETF (2017), *Getting organised for better qualifications: A toolkit*, European Training Foundation, Turin, https://www.etf.europa.eu/en/publications-and-resources/publications/getting-organised-better-qualifications-toolkit. [14]

ETF (2014), *Guide for the Review of Institutional Arrangements*, European Training Foundation, Turin, http://etf.europa.eu/en/publications-and-resources/publications/guide-review-institutional-arrangements. [17]

EURYDICE (2020), *Sweden: Organisation of the Education System and of its Structure*, https://eacea.ec.europa.eu/national-policies/eurydice/content/organisation-education-system-and-its-structure-80_en (accessed on 12 October 2020). [21]

Government of Kazakhstan (2019), *Road Map on the Development of the National Qualifications System for 2019-2025*, https://old.enbek.gov.kz/en/node/363246. [29]

Johanson, R. (2009), "A Review of National Training Funds"*, The World Bank: Social Protection & Labor*, http://siteresources.worldbank.org/SOCIALPROTECTION/Resources/SP-Discussion-papers/Labor-Market-DP/0922.pdf. [43]

Kuczera, M. (2017), "Incentives for apprenticeship"*, OECD Education Working Papers*, No. 152, OECD Publishing, Paris, https://dx.doi.org/10.1787/55bb556d-en. [47]

Müller, N. and F. Behringer (2012), "Subsidies and Levies as Policy Instruments to Encourage Employer-Provided Training"*, OECD Education Working Papers*, No. 80, OECD Publishing, Paris, https://dx.doi.org/10.1787/5k97b083v1vb-en. [44]

National Center for Educational Quality Enhancement (2020), *About Us*, https://www.eqe.ge/en/page/static/5/chven-shesakheb (accessed on 29 January 2021). [28]

OECD (2020), "Developing a school evaluation framework to drive school improvement", in *OECD Education Policy Perspectives*, OECD Publishing, Paris, https://doi.org/10.1787/60b471de-en. [13]

OECD (2020), *Improving Governance with Policy Evaluation: Lessons From Country Experiences*, OECD Public Governance Reviews, OECD Publishing, Paris, https://dx.doi.org/10.1787/89b1577d-en. [27]

OECD (2020), "Strengthening national examinations in Kazakhstan to achieve national goals", in *OECD Education Policy Perspectives*, OECD Publishing, Paris, https://doi.org/10.1787/0bf8662b-en. [42]

OECD (2020), *Strengthening the Governance of Skills Systems: Lessons from Six OECD Countries*, OECD Skills Studies, OECD Publishing, Paris, https://dx.doi.org/10.1787/3a4bb6ea-en. [1]

OECD (2019), *OECD Skills Strategy 2019: Skills to Shape a Better Future*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264313835-en. [4]

OECD (2019), *OECD Skills Strategy Poland: Assessment and Recommendations*, OECD Skills Studies, OECD Publishing, Paris, https://dx.doi.org/10.1787/b377fbcc-en. [40]

OECD (2019), *PISA 2018 Results (Volume I): What Students Know and Can Do*, OECD Publishing, Paris, https://dx.doi.org/10.1787/5f07c754-en. [18]

OECD (2019), *Survey of Adult Skills (PIAAC) (2012, 2015, 2019) (database)*, https://www.oecd.org/skills/piaac/. [38]

OECD (2018), *Getting Skills Right: Brazil*, Getting Skills Right, OECD Publishing, Paris, https://doi.org/10.1787/25206125. [46]

OECD (2017), *Education Policy Outlook: Sweden*, OECD Publishing, Paris, http://www.oecd.org/education/Education-Policy-Outlook-Country-Profile-Sweden.pdf. [20]

OECD (2017), *Financial Incentives for Steering Education and Training*, Getting Skills Right, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264272415-en. [39]

OECD (2017), *Higher Education in Kazakhstan 2017*, Reviews of National Policies for Education, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264268531-en. [12]

OECD (2016), "Online tools for engaging with stakeholders (Estonia)" OECD Publishing, Paris, http://www.oecd.org/gov/regulatory-policy/EST-Online-Tools.pdf. [37]

OECD/The World Bank (2015), *OECD Reviews of School Resources: Kazakhstan 2015*, OECD Reviews of School Resources, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264245891-en. [8]

SAQA (2020), *What is the South African Qualifications Authority?*, https://www.saqa.org.za/about-saqa (accessed on 2 October 2020). [31]

Schmitter, P., A. Wiener and T. Diez (2018), "Neo-Neofunctionalism", in *European Integration Theory (Third Edition)*, Oxford University Press, https://www.oxfordpoliticstrove.com/view/10.1093/hepl/9780198737315.001.0001/hepl-9780198737315-chapter-3. [2]

Skills Academy (2020), *SETAS*, https://www.skillsacademy.co.za/list-of-setas/ (accessed on 7 October 2020). [33]

Skills Development Scotland (SDS) (2018), *Regional Skills Strategy Aberdeen City & Shire*, https://www.skillsdevelopmentscotland.co.uk/media/44785/aberdeen_city_and_shire_regional_skills_strategy.pdf. [19]

SKL International (2020), *Ukraine – Support to Decentralisation*, https://sklinternational.se/projects/projekt/ukrainesupporttodecentralization.739.html. [23]

Treasury Board of Canada Secretariat (2016), *Policy on Results*, https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=31300. [26]

UNESCO (2020), *Ensuring Lifelong Learning for All in Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan: Country Evidence and Policy Recommendations*, UNESCO; UNESCO Almaty Office, https://unesdoc.unesco.org/ark:/48223/pf0000372898?posInSet=1&queryId=69cc8c8e-9c3a-470d-8995-3fd1f3b0cd60&fbclid=IwAR1Yc2tONlcJA6OLnV64DeIkQM6LHDqrPPnHwiZE6otBbjeH6n1PIjNE6U8. [10]

UNESCO Institute for Lifelong Learning, ETF and Cedefop (2015), *Global Inventory of Regional and National Qualifications Frameworks, Volume II: National and Regional Cases*, UNESCO Institute for Lifelong Learning, https://unesdoc.unesco.org/ark:/48223/pf0000235123. [15]

Västra Götaland (2016), *Smart Specialisation in Västra Götaland*, https://s3platform.jrc.ec.europa.eu/documents/20182/232763/SE_V%C3%A4stra+G%C3%B6taland_RIS3_Final.pdf/700f7d05-afb1-4d13-9abb-94bb3e38a484. [22]

World Bank (2020), *Education Statistics - All Indicators*, https://databank.worldbank.org/source/education-statistics-%5e-all-indicators. [7]

World Economic Forum (ed.) (2019), *Agile Governance for Creative Economy 4.0*, http://www3.weforum.org/docs/WEF_Agile%20Governance_for_Creative_Economy_4.0_Report.pdf. [3]

Annex A. Engagement

The OECD Skills Strategy project involved ongoing oversight and input from the Kazakhstan National Project Team (NPT), which was co-ordinated by, and composed of, experts from several ministries, public employment services (PES) and the National Chamber of Entrepreneurs (NCE), as outlined in Table A A.1.

Table A A.1. Kazakhstan National Project Team

Members	
Akmadi Sarbassov	First Vice-Minister of Labour and Social Protection of Population of the Republic of Kazakhstan (MLSPP)
Nariman Mukushev	Former Vice-Minister, MLSPP
Saltanat Mustafina	Director, Department of International Co-operation and Integration, MLSPP
Naila Mukhtarova	Director, Employment Department, MLSPP
Dinara Zhubanova	Director, Department of National Qualifications System Development and Forecasting, MLSPP
Yerbolat Abulkhatin	Former Director, Employment Department, MLSPP
Lyazzat Adilova	Deputy Director, Department of International Co-operation and Integration, MLSPP
Assem Umirbayeva	Deputy Director, Department of National Qualifications and Forecasting System Development, MLSPP
Assel Shaimerdenova	Deputy Director, Department of Social Assistance Policy Development, MLSPP
Syrym Nasi	Deputy Director, Department of Social Services Policy Development, MLSPP
Altyn Mussina	Deputy Director, Department of Social Insurance Policy, Basic Social Security and Pensions, MLSPP
Danat Nabiyev	Deputy Director, Department of Social Assistance Policy Development, MLSPP
Aziz Ibragimov	Former Deputy Director, Employment Department, MLSPP
Madina Karymbayeva	Deputy Director, Public Employment Service (PES) of Nur-Sultan
Alma Nurmagambetova	Deputy Director, PES of Nur-Sultan
Kalamkas Kulshimanova	Former Deputy Director, PES of Nur-Sultan
Nurlan Isekeyev	Former Deputy Director, PES of Nur-Sultan
Dana Kassymova	Deputy Director, Department of the Foreign Economic Co-operation, Ministry of Industry and Infrastructure Development of the Republic of Kazakhstan
Baurzan Kusubayev	Former Deputy Director, Department of the Foreign Economic Co-operation, Ministry of Industry and Infrastructure Development of the Republic of Kazakhstan
Galiya Dauletova	Former Deputy Director, Department of Technical and Vocational Education, Ministry of Education and Science of the Republic of Kazakhstan (MOES)
Banu Narbekova	Deputy Director, Department of Higher and Postgraduate Education, MOES
Kalamkas Algazinova	Head, Division of Partnerships and Skills, Department of Technical and Vocational Education, MOES
Assem Mukasheva	Deputy Director, Department of Strategic Planning and Analysis, Ministry of National Economy of the Republic of Kazakhstan
Lyazzat Shonayeva	Deputy Director, Department of Human Capital Development, National Chamber of Entrepreneurs
Ulzhan Kalimuratkyzy	Head, Division of Labour Market Forecasting, Department of National Qualifications System Development and Forecasting, MLSPP
Aizhan Anuarbekova	Chief Expert, Division of Labour Market Development, Department of Employment, MLSPP
Indira Kenesh	Expert, Division of Labour Market Forecasting, Department of National Qualifications System Development and Forecasting, MLSPP

OECD missions to Kazakhstan

The OECD conducted two missions to Kazakhstan between October 2019 and February 2020, and one mission virtually in June 2020, due to the coronavirus (COVID-19) outbreak. During the missions, the OECD team met with a broad range of stakeholders, representing ministerial departments, government agencies, employer associations, trade unions, education and training providers, research institutions and more. The OECD would like to thank all participants for their invaluable contributions to the project. A list of stakeholders invited to the consultations is provided in Table A A.2. A description of the objectives and format of each mission follows.

Table A A.2. Stakeholders invited to the consultations

Stakeholders
AINAR Foundation for the Support of Children with Autism, Special Needs and Orphans
Almaty Management University
Astana IT University
Association of Ship Owners and Entrepreneurs of the Marine Industry
Association of Subjects of Management, Service and Energy Service in the Housing Sphere "Shanyrak"
Asyl Bala Public Foundation
BTS Education
Central Board of the Public Association "Kazakh Society of the Blind"
College of Economics, Technology and Standardization of Food Production of the Astana Education Department
College Financial Academy
College of Humanities of the Astana Education Department
College of Management and Business
College of Public Catering and Service of Astana City Akima
Committee on Youth and Family Affairs under the Ministry of Information and Public Development (MIPD)
Construction and Technical College of Astana City Akimat
Energy and Communication College of Astana City Akimat
Eurasian Association of Tourism
Federation of Trade Unions of the Republic of Kazakhstan
Higher Trade and Economic College of Kazpotrebsoyuz, Astana
HR-Managers Association
Industry Trade Union of Workers of State, Banking and Public Services
Information and Analytical Center under the MOES
Institute for Economic Research
International University Astana
Kamkor Magistral Union of Transport Workers
Kasipkor Holding
Kazakh Engineering Academy
Kazakh National Academy of Choreography
Kazakh National Pedagogical University named after Abay
Kazakh National Women's Pedagogical University
Kazakh Society of the Deaf
Kazakh University of Economics, Finance and International Trade
Kazakh University of Humanities and Law (KAZGYUU)
Kazakh University of International Relations and World Languages named after Abylai Khan
Kazakh University of Technology and Business
Kazakhstan IT Association
Kazakhstan Trade Union of Culture, Sport, Tourism and Information Workers
Kazakhstan Trade Union of Education and Science workers

Stakeholders
Kazakhstan Trade Union of Oil and Gas Workers
Kazakhstan Trade Union of Power Engineers
Kazakhstan Trade Union of Railway, Automobile, Air and Water Transport Workers
Kazakhstan Trade Union of Workers of Medium and Small Business (YNTYMAQ)
KAZENERGY Association
L.N. Gumilev Eurasian National University
Management College
Mining and Metallurgical Trade Union "Kazprofmetal"
Ministry of Education and Science
Ministry of Industry and Infrastructure Development
Ministry of National Economy
Multi-Field College of Astana City Akimat
Narxoz University
National Chamber of Entrepreneurs "Atameken"
National Commission for Women, Family and Demographic Policy
National Research Center "Molodezh"
Nazarbayev University
Orken Media
Palladium Group, USAID's Future Growth Initiative
Public Employment Service of Almaty
Public Employment Service of Nur-Sultan
Polytechnic College of the Astana Education Department
Public Association "Sectoral Trade Union of Education and Science Workers"
Public foundation "Zabota"
QazTrade Trade Policy Development Center
Republican Association of Mining and Metallurgical Enterprises
Republican Public Association "Kazakhstan Confederation of the Disabled"
Social movement "The Child Should Live in a Family"
S. Seifullin Kazakh Agrotechnical University
Technical College of Astana City Akimat
Technological College of Astana City Akimat
Trade Union of Agricultural Workers in Nur-Sultan City
Trade Union of Chemical, Petrochemical and Allied Industries
Trade Union of Machine Workers
Trade Union of Workers of the Coal Industry
Trade Union of Workers of the Nuclear Industry
Transport and Communications College of the Education Department of Astana City Administration
Union of Transport Workers of Kazakhstan "Kazlogistics"
Vocational College of Astana City Akimat
Youth Association of the Disabled

Mission 1: Skills Strategy Policy Seminar mission (24-25 October 2019)

In the first mission of the OECD Skills Strategy project, the OECD visited Kazakhstan to discuss the project with the NPT. The main objectives of this mission were to officially launch the project, discuss main policy priorities, discuss the proposed priority areas, and to plan the upcoming Assessment mission. This mission included the following elements:

- **Skills Strategy Policy seminar (24 October 2019):** The official start of the OECD Skills Strategy project in Kazakhstan, beginning with the high-level OECD Skills Strategy Seminar. The seminar

convened policy makers and senior officials from all departments of the Government of Kazakhstan at a high-level public event.

- **Technical-level meeting (24 October 2019):** A meeting with the NPT to discuss the main skills policy priorities for Kazakhstan, and the scope and main challenges in each of the four priority areas.
- **Wrap-up meeting with core NPT (25 October 2019):** A meeting with the NPT to discuss the main findings from this mission and to plan the Assessment mission.

Mission 2: Assessment mission (24-28 February 2020)

The Assessment mission was organised to undertake a series of workshops and group discussions to evaluate and refine the OECD's initial assessment of the skills performance in Kazakhstan, including a first draft list of opportunities and related recommendations. This mission included the following elements:

- **Group discussions (24-27 February 2020):** Four separate group discussions were convened with experts on each propriety area (officials from relevant departments; educational establishments; employer groups, etc.). In each of these meetings, OECD representatives introduced the OECD Skills Strategy as a strategic framework. Participants then discussed Kazakhstan's main performance and opportunities for improvement in each of the four priority areas, with the OECD moderating each discussion.
- **Assessment Workshop (25 February 2020):** The main purpose of this workshop was to collect detailed insights into Kazakhstan's performance and initiatives across the four priority areas from a broad spectrum of relevant stakeholders. The workshop was also designed to build awareness of the challenges and opportunities in each priority area and to encourage stakeholders to identify the most important areas for recommendations. Over 70 representatives participated in the workshop, including policy makers; officials from several government departments and public agencies; representatives from across the educational spectrum; curriculum experts; trade unions; employer representatives; and representatives from the voluntary and community sectors.
- **Almaty Workshop (27 February 2020):** This workshop followed the same objective and format as the previous day's event in Nur-Sultan, albeit on a reduced scale in terms of the number of participants (approximately 50), as well as the time available to consider each priority area and related recommendations. The majority of participants were from educational establishments; training providers; and employer representatives.
- **Bilateral meeting with the Information and Analytical Center (26 February 2020):** The objective of this meeting was to discuss the Programme for the International Assessment of Adult Competencies (PIAAC) results in Kazakhstan, and the scope and main challenges of different groups and regions.
- **Meetings with the NPT (24 February and 28 February 2020):** These meetings were held to discuss first the planning and then the outcomes of the Assessment mission.

Mission 3: Recommendations consultations (15-23 June 2020)

This third mission was organised to test and refine the draft recommendations. Due to the COVID-19 pandemic, the mission was held completely on line via Zoom. This mission included the following elements:

- **Recommendations Webinar to discuss high-level draft recommendations with all stakeholders (16 June 2020):** The main purpose of this webinar was to build awareness of the challenges and opportunities in each priority area. Approximately 70 representatives participated in the webinar, including policy makers; officials from several government departments and public agencies; representatives from across the educational spectrum; curriculum experts; trade unions; employer representatives; and representatives from the voluntary and community sectors.

- **Group discussions (15-23 June 2020):** These online sessions were organised to test and refine the draft recommendations with a broad spectrum of relevant stakeholders. A total of 12 one-hour sessions across the four priority areas were organised, with approximately 10 participants joining each session. The OECD introduced the main draft recommendations and then moderated discussions in a plenary format with the participants.
- **Meetings with the NPT (15 June and 23 June 2020):** The first of these meetings was held to discuss Kazakhstan's priority areas and the draft recommendations, as well as finalising the organisation of the consultations. In the second meeting, the OECD and the NPT discussed the outcomes of the mission and the next steps.

OECD Skills Studies

OECD Skills Strategy Kazakhstan

ASSESSMENT AND RECOMMENDATIONS

Skills are the key to shaping a better future and central to the capacity of countries and people to thrive in an increasingly interconnected and rapidly changing world. Megatrends such as globalisation, technological advances and demographic change are reshaping work and society, generating a growing demand for higher levels of skills and new sets of skills.

OECD Skills Strategy projects provide a strategic and comprehensive approach to assess countries' skills challenges and opportunities and help them build more effective skills systems. The OECD works collaboratively with countries to develop policy responses that are tailored to each country's specific skills needs. The foundation of this approach is the OECD Skills Strategy Framework, which allows for an exploration of what countries can do better to: 1) develop relevant skills over the life course; 2) use skills effectively in work and in society; and 3) strengthen the governance of the skills system.

This report, *OECD Skills Strategy Kazakhstan: Assessment and Recommendations*, identifies opportunities and makes recommendations to improve the activation of skills of vulnerable populations, foster greater participation in adult learning of all forms, build an effective skills information system, and strengthen the governance of skills policies in Kazakhstan.

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