



Getting Skills Right

Creating responsive adult learning systems

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Foreword

Globalisation, technological progress and demographic change are having a profound impact on the world of work. These mega-trends are affecting the number and quality of jobs that are available, how they are carried out and the skills that workers will need in the future to succeed in the labour market. Although the timing and the speed of these developments differ across countries, it is expected that skill needs will continue to change, possibly at an accelerated pace, in the coming decades affecting advanced, emerging and developing countries alike.

Adult learning systems have a key role to play in enabling individuals to keep their skills continuously updated to stay employed and/or find new jobs. In most countries, failure to develop and maintain skills that are relevant to labour market needs has translated in recruitment difficulties for employers, coexisting with individuals struggling to find jobs matching their skills. Such imbalances are costly for the individual, employers and society as a whole. They undermine the competitiveness of companies and the economy as a whole, as well as workers' wages, job satisfaction and career prospects. However, creating adult learning systems that are more responsive to changing labour market needs is a challenge, due to the complexity of the system, information asymmetries and conflicting stakeholder interests.

This booklet outlines seven key action points to improve the responsiveness of adult learning systems. It aims to provide practical insights for stakeholders who are directly involved in the design, implementation and monitoring of adult learning policies, including policy-makers and the social partners. Each action point draws on research evidence and provides insights on how to translate it into practice by highlighting promising policies in OECD and emerging countries.

The document is part of a series of publications on the functioning, effectiveness and resilience of adult learning systems in the context of a changing world of work. It accompanies the OECD report on [Getting Skills Right: Future-ready Adult Learning Systems](#), which includes the OECD Priorities for Adult Learning dashboard (www.oecd.org/employment/skills-and-work/adult-learning/dashboard.htm) and a cross-country analysis of the readiness of adult learning systems to address future skill challenges.

The OECD and JPMorgan Chase Foundation have joined efforts to support policy makers, firms and individuals to make the most of ongoing changes through adult learning. Together we can truly contribute to 'getting skills right' and create more responsive training systems and inclusive labour markets for the world of tomorrow.

Please cite as

OECD (2019), Getting Skills Right: Creating responsive adult learning systems, (www.oecd.org/employment/emp/adult-learning-systems-2019.pdf).

Introduction

Keeping-up with a changing labour market

Megatrends such as technological change, globalisation and population ageing are influencing the kind of jobs that are available and how we do them. For instance, new forms of work enabled by technology require more self-management and self-organisation skills than traditional employment contracts. Similarly, as digital devices and software are introduced and updated with increasing frequency we need to develop and maintain our digital literacy and ICT skills, even for occupations where this was not the case just a decade ago.

At the same time, people have longer working lives, which means that not only do they need to train more frequently, but also over the course of a longer career. We can also expect that climate change, global warming and the transition towards a low-carbon economy will have an impact on the world of work. To keep up with these changes, we need more and better adult learning to maintain high levels of employment, productivity and competitiveness.

Failure to develop and maintain skills that are relevant to the labour market already results in recruitment difficulties for employers, while many individuals, from recent graduates to workers with considerable experience, struggle to find jobs matching their qualifications (OECD, 2016). These skill imbalances are costly for both the individual and society as a whole, especially when they are persistent. Lack of certain skills or skill-sets can limit the ability of companies to adopt new technologies and therefore lead to lower competitiveness and output. At the same time, individuals who do not have the right skills for their job may face lower wages, job satisfaction, job security and poorer career prospects (OECD, 2012). This has a negative impact on public finances, through lower tax revenue and increased public spending on unemployment or in-work benefits.

Initial education is essential in preparing people for this changing demand for skills. Yet, with the majority of people affected by these changes already in the workforce, adult learning systems can also play a key role in addressing this challenge. Investment in adult skills can foster economic growth and ensure that the gains from technological progress are shared in an equitable way (WEF, 2018).

The challenge of fostering the 'right' skills

There is not much data on the alignment between adult learning systems and the skill needs of the labour market, but there is evidence that the alignment is, at best, poor. Data from the Continuing Vocational Training Survey (CVTS) shows that 21% of adults who take part in training, participate in health and safety training. In some countries, such as Ireland and Italy, this share is even higher than 30%. While knowledge on health and safety is an important requirement to reduce the likelihood of work accidents, it is part of compulsory training and does not necessarily signify the existence of a positive learning culture.

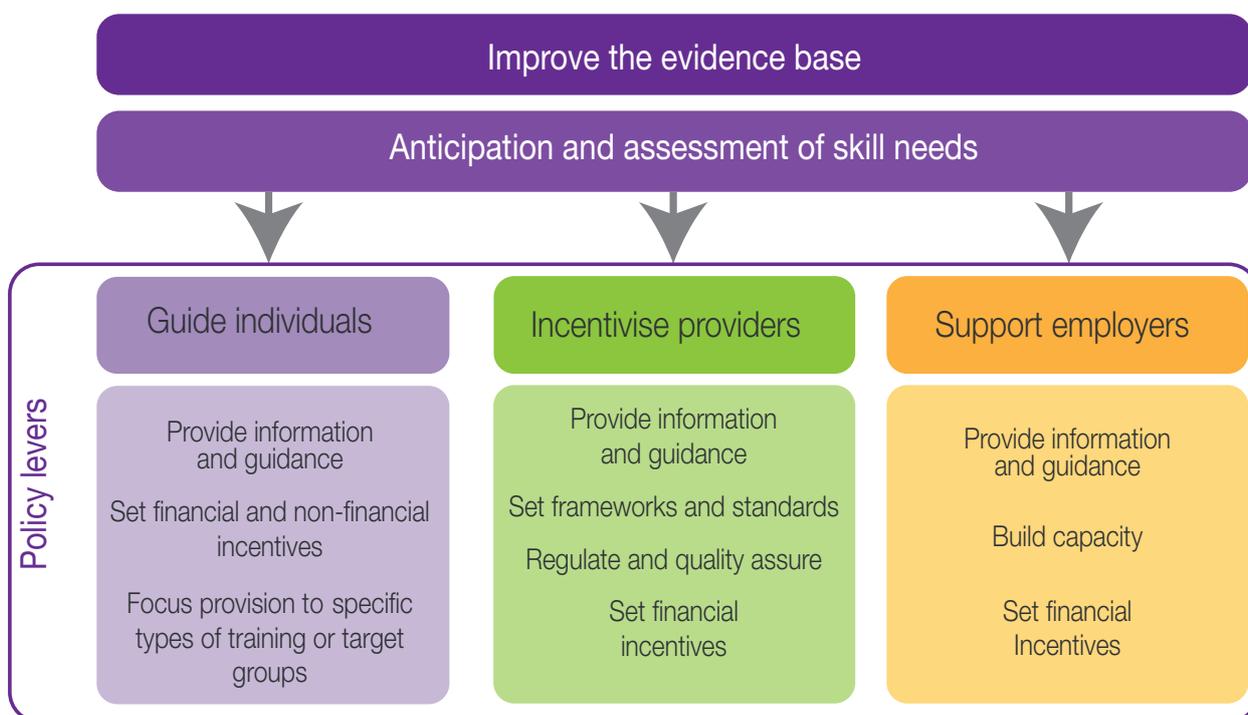
These data suggest that there is a certain degree of misalignment between adult learning provision and the needs of the labour market. This is further supported by national data sources, for example data on training financed by Italian inter-professional funds (OECD, forthcoming), showing a lack of alignment with existing country-specific skill shortages.

Further, OECD research shows that workers in jobs with a significant risk of job automation are less likely to participate in adult learning than workers who have less automatable jobs (OECD, 2019b). The same is true for workers in occupations that are in surplus in the labour market. If the adult learning system was perfectly aligned with the skill needs of the labour market, we would expect these groups to take part in training more often than the average worker, because their jobs are more likely to change or even disappear in the future.

Yet, aligning the adult learning system with the skill needs of the labour market is not an easy task, due to the complexity of the system, lack of information and the diverging interests of different stakeholders. Individuals may not know which occupations and skills are in demand in the labour market or have information about the quality of the training. Similarly, employers may lack the information needed to make sound investments in training. Most firms, particularly the small ones, do not carry out systematic and regular assessments of their training needs, leading to difficulties in defining their skill needs beyond the very short term. In addition, employers may be hesitant to invest in their employees' skills as this may mean that another company poaches them. In some systems, providers themselves have little incentive to keep their training aligned with labour market needs as their revenue is often linked to the number of learners, not to their employment outcomes. Finally, government intervention, for example the provision of specific training courses, can be slow to respond to the changes in the labour market.

Improving the responsiveness of adult learning systems

What can we do to create an adult learning system that is more responsive to changing skill needs? First, it is necessary to gather and generate information regarding skill demand and supply. Based on this evidence, various policy measures can be introduced that influence the behaviour of individuals, providers and employers. The chart below provides a framework regarding policy-levels targeted at these actors that can improve the responsiveness of adult learning systems to changing skill needs.



This booklet outlines seven action points to make adult learning systems more responsive to the changing skill needs in the labour market. It aims to provide practical insights for stakeholders who are directly involved in the design, implementation and monitoring of adult learning policies, including policy-makers and social partners. It focuses on the following four topics:

■ **Improve the evidence base:** Producing reliable data about what skills are needed in the labour market and what skills workers collectively hold, is the first step in tackling imbalances. Any intervention in this area is only as good as the data it is drawing on. Therefore, we need to produce reliable evidence and make sure that it is presented in an accessible way to the stakeholders who will be using it. This is challenging due to different needs and interests of the many stakeholders involved. Action points one and two focus on key issues to improve your evidence base.

■ **Guide individuals:** Where data on skill needs exist, they are not always conveyed to individuals. Not knowing what skills are needed in the labour market is a key barrier for individuals to make the right investment in training and to build a career path that will fulfill their professional aspirations. Yet, even when people want to invest in the 'right' skills, distorted incentives and financial constraints can prevent them from signing up. Action points three and four discuss approaches to guiding individuals towards in demand skills and enabling them to participate in the 'right' training.

■ **Incentivise providers:** Providers can be slow to improve curricula and adapt the course catalogue to labour market changes. Different types of providers, i.e. public, private or third-sector education and training institutions, have different mandates and objectives. It is essential to design appropriate financial incentives and regulatory mechanisms that take into account these differences. Action points five and six reflect on how to align the interests of providers with the skill needs of the labour market.

■ **Support employers:** Not all employers assess their future skill needs strategically and provide training that is in line with their identified needs. Doing so is a particular challenge for small and medium-sized enterprises (SMEs), often due to limited capacity of their human resources function. Supporting specific groups of employers in identifying their skill needs and helping them to deliver or finance the appropriate training is therefore important to align training provision with the skill needs of the labour market. Action point seven will discuss this issue.

This booklet is part of a series of publications on getting adult learning systems ready for the future. The two further booklets in this series focus on engaging low-skilled adults in learning (OECD, 2019a) and social partner involvement in the adult learning system (OECD, 2019c).



Action 1 :

Improve the governance of skill anticipation

Why is this important?

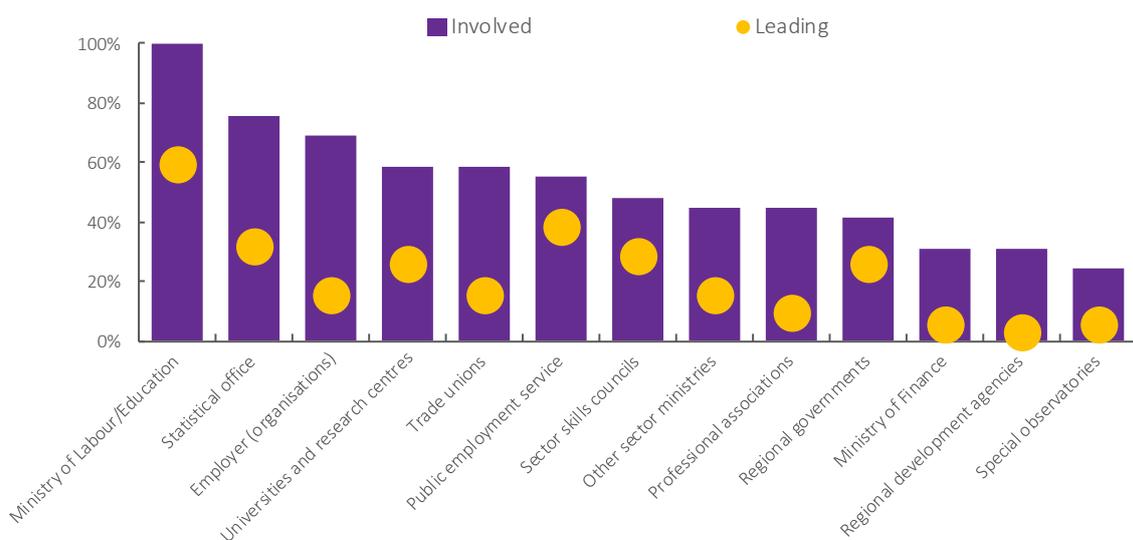
In many countries, a range of different stakeholders conduct exercises to understand which skills are needed in the labour market and how this maps onto the skills held by the population. Typically, these exercises are not coordinated with each other. What further complicates the situation is that each of these activities involve multiple stakeholders, either because they lead the exercise together or because they are involved in wider consultation (OECD, 2016).

Given this diversity, it is not surprising that policy makers and social partners see governance and coordination as key challenges to generating better skill assessment and anticipation information and translating it into policy (OECD, 2016). To improve this situation, we must streamline and improve the coordination between different exercises. Further, we should include the voices of all relevant stakeholders in the skills assessment and anticipation process, with the aim to strengthen the evidence base.

Did You Know ?

Ministries of Labour and/or Education are typically involved in exercises to identify which skills are needed in the current and future labour market. They are the actors that most often take a leading role in these exercises. Public employment services, sector skills councils and regional governments are less often involved, but when they are, they regularly lead their own skills assessment exercises. Employers and trade unions, on the other hand, are often involved but not usually among the leading actors of the skills assessment and anticipation exercises.

Stakeholder roles in skills assessments and anticipation exercises



Note: % of OECD countries (excluding GBR, ISL, ISR, LTU, LUX, LVA, MEX, NZL).

Source: Questionnaire on Anticipating and Responding to Changing Skill Needs: Ministry of Labour and Ministry of Education questionnaires and Social Partners and other stakeholder questionnaire (OECD, 2016).

What can we do?

There are many ways to improve governance and stakeholder coordination. Governments can give a clear (legal) mandate to an institution to lead data generation. Less formal mechanisms include setting up special bodies, e.g. advisory boards, roundtables or skill councils to oversee a coordination process and foster collaboration between stakeholders. See how others implement this in practice:

- Setting up a dedicated coordinating body can help to improve communication, reduce overlap and streamline the various processes, especially if there are multiple stakeholders running parallel initiatives. France faces a coordination and harmonisation challenge, as parallel skill assessment exercises take place at national, regional and sectoral level, which all involved different approaches and methodologies. *Strategy France (France Stratégie)*, a government think-tank was commissioned with improving the coherence of this fragmented system by coordinating activities to share experience, methods and tools. It established the *Employment and Skills Network (Réseau Emplois Compétences)* to facilitate the creation of a common methodological framework for regional and sectoral anticipation studies.
- Establishing independent and reputable organisations that lead skill assessment exercises aids the streamlining of the process and acceptance of the results of these exercises (OECD, 2016). In 2017, Canada set up the *Future Skills* initiative, which consists of an independent council and a centre to improve information on emerging skills and workforce trends. The Centre's aim is to develop and test new approaches to skills assessment at arm's length from government. This includes, for example, the implementation of rigorous research on the effectiveness of innovative skill development and training approaches, as well as support for the replication and up-scaling of proven practices. The Council is made up of 15 members that generate information, create strategic plans and advise the Minister on priorities related to skills development and training (Canada.ca, 2018).
- Co-ordination can also be improved through making the consultation and involvement of all stakeholders a legal obligation. To improve stakeholder involvement, Estonia introduced two laws in 2015 on the governance and procedure of skills anticipation. The new system establishes that the *System of Labour Market Monitoring and Future Skills Forecasting (Oskuste Arendamise koordineerimisüsteem, OSKA)* provides quantitative skill forecasts in specific sectors. Based on these results and qualitative insights from a panel of advisers and sectoral councils the OSKA Coordination Council conducts a yearly analysis of labour market and skill needs. It also proposes actions for both labour market and educational policy. Representatives from employers and trade unions are involved in the Coordination Council that oversees OSKA alongside ministries and the Estonian unemployment insurance fund. Additionally, education providers are involved in the Sectoral Expert Panels, while experts from universities and professional associations sit in the OSKA Panel of Advisers. The whole system is administered and developed by the Estonian Qualifications Authority (Kutsekoda), which hosts OSKA. The reform is in its early stage, but it has de-facto increased stakeholder involvement (OSKA, 2018; Kuteskoda, 2018).

Three key insights from existing practice:

- ⇒ *Establish dedicated bodies responsible for coordinating parallel skill anticipation exercises.*
- ⇒ *Create independent bodies responsible for robust skill assessment and anticipation to increase acceptance and use of data.*
- ⇒ *Ensure stakeholder involvement through clear and pre-established procedures, especially if there is a traditionally low level of stakeholder dialogue.*





Action 2 : Enhance the evidence base

Why is this important?

The production of skill assessment and anticipation (SAA) information is not a self-serving exercise. Its key purpose is to inform policy-making, such as the development of appropriate adult learning programmes to address current and emerging skill gaps. Yet, in many cases, information on skill needs fails to fulfil this purpose.

Many of the top ten barriers that prevent the translation of evidence into practice are related to bringing anticipation exercises closer to the needs and requirements of policymakers. Ministries and social partners identify lack of adequate human resources, statistical infrastructure and funds as obstacles in the way of developing their methods and analysis (OECD, 2016).

Did You Know ?

According to OECD research, 63% of ministries identify an *insufficient level of disaggregation* as one of the barriers for translating skills assessment and anticipation information into effective policies. Employment opportunities and the skill-profile of the population vary considerably within a country. Data need to be sufficiently granular regionally, so that they can inform targeted and regionally relevant employment and education policy.

More than half of the surveyed stakeholders state that the *output of skill assessment exercises is too technical*. The complexity particularly affects local government or public employment services, where there may be a lack of technical capacity for interpreting the data and incorporating it into decision making. This can result in geographically uneven usage of the evidence impacting less developed regions.

Half of the respondents state that the way skills are measured and defined is not useful for policy-making. In the majority of countries, exercises are based on information about qualifications or fields of study instead of skills, as the latter would be more costly and difficult to assess. This is not ideal, because two individuals with the same qualifications can have very different skill levels due to abilities and experience. As a result, information based on skills would provide more useful insights (Quintini, 2011).

Another issue flagged by almost half of the respondents is the *difficulty of anticipating future skill trends* in the context of evolving labour market dynamics. Exercises that anticipate changes are more challenging than those assessing ongoing skill needs, as they require dealing with uncertainty and making assumptions about the future. Often, the responsible public institutions lack the technical capacity to set up forecasting models. In addition, quantitative models would need to be accompanied by expert opinion which can be instrumental in predicting rapid and abrupt changes, which is especially important in this context. However, considerably fewer countries carry out skill foresight exercises that combine quantitative estimations with qualitative insights in a systematic way.

Source: Questionnaire on Anticipating and Responding to Changing Skill Needs (OECD, 2016) and OECD Policy Questionnaire: Readiness of Adult Learning Systems to Address Changing Skills Needs (2018).

What can we do?

There are multiple resource-effective ways to overcome the barriers mentioned above. Making sure that the information collected is shared with a wide audience in a user-friendly way maximises impact and the probability that all valuable information is extracted. Meanwhile, involving current and prospective end users of the data in the design and development phase is a great practice to ensure usefulness of the output. See how others implement this in practice:

- Collecting detailed regional or sector-specific data can be expensive and resource intensive. To overcome this problem, Finland carries out such analysis for three to four priority sectors every year, as chosen by stakeholders. The *Finnish National Agency for Education (EDUFI)* developed a qualitative and forward-looking model for skill anticipation between 2008 and 2012 (*VOSE project*). In 2016, sectors analysed included the food-chain sector, retail, games industry, and services for the elderly (EDUFI, 2018).
- In some cases, data or information that would be valuable for stakeholders already exists, but it is either not shared with potential users or not presented in a user-friendly way. In Austria, the *Public Employment Service research network* runs a comprehensive information system and a service platform to share skill assessment and anticipation knowledge with a wider range of stakeholders. It contains information about the labour market, education (e.g. vocational education and training, VET), and qualifications, which is regularly updated (www.ams-forschungsnetzwerk.at). The platform is widely used across government and adult learning providers.
- Some countries include end users of the skill assessment and anticipation data in their development process, to maximise usage and impact. The Estonian *OSKA system* (see action 1) is one example of this. Another example is Norway, where employment and education authorities are jointly involved in the design and development of the forecasts carried out by Statistics Norway, which ensures that they understand its output and are able to use it for policy making (OECD, 2016).
- 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 skill anticipation. The 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 policymakers and stakeholders with some 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 skill anticipation exercise (Konjunktur Institutet, 2018; CEDEFOP, 2017).

Four key insights from existing practice:

- ⇒ *Collect in-depth information about specific sectors or regions on a rotating basis to reduce the resource intensity of SAA exercises.*
- ⇒ *Make sure the information collected is shared with a wide range of stakeholders to maximise usage.*
- ⇒ *Include end users of SAA information in the design and development of the exercises to maximise impact.*
- ⇒ *Systematically enrich quantitative analyses with qualitative insights about labour market dynamics.*





Action 3 : Help people make informed training choices

Why is this important?

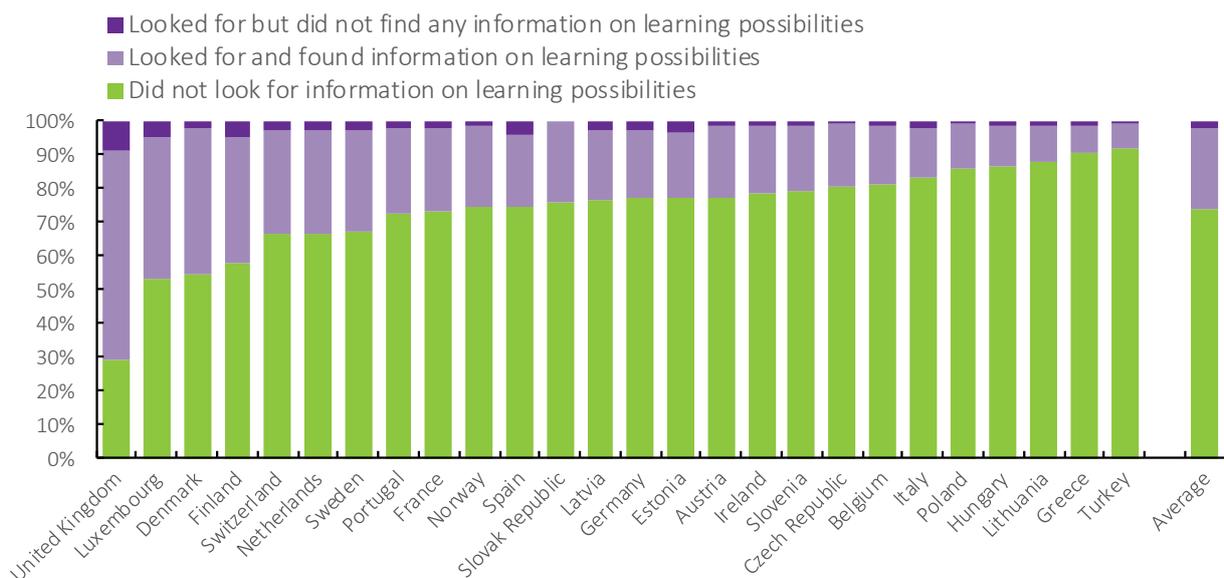
Training choices have a crucial impact on people's lives. They influence their income, well-being and even job-security. However, it is extremely difficult to understand which occupations and skills are in demand in the labour market and have a bright outlook for the future. It is also a challenge to identify the skills individuals hold and how they might be transferable across occupations. Hence, tailored information on training must be available to all individuals including students, workers and the unemployed. We also have to actively reach out to individuals who do not seek information on their own and engage them in adult learning (see also Getting Skills Right: Engaging low-skilled adults in learning, OECD, 2019a).

Even if people understand labour market dynamics and would like to pursue labour-market relevant training, certain barriers can prevent them from doing so. These include financial, time or family-related reasons, lack of prerequisites or support from their employer. Moreover, if financial incentives are not set correctly, this can lead to distorted choices as training costs influence the decision of individuals. In addition to guiding individuals, we also have to set the right incentives and help them overcome various barriers so that they can participate in adult learning.

Did You Know ?

An overwhelming majority of adults in European OECD countries (more than 70%) do not look for learning opportunities. Only in the United Kingdom do more than half of the adults actively seek information. On a positive note, the vast majority of adults who look for information on learning possibilities manage to find them.

Adults' search for information about learning possibilities



Note: Unweighted country average.
Source: Adult Education Survey 2011 (Eurostat, 2018).

What can we do?

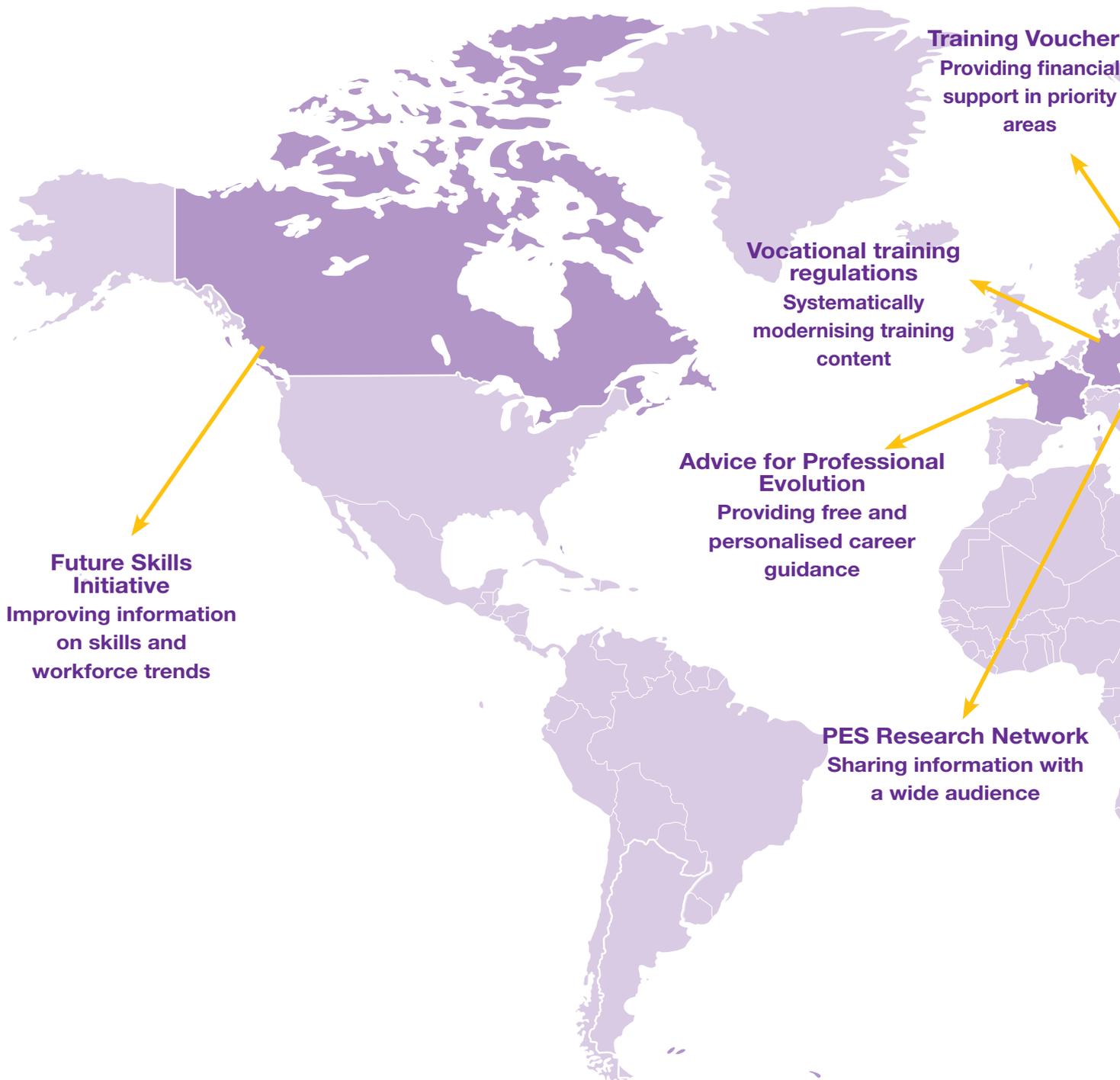
Providing tailored information and guidance about training and labour market trends is essential to enable individuals to make good decisions. Incentives such as funding or time off work when training for skills in shortage can also support individuals to take up these programmes. See how others implement this in practice:

- One-stop shops provide all relevant information in the same place in an accessible way. The Danish website *UddannelsesGuiden* (www.ug.dk), for example, brings together information about different education options, the structure of the Danish labour market and the role of industries and businesses. It also features a Job Compass (*JobKompasset*) tool, which allows individuals to learn about different occupations within sectors. The information provided for each occupation includes a description of daily activities, average income, tools or equipment used, and even the occupations' outlook for the future. The Job Compass also directly links to the vocational courses that prepare and certify individuals in these occupations. Users can access further information and guidance easily via chat, phone or email (OECD, 2019b).
- Accessible and tailored career guidance that builds on the evidence from skill assessment exercises can help people make the right training decisions. In France, a law from 2009 sets out that every individual has the right to information, advice and career guidance support. To put this right into action, the *Advice for Professional Evolution (Conseil en Évolution Professionnelle, CEP)* was launched in 2014, offering free and personalised services. These start with a one-to-one interview to analyse skills and professional experience and continue with career counselling, which takes into account evidence from skills assessment exercises. Based on this the adviser and the individual develop a professional plan, which includes recommended training. People continue to receive support throughout the implementation of this personalised plan. The process and services vary somewhat for different target groups, i.e. students, the unemployed, the disabled. For instance, the unemployed are sign-posted to the system by the PES (Pole Emploi), while employees are informed of the existence of the CEP by their employers. In 2016, over 1 541 544 individuals used the service, more than twice the number of 2015 (OECD, 2017a; Euroguidance.eu, 2018).
- Output from skill assessment exercises can also be used to strengthen incentives. In Austria, there is a dedicated grant scheme available for those who enrol in full-time training for shortage occupations, as defined in the PES training catalogue. The programme is restricted to individuals without a higher education degree, who are eligible for unemployment insurance and have a certain work history, i.e. being employed 4 years out of the past 15.

Three key insights from existing practice:

- ⇒ *Provide one-stop shop solutions where individuals can access all relevant information.*
- ⇒ *Systematically draw on skill assessment information in career advice, training programme provision and the design of financial incentives.*
- ⇒ *Make career advice and guidance available for the employed.*



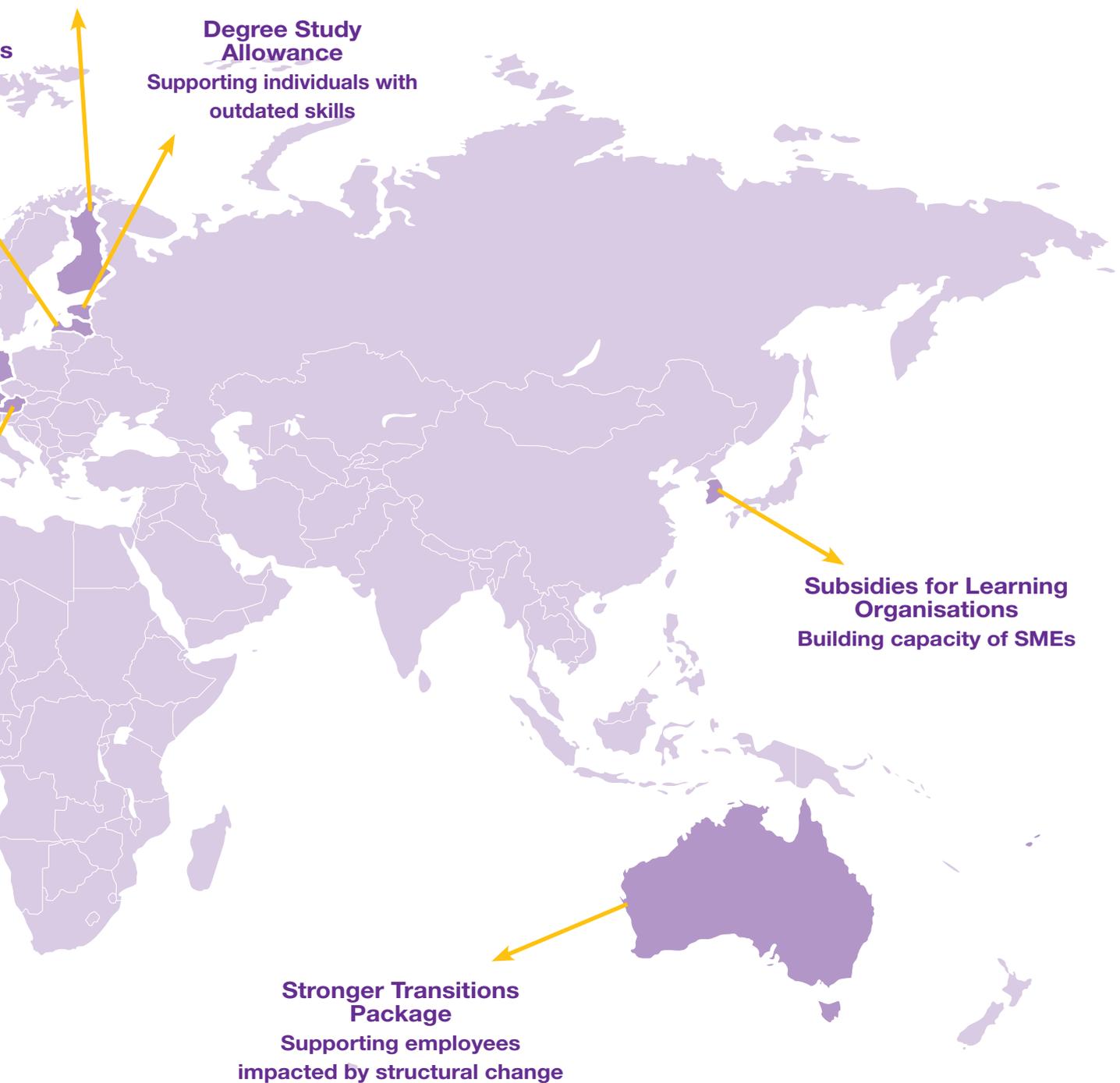


Adult learning systems:

Interesting practices

VOSE project

Analysing the skill needs of priority sectors each year





Action 4 : Provide specific support for workers at risk of skill obsolescence

Why is this important?

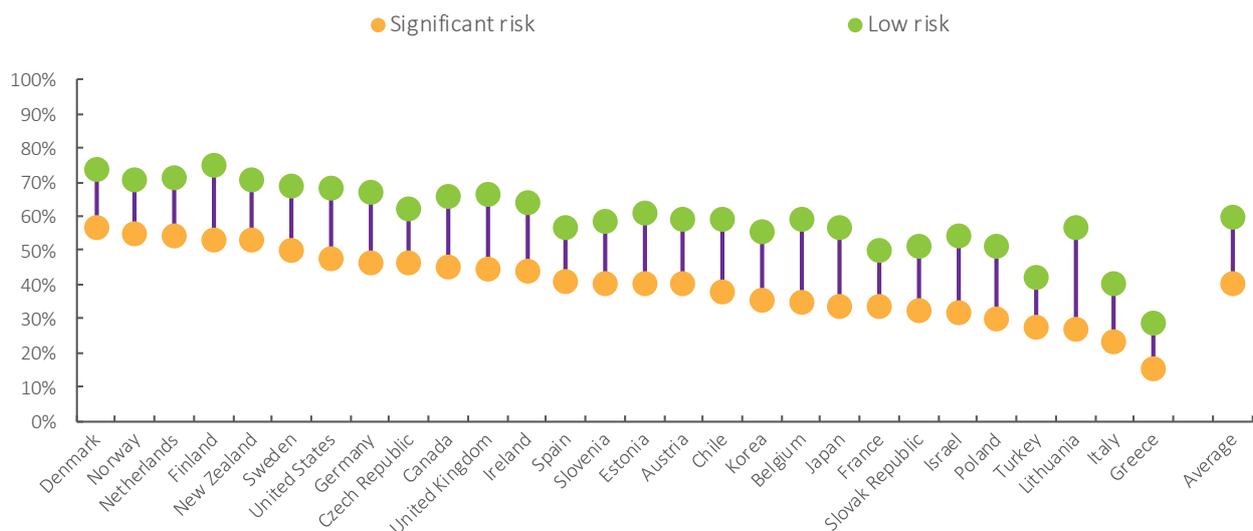
Workers with outdated skills or skill-sets have the greatest need for education and training. They typically have to upskill or reskill to keep their job, find a job, or progress in their career. Workers in highly automatable jobs and/or in jobs that are 'in surplus' in the labour market have an increased risk that their skills will become obsolete. Yet, we know that these workers are actually less likely to participate in training than others (OECD, 2019b).

Hence, training adults for the skills that are in demand is only half of the equation of aligning adult learning systems with changing skill needs. We must also identify and support those workers who are most at risk of skill obsolescence to acquire new skills that are in demand, ideally, before they become unemployed.

Did You Know ?

People who have jobs with a high risk of automation are less likely to participate in adult learning activities than those who have jobs with a low automation-risk (40% vs. 59%). Even in countries where overall learning participation is high, such as the Nordic countries, the Netherlands and New Zealand, training participation of people with jobs at high risk of automation lags more than 15 percentage points behind. This is problematic, because the probability that job tasks will change in the near future, and thereby the need to train, is higher in automatable jobs.

Participation in job-related adult learning by risk of automation



Note: % of workers participating in adult learning (in the last 12 months). Significant risk is defined as having a risk of automation over 50%, low risk as at most 50%. Belgium refers to Flanders only, United Kingdom to England and Northern Ireland. Training refers to formal or non-formal job-related adult learning.

Source: Nedelkoska and Quintini (2018) using PIAAC data (2012, 2015).

What can we do?

In some places, workers at risk of skill obsolescence have access to targeted services. First, as they are less likely to reach out to services themselves, they must be identified either on an individual or on a group basis, for example in case of collective dismissals. Then, support can be provided, including through advice and guidance, training opportunities and financial incentives. These measures are often closely related to interventions that support the low skilled in upskilling (OECD, 2019a). See how others implement this in practice:

- Financial support for upskilling is provided through the *Degree Study Allowance (Tasemeõppes osalemise toetus)* in Estonia. The allowance targets employed or unemployed individuals who have insufficient or outdated education or skills and hence find it difficult to find work or are at risk of losing their job. More specifically, it targets individuals who i) either acquired their qualification more than 15 years ago, ii) do not hold a professional or vocational qualification and have acquired their basic or general secondary education more than 5 years before, and iii) need to retrain due to health reasons. The allowance is funded through the Unemployment Insurance and paid when the individual takes up education or training at a state-commissioned educational institution. To provide labour market relevant training, it only funds education and training for professions that are in demand according to the Estonian skills forecasting system. Individuals receive up to EUR 260 per month.
- Supporting employees at risk of dismissal is the purpose of the *Swedish Job Security Councils (Trygghetsråden)*. The councils target workers at risk of collective dismissals, which means their company or part of their company is closing down or has to restructure for technological or economic reasons. In this case, the councils provide a range of services, including advice and guidance, training, financial support and business start-up support. The councils typically intervene before a dismissal takes place, to manage the transition to other jobs for between six to eight months. Workers have a dedicated coach and receive personalised services. Job Security Councils are based on sectoral or cross-sectoral collective agreements (omställningsavtal), are run by social partners and exist in all sectors of the Swedish economy. They are financed through an employer levy of 0.3%. Workers do not have to be trade union members to benefit from the councils' services. The councils have a relatively high success rate: 74% of workers go on to employment or further training and 70% of those who find work manage to maintain or increase their salary in the process (Eurofound, n.d.; OECD, 2015).
- Along the same lines, the 2018 *Australian Stronger Transitions Package* targets workers in five regions which are impacted by structural change and hence where expectations of future employment opportunities are low. The package includes a set of tailored interventions that come into action before redundancies have taken place. Training measures include comprehensive skills assessments; job search preparation; resilience training; language, literacy and numeracy support; digital literacy training; exploring self-employment options and industry experiences.

Three key insights from existing practice:

- ⇒ *Identify those individuals who are at risk of skills obsolescence, either on an individual basis or where they are affected by collective dismissals.*
- ⇒ *Intervene before people become unemployed and manage the transition between different jobs through tailored services, including training.*
- ⇒ *Consider involving social partners in the development and implementation of measures for individuals at risk of skills obsolescence.*





Action 5 : Keep training content up-to-date

Why is this important?

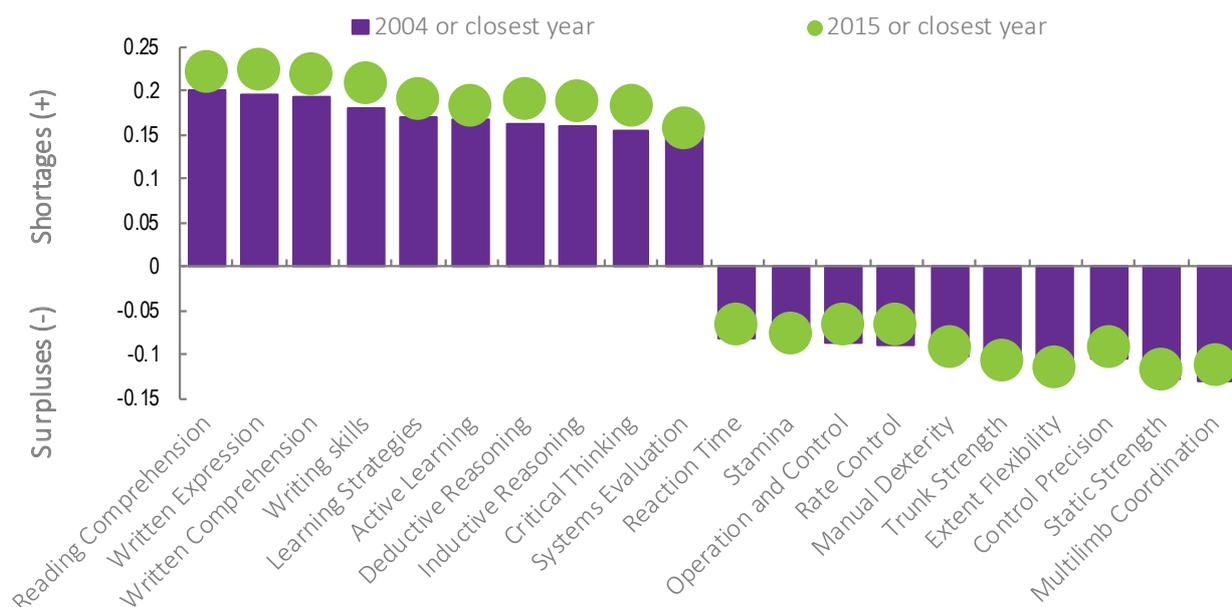
To keep abreast with the changing skill needs in the labour market, we need adult learning systems that dynamically respond to these changes. This means that we must put in place structures and mechanisms that allow for the continuous review of the training offer, the content of training and the delivery methods.

An example for this is the fast moving area of ICT training. Many countries have expanded their offer of adult ICT training, provided additional funding to this area, developed curricula and/or set standards for the delivery of such training. However, the market of ICT is fast-paced and new tools and products are emerging all the time. For instance, while Javascript has been the dominating programming language for the past six years, according to the programming forum Stack Overflow, Python may soon overtake it. Its usage has risen steeply over the past years, not least due to its popularity amongst developers of artificial intelligence applications (Stack Overflow, 2018; The Economist, 2018). Similar fast-moving changes to technology and working practices can be observed in other skill areas.

Did You Know ?

Over the past decade, skill development systems in many OECD countries have struggled to keep up with labour market changes. For instance, while in 2004 there was already a substantial lack of individuals with high-level cognitive skills (e.g. critical thinking and learning abilities), by 2015 these shortages became even more severe. At the same time, there continue to be more people with manual and physical skills than jobs that require them.

Time evolution of skills with the largest shortages and surpluses in OECD countries



Note: Skills are ordered by the intensity of shortages. Results are presented on a scale that ranges from around -1 to +1, with the maximum equal to the highest observed shortage across OECD countries.
Source: OECD Skills for Jobs Database (2018).

What can we do?

Putting in place education and training frameworks, standards and regulations, provides the basis for defining the content of adult learning. However, structured, coordinated and timely processes to keep these tools updated are rare. Approaches taken in other areas of education and the private sector can serve as inspiration. See how others implement this in practice:

- The German process of systematically keeping vocational training regulations up to date (*Modernisierung/ Neuordnung von Ausbildungsberufen*) is a promising approach that could be applied to adult education and training more widely. In Germany, the training for each recognised vocational occupation is regulated through a vocational training regulation. It sets out the duration of vocational training, the knowledge, skills and abilities that need to be acquired through training, a chronologically ordered training plan and assessment criteria. Existing training regulations are updated regularly according to a clearly specified process: 1) Social partners or the Federal Institute for Vocational Education and Training (Bundesinstitut für Berufsbildung, BIBB) make a case for updating to the responsible Ministry, typically the Ministry of Economy and Technology. 2) The Ministry agrees key parameters of the new/updated training regulation with key stakeholders. 3) The BIBB develops the regulation in collaboration with experts nominated by the social partners within one year. The education ministries of the federal states develop school-based elements of the dual vocational training. 4) A council of representatives of the national and federal state level signs-off on the new/updated training regulation. In the period 2006-2015, 130 out of the 328 vocational training regulations and their training content were modernised and 19 additional regulations for new occupations were created (BIBB, 2017). The speed of adaptation is increasing, according to the BIBB (BIBB, 2018). Amongst the 25 new and modernised training regulations in 2018 were a range of ICT and electronics occupations.
- Thinking of adult learning programmes as products that need to be continuously improved, is key to the approach of the private education provider *General Assembly (GA)*. GA is a global education company that provides experimental education courses in today's most in-demand skills, such as web development and data science. The development cycle of any new education programme starts with carrying out market research with employers and potential users. Once a programme is launched, GA continuously iterates and adapts the curriculum. Changes are introduced based on feedback from monitoring and evaluation data from instructors and learners and an analysis of skill trends. Each course goes through at least two curriculum updates per year. For example, GA used to teach a visual design course that used Photoshop as the main software tool. This course is now taught using a software called "Sketch + InVision", as the skill demand shifted towards this tool.

Three key insights from existing practice:

- ⇒ *Put in place a clearly defined process for regularly updating frameworks, standards and regulation of adult education.*
- ⇒ *Use skill assessment evidence regarding ongoing trends along with feedback from training participants and employers to identify areas where updates are needed.*
- ⇒ *Foster a culture in which programme updates and refinements are embedded in the development of any education and training programme.*





Action 6 :

Use financial incentives to steer providers

Why is this important?

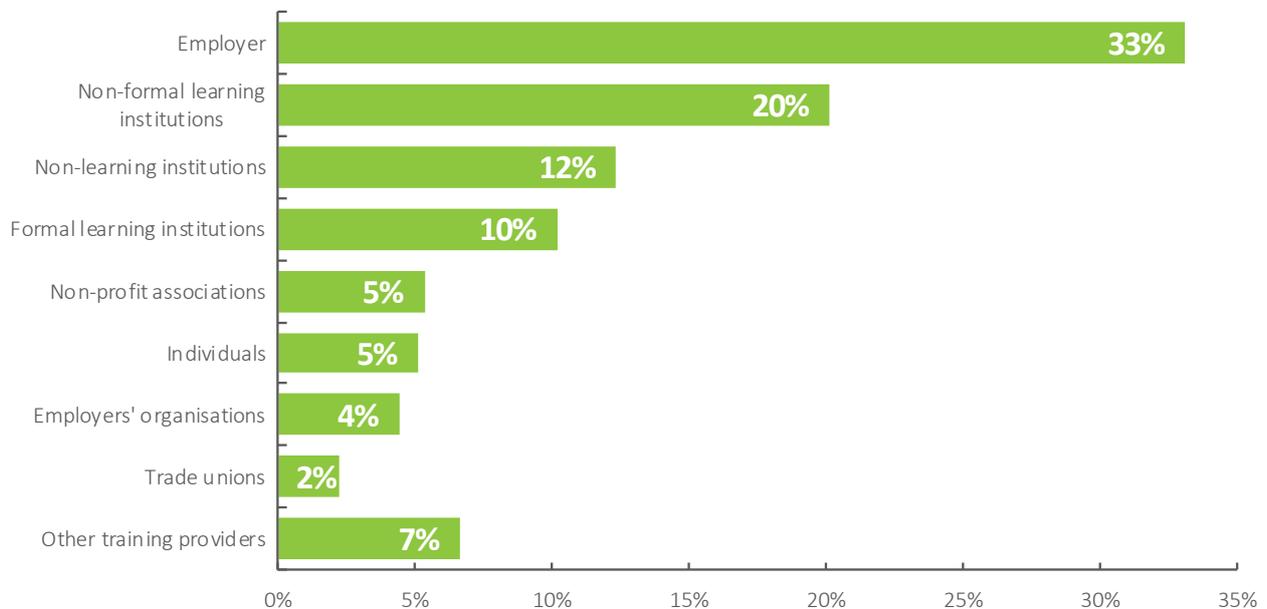
Governments subsidise adult education to encourage participation due to its many individual and societal benefits. However, the allocation of the funding itself can contribute to mismatches between what training individuals pursue and what skills are useful in the labour market. Providing funding based on the number of individuals enrolled (which is a widespread practice) does not set incentives for providers to take into account labour market needs and continuously improve training.

Aligning providers' incentives more with that of the adult learners and their prospective employers through funding provision is essential. Especially as financial incentives can be an efficient way to nudge people into making the 'right' training choices.

Did You Know ?

While formal education is typically provided by schools or colleges, i.e. formal learning institutions, there are a range of other institutions where adults learn and develop their skills. The largest share of non-formal learning is provided by employers (33%), followed by non-formal learning institutions (20%) and non-learning institutions (12%) such as libraries or museums, where providing education is not the main activity. Trade unions and employers' organisations provide a smaller share of non-formal training.

Providers of non-formal learning activities



Note: As a % of adults who followed non-formal training (job-related and non-job-related). Non-learning institutions are institutions where education is not the main activity (e.g. equipment suppliers, libraries, museums or ministries). Unweighted average across BEL, CZE, DNK, DEU, EST, IRL, GRC, ESP, FRA, HRV, ITA, LVA, LTU, LUX, HUN, NLD, AUT, POL, PRT, SVN, SVK, FIN, SWE, GBR, NOR, CHE, TUR.
Source: Adult Education Survey 2016 (Eurostat, 2018).

What can we do?

Governments can put in place financial incentives for providers that steer the training provision towards fields that experience shortages. These include higher subsidies for training in in-demand skills and occupations, linking funding to graduate outcomes or providing one-off funding to set-up programmes in strategic fields (OECD, 2017b). See how others implement this in practice:

- Estonia introduced elements of *performance-based funding* in its vocational education and training system in 2018. The aim of this change was the reduction of the dropout rate, promotion of quality and increased alignment with the needs of the business sector. Performance-based funding accounts for 8% of the total funding received by training institutions. Indicators to assess performance include the share of students who participate in work-based training. Training institutions continue to receive core-funding (not performance-based), which is linked to fields of study and some other indicators including the number of learners, salaries of teachers and number of students with special educational needs. According to the Ministry of Education and Research, preliminary data show an improvement in the proportion of students enrolled in priority areas (European Commission, 2018).
- Some countries draw up lists of courses that are eligible for a government subsidy, or establish the level of funding based on skill assessment information. Several Australian states take this approach in the area of VET. South Australia produces a list of VET courses eligible for funding based on priority industries, industry growth prospects and employment outcomes of the qualification. Meanwhile, Queensland categorises all VET qualifications into three groups based on national, state level and industry information on skill demand. 'Priority One' trainings are for occupations that are in critical demand in the region and are 100% subsidised. Priority Two and Three are subsidised with a rate of 88 and 75% respectively. Funding priorities are reviewed annually (OECD, 2017a). Similarly, in Korea, the government annually updates a list of 'target occupations' based on the results of surveys and forecasting exercises. Financial support for providers of vocational training depends on the results.
- In Latvia, providers are financed indirectly by providing vouchers for individuals to train in priority skills and occupations. The Latvian State Employment Agency (SEA) issues vouchers to the unemployed for both vocational and non-formal basic competency programmes. These can be used exclusively for priority training areas defined by the Latvian Training Commission. The Commission takes into account data from SEA (e.g. vacancies, unemployment by education and workplace), labour market forecast and sectoral trends. The maximum funding and length of the training varies with the qualification level of the programme (from around EUR 600 to EUR 1 220 and from 480 to 960 hours). The unemployed additionally receive a monthly stipend. Training directly requested by employers cannot be funded by the voucher scheme.

Three key insights from existing practice:

- ⇒ *Consider linking (some of the) funding to labour market or other individual outcomes to strengthen incentives for providers.*
- ⇒ *Increase financing of providers for areas that are strategic and/or where there are labour market shortages.*
- ⇒ *Review the desirability and feasibility of introducing training vouchers to increase competition between providers.*





Action 7 : Build capacity of employers to train for a changing world of work

Why is this important?

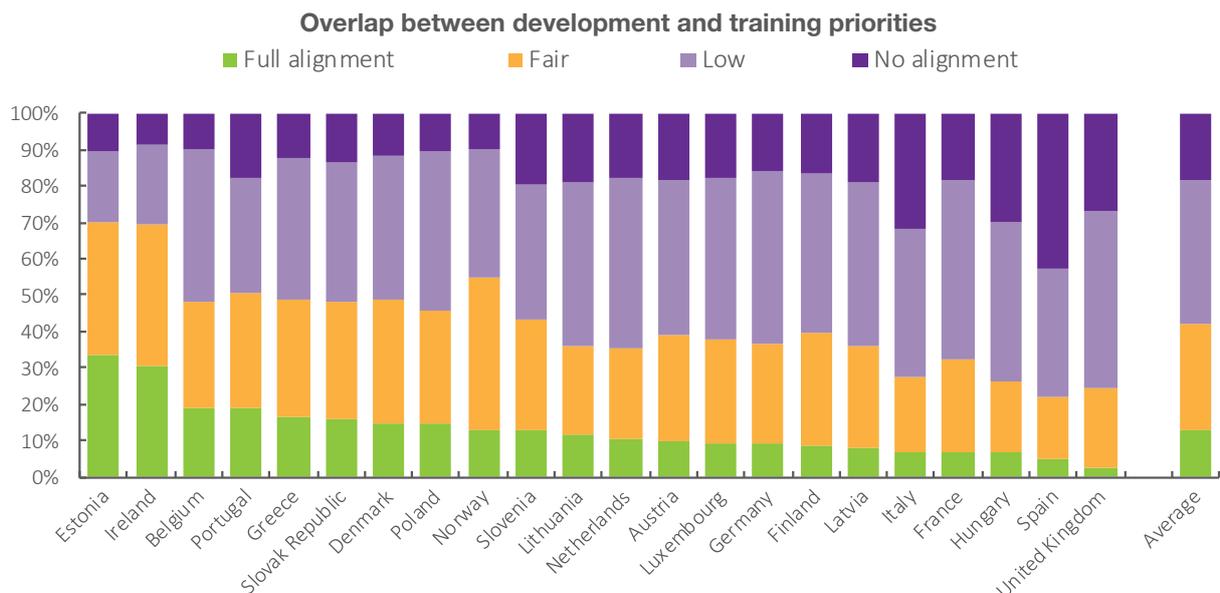
A large share of adult learning takes place in the workplace, not least because this is where adults spend a lot of their time. Further, employers have an interest in keeping the skills of their employees up to date, so that they can introduce new technologies and work-organisation methods and stay competitive. In fact, across OECD countries 76% of companies with at least 10 employees provide training for their staff (OECD, 2019b).

However, employers do not always provide training for the skills most needed in the labour market. For instance, 21% of training hours across European OECD countries are used for health and safety training, according to data from the Continuing Vocational Training Survey (CVTS). While knowledge on health and safety is certainly an important requirement to reduce the likelihood of work accidents, it is part of compulsory training and does not necessarily signify the existence of an active learning culture.

The key challenge for many companies is to know what skills they need for the development of their business and how to provide the relevant training. This is particularly true for SMEs which can lack the capacity and capability to assess their skill needs beyond the short-term (Ellis, 2003). Companies need to get better at anticipating their skill needs and offer training that prepares employees for the future.

Did You Know ?

In many OECD countries, the overlap between companies' priorities in the area of skill development and the training activities actually offered is relatively small. On average only 13% of firms in European OECD countries report that the three most important skills for the development of their firm are also the three most prioritised training areas. By contrast, in one out of five firms, there is no alignment between the top three training and development priorities.



Note: Degree of alignment is calculated as the overlap between the top 3 development priorities of the firms and the top 3 training priorities (in terms of training hours): No alignment (i.e. no overlap), low (i.e. one development priority is also a training priority), fair (i.e. two development priorities are also training priorities) or full alignment (i.e. complete overlap between development and training priorities); Excludes firms with less than 10 employees; average of OECD countries participating in CVTS.
Source: CVTS 2015 (Eurostat 2018).

What can we do?

There are many ways to develop the capacity of companies to provide relevant training. Measures typically include a mix of hands-on consultancy and financial incentives. See how others implement this in practice:

- Finland has a financial incentive that goes hand-in-hand with building the capacity of companies to identify their training needs and deliver training. The *Joint Purchase Training (Yhteishankintakoulutus)* supports employers who want to retrain existing staff or set-up training programmes for newly recruited staff. Offered by the Public Employment Services (PES), it supports employers to define their training needs, select the appropriate candidates for training and find an education provider to deliver the tailored training. The PES also part-finances the training. Types of training that can be developed: i) Tailored Training (Täsmäkoulutus) for employers who want to retrain their staff due to technological or other changes in the sector (min. training duration 10 days), ii) Recruitment Training (Rekrykoulutus) for employers who cannot find employees with the skills needed and want to hire, then train new staff (training duration 3-9 months) and iii) Change Training (Muutoskoulutus) for employers who have staff that has become redundant and help them transition to other job opportunities (training duration 10 days to 2 years (OECD, 2017; Eurofound, n.d.)).
- Building the capacity of SMEs to develop their staff is the declared goal of the *Korean Subsidies for Learning Organisations*. Employers can access a set of complementary subsidies: Financial support is available to hire external consultants to analyse the company's training needs, build the capacity of the CEO and managers and accompany the process of becoming a learning organisation. Further subsidies are available for setting up learning groups and to fund staff responsible for managing these groups. Funds can be also used to provide training to CEOs and staff responsible for learning activities. The final set of subsidies allows companies to take part in peer-learning activities and share their experience of building a learning organisation.
- Social partners can play a key role in building the capacity of employers to train for the future. In Germany, the initiative *Securing the skilled labour base: vocational training and education (CVET) and gender equality (Fachkräfte sichern: weiterbilden und Gleichstellung fördern)* supports social partners in increasing adult learning participation and gender equality at work. Funding is provided for five types of activities: i) creation of staff development structures, particularly for skill upgrading; ii) creating of interlinked CVET structures for SMEs, iii) initiate dialogue across branches of industry, iv) strengthen the ability of business stakeholders to promote equality of opportunity, v) develop work time models and career pathways adapted to phases in a worker's life. This initiative funds 93 projects. For example, one project aims to create staff development structures in utility companies in the three German cities of Coburg, Kronach and Lichtenfels. Companies receive coaching and training for key staff on analysing their skill and training need, practical ways of introducing staff development structures and working with partners (BMAS, 2018).

Three key insights from existing practice:

- ⇒ Provide targeted coaching for companies to help them identify their skill needs and develop an appropriate training offer.
- ⇒ Offer financial incentives for SMEs alongside advice and guidance.
- ⇒ Facilitate company-networks within and across industries for peer learning.



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