

2 **Securing a balance in skills through a responsive and diversified supply of skills in Ireland**

In the context of rapidly changing skills needs, it will be essential for Ireland to develop a skills system that helps to secure a balance between skills demand and supply. Ireland needs to ensure that its skills system is flexible and responsive to address skills shortages and mismatches as they emerge and plan for future skills needs. A diversified supply of skills is also needed to build adaptability and resilience in the face of societal and economic change. This chapter provides an assessment of current and projected skills imbalances and presents three opportunities to better secure a balance in skills: 1) improving information and guidance for individuals on learning and career pathways; 2) strengthening learning and career pathways over the life course; and 3) making education and training provision more responsive to changing skills needs.

The importance of securing a balance in skills through a responsive and diversified supply of skills

Countries should aim to build skills systems that bring skills demand and supply into alignment – so as to reap the full societal and economic benefits of their skills investments. Minimising skills imbalances – comprising skills shortages and surpluses, as well as skills mismatches (Box 2.1) – is critical for the social and economic success of wider society, businesses and individuals (OECD, 2019^[1]). For businesses, skills shortages and mismatches may constrain their productivity, innovation and competitiveness and increase hiring costs and staff turnover. For individuals, not having the skills required for occupations can negatively impact their well-being and career progression, while having skill levels above those required can reduce their job satisfaction and drive the attrition of their skills over time (OECD, 2016^[2]). Ensuring that people’s skills align well with those required to participate fully in an increasingly complex and interconnected world is also essential for inclusive societies.

Box 2.1. Definitions: Types of skills imbalances

A skills shortage refers to a condition of disequilibrium in which the demand for a specific type of skill exceeds its supply in the labour market, at the prevailing market wage rate.

A skills surplus, in contrast, comes about when the supply of a specific type of skill exceeds its demand in the labour market.

Skills mismatches occur when a worker’s skills exceed or fall short of those required for the job under current market conditions. Skills mismatches can be measured in several different ways:

- **Qualification mismatch** arises when a worker’s educational attainment is either higher or lower than that required by his/her job. If his/her qualification level is higher than that required by the job, the worker is classified as over-qualified; if the opposite is true, he/she is classified as under-qualified.
- **Skills mismatch** arises when a worker has higher or lower skills proficiency than that required by his/her job. If the worker’s skills proficiency is higher than that required by his/her job, then the worker is classified as over-skilled; if the opposite is true, he/she is classified as under-skilled.
- **Field-of-study mismatch** arises when a worker is employed in a field different from the one in which he/she has specialised.

Source: OECD (2016^[3]), *Skills Matter: Further Results from the Survey of Adult Skills*, <https://doi.org/10.1787/9789264258051-en>.

A dynamic and evolving economy will always experience some skills imbalances. In a context of rapidly changing skills requirements for jobs, changing labour markets and imperfect information, it is impossible to secure a perfect balance in skills. Therefore, the imperative is to ensure flexibility and responsiveness in the skills system, respond to shortages as they emerge, minimise skills mismatches, and meet the future skills needs of society and the economy.

Securing a balance in skills is now more important than ever, which is as true for Ireland as for other OECD countries. Rapid technological change, globalisation, demographic and climate change, Brexit, the coronavirus (COVID-19) pandemic and more recently, the Russian Federation’s large-scale aggression against Ukraine, reshape skills supply and demand (see Chapter 1). To optimally benefit from these developments and meet its own economic and societal ambitions, Ireland needs a skills system that provides people with a diversified supply of skills that will make them more resilient and effectively adjust to changes.

The importance of securing a balance in skills is already reflected in Ireland’s main strategic document for skills policy,¹ the National Skills Strategy (NSS) 2025, which was launched in 2016 (Box 2.2) (Department of Education and Skills, 2016_[4]). The first objective of the strategy – “education and training providers will place a strong focus on skills development opportunities that are relevant to the needs of learners, society and economy” – is directly linked to the issue.

Box 2.2. This chapter and Ireland’s National Skills Strategy 2025

This chapter on securing balance in skills through a responsive and diversified supply of skills is linked to various objectives of Ireland’s NSS 2025. Given that many policies affect either the supply or demand of skills, and thereby skills imbalances, almost all objectives and key actions in the strategy could be considered relevant. These objectives range from the active participation of employers in the skills system to ensuring that more people engage in lifelong learning.

In particular, the first objective, “education and training providers will place a strong focus on skills development opportunities that are relevant to the needs of learners, society and economy”, is directly linked to the issue of securing a balance in skills. Key actions identified in the strategy, and which are pertinent to securing a balance in skills, include learning 21st-century skills at all ages; raising participation in science, technology, engineering and mathematics (STEM) education; and enhancing integration, partnerships and synergy between the further education and training (FET) and higher education (HE) sectors.

Source: Department of Education and Skills (2016_[4]), *Ireland’s National Skills Strategy 2025 – Ireland’s Future*, www.gov.ie/en/publication/69fd2-irelands-national-skills-strategy-2025-irelands-future/.

Several other opportunities described in other chapters are relevant for securing a balance in skills. Chapter 3 examines how to strengthen lifelong learning, which contributes to aligning the skills supply – through upskilling and/or reskilling – with changing skills demands. Improving the use of skills, as examined in Chapter 4, can also have an impact on reducing skills mismatches. For example, shortages and mismatches (e.g. over-qualification) could be reduced by raising the demand for skills and making more effective use of the available skills of workers. Chapter 5 explores how governance arrangements can involve employers more fully in the design of education and training (i.e. in shaping the content of new courses), which, by extension, can make education and training more responsive to changing skills needs.

This chapter begins with an overview of existing policies for ensuring a balance between skills demand and supply and an assessment of the current skills imbalances in Ireland. Subsequently, it examines three skills-related policy areas – or opportunities – for better securing a balance in skills:

1. improving information and guidance for individuals on learning and career pathways
2. strengthening learning and career pathways over the life course
3. making education and training provision more responsive to changing skills needs.

Overview and performance in securing a balance in skills through a responsive and diversified supply of skills

Overview of the current policies for securing a balance in skills

This section examines the policies that are relevant for the three identified opportunities for better securing a balance in skills in Ireland, as mentioned above.

Provision of information and guidance on learning and career pathways

Ireland has an extensive career guidance support system across the education and training system, including post-primary education, further education and training (FET) and higher education (HE). This support system covers the provision of information on careers and learning opportunities, as well as guidance counselling services in schools and career guidance services in working life.

Information on learning and careers is provided on multiple online portals that assist and inform people about available courses at all levels of education and different career pathways (see Table 2.1 in Opportunity 1 for an overview of these portals). Some of these portals aim to be one-stop-shops for all career information (most notably the CareersPortal supported by both public and private organisations), but most portals target different groups of learners and provide information on specific topics or segments of the education and training system. For instance, Fetchcourses provides information on FET programmes funded by SOLAS, the state agency overseeing FET; Generation Apprenticeship provides information on apprenticeships; Smart Choices presents labour market information (LMI) and information on available FET courses; and Smart Futures has information on STEM careers.

Various organisations provide career guidance services to youth and adults. A broad range of stakeholders are involved; an extensive overview of key organisations in the career guidance support system is described in a review of career guidance in Ireland by Indecon's Economic Consultants (2019^[5]). In addition to various government departments, this includes educational organisations and training providers (e.g. universities, education and training boards [ETBs] and Skillnet Ireland); statutory agencies (e.g. SOLAS, the Higher Education Authority [HEA], Quality and Qualifications Ireland [QQI], Science Foundation Ireland and the National Disability Authority); advisory committees or non-statutory agencies (e.g. the National Skills Council [NSC], Regional Skills Fora [RSF] and the Labour Market Advisory Council); and more.

For youth in schools, the 1998 Education Act (9.C) states that all recognised schools must ensure students have access to appropriate guidance to assist them in their educational and career choices. Schools are expected to develop comprehensive guidance plans, considering the needs of students, available resources and contextual factors.

In the FET sector, guidance policies are steered by the 2020 National FET Strategy (SOLAS, 2020^[6]). The sector provides career and education information, as well as one-to-one and group guidance to students. For example, ETBs offer Adult Educational Guidance and Information Services (AEGIS), which support adults who wish to return to education and training or are already registered in a FET programme, and apprentices can access training advisers located in training centres.

As the planning and policy development body for HE, the HEA is responsible for career guidance policies in the HE sector. Higher education institutions (HEIs) provide guidance services directly to students through student support services, which include careers offices, disability support and more. Current provision emphasises support to final-year students and recent graduates (Indecon Economic Consultants, 2019^[5]).

Outside the education and training system, there are additional guidance services providers. For instance, the Department of Social Protection (DSP) provides guidance services to job seekers through the Intreo offices, Ireland's public employment services, and to the long-term unemployed through its network of contracted employment services as part of the National Employment Scheme and Local Area Employment Scheme. Among other activities, Intreo offices organise one-to-one meetings with job seekers with a comparatively low or medium likelihood of finding a job within 12 months and with job seekers with a high probability of exiting unemployment after 6 months (OECD, 2021^[7]).

Guidance counsellors in Ireland are supported through several networks and events. The Association of Higher Education Career Services exist for guidance counsellors in HEIs; the biannual National Forum on Guidance promotes collaboration and co-operation across the guidance sectors; and the Institute of

Guidance Counsellors maintains a register of all accredited counsellors and provides continuing professional development for its members.

In line with the findings of the *Indecon Report on Career Guidance (2019^[5])*, to ensure coherence in career guidance policy, a new Guidance Policy Unit has been established in the Department of Education to develop, strengthen and co-ordinate guidance policy. Additionally, strengthened structures have been established, including a new guidance team in the Professional Development Service for Teachers that provides professional learning opportunities and support to guidance counsellors in post-primary schools.

The delivery of career guidance is undergoing significant change at present. A recently established National Policy Group for lifelong guidance with senior officials from five government departments is currently working on the development of a coherent, long-term, strategic framework for lifelong guidance. As part of efforts by the Government of Ireland to strengthen coherence in guidance policy as well as relationships between the policy function and the delivery of guidance, a decision was made to cease the operations of the National Centre for Guidance in Education in September 2022, with its functions now delivered through the new structures.

While strengthening the provision of information and guidance on learning and career pathways is a priority for Ireland, there are clear areas for improvement, as will be examined in Opportunity 1.

Available learning and career pathways throughout life

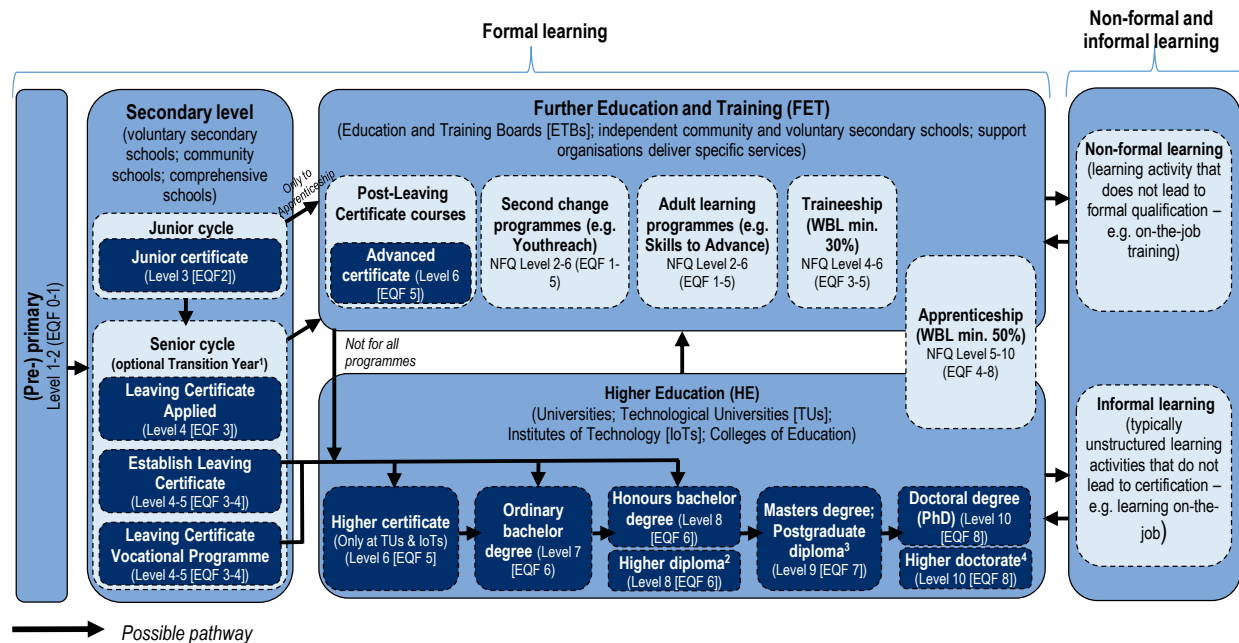
An education and training system that provides youth and adults with well-developed pathways contributes to a diversified supply of skills that can make society more responsive to changes in skills demand. At present, Ireland's education and training system already provides youth and adults with diverse routes to develop skills throughout life (see Figure 2.1 for a schematic overview of existing learning pathways).

After pre-primary and primary education, young people usually progress through both the Junior Cycle and Senior Cycle (with an optional Transition Year). In upper secondary education, there are three Leaving Certificate programmes: Established Leaving Certificate (Levels 4-5²), Leaving Certificate Vocational Programme (Levels 4-5) and Leaving Certificate Applied (Level 4). While the Leaving Certificate Applied only provides direct access to FET and other training options, the other two certificates provide access to both FET and HE (OECD, 2021^[8]). The Senior Cycle programmes are currently being redeveloped to include the revision of subject curricula, the introduction of two new subjects, significant revisions to assessment arrangements and a focus on the progression pathways to further and higher education (Department of Education, 2022^[9]).

While FET and HE are traditionally separate sectors, Ireland aims to apply a more unified approach to tertiary education to improve their complementarity and the pathways between the two sectors (DFHERIS, 2022^[10]). The FET and HE sectors have their own strengths, and their diverse learning offers provide learners with a broad variety of learner pathways.

The main providers in FET are 16 ETBs that provide education and training directly or via a network of contracted training or community education and training providers. FET is also provided by approximately 25 independent community and voluntary secondary schools and support organisations that deliver specific services (e.g. the National Adult Literacy Agency) (SOLAS, 2020^[6]). SOLAS oversees the system of publicly funded FET.

Figure 2.1. Pathways through Ireland's education and training system and beyond



Note: This figure aims to provide a high-level overview of the different learning pathways that exist and might simplify some parts of the education and training system. Levels refer to the National Quality Framework.

1. The optional Transition Year is a one-year programme between the Junior Cycle and the Senior Cycle that allows students to experience a wide range of educational instruction and work experience.
2. The Higher Diploma is a Level 8 qualification, which usually lasts for a year, with the majority of students already having an Honours bachelor's degree. In most cases, the Higher Diploma is in a different subject than the initial qualification.
3. The Postgraduate Diploma is a short-term academic programme after undergraduate studies with a vocational focus at the graduate level of study that is typically one year (contrary to master's degrees of 18-24 months).
4. The Higher Doctorate recognises excellent and distinguished contributions to learning and may be used for career progression to advanced levels of academia and research.

Source: Based on OECD (2021^[8]), *Education GPS Ireland: Overview of the Education System*, https://gpseducation.oecd.org/Content/MapOfEducationSystem/IRL/IRL_2011_EN.pdf.

Students who progress to the FET system can choose from a range of programmes. The Post-Leaving Certificate (PLC) courses are one- or two-year full-time programmes that offer technical and practical education to students. There are also programmes in FET that provide second-chance education to youth. An example is Youthreach, a full-time programme, usually over two years, for people aged 15 to 20 who left school early and are not working. The Higher Education Links Scheme (HELs) allows FET learners with specific Level 5 or Level 6 major degrees to access a range of HE courses.

Ireland also offers traineeships and apprenticeships that strongly emphasise work-based learning (WBL). Traineeships typically last between 6-20 months and have at least 30% of learning activities in the workplace. Over 75 traineeship programmes are available nationally in a range of industries. Apprenticeships vary in length, lasting between two and four years, have at least 50% of learning activities in the workplace, and apprentices have an employment contract with a salary. There are two main types of apprenticeships: Craft Apprenticeships (e.g. for carpentry, plumbing, motor mechanics and electrical apprenticeships) and, since 2016, New Apprenticeships in other areas of industry (e.g. in information and communications technology [ICT], finance and hospitality). In addition to the different sectors, the two types of apprenticeships differ in funding and format, as will be explained in Opportunity 2. It is important to note that apprenticeships are delivered through both FET and HE at Levels 5-10. For some apprenticeships,

the first off-the-job training phase of Craft Apprenticeships takes place in an ETB training centre. The subsequent off-the-job training phases are in a technological university or institute of technology.

Students choosing to enrol in HE can go to one of the seven state-funded universities that offer degree programmes at bachelor, master and doctorate levels. In addition, the technological sector in HE comprises two institutes of technology and five technological universities.³ Following the 2018 Technological Universities Act, technological universities were established by merging at least two institutes of technology. The technological universities emphasised programmes at Levels 6-10 and industry-focused research. The HE sector also includes Colleges of Education that offer a four-year Bachelor of Education degree and a two-year Professional Master of Education. Overall, most learners entering HE choose an Honours bachelor's degree at Level 8.

Learning pathways continue after initial education. As explained in Chapter 3, adult learning can take different forms (formal, non-formal and informal), with formal adult education and training provided by the FET and HE sectors. A range of programmes is specifically targeted to adults, especially in FET. Some examples are Springboard+, which is fully free for unemployed adults and 90% subsidised for employed adults; Skills to Advance, to strengthen the skills of adults so they can progress in their current jobs or take advantage of new job opportunities; and Skills to Compete, to support those who have lost their jobs as a result of COVID-19.

Despite the many existing learning pathways for youth and adults, they could be strengthened in several ways, as will be examined in Opportunity 2.

Responsiveness of education and training provision

The speed at which the provision of education and training can adapt to changing skills needs is affected by a variety of factors. One of them is the active engagement of employers in the development of education and training programmes, which is considered an effective strategy for ensuring that programmes reflect the current needs in the labour market. As explained in more detail in Chapter 5, Ireland already has several arrangements in place to promote better employer engagement. A notable example is Skillnet Ireland. With a mandate to strengthen skills and workforce development for enterprises, Skillnet Ireland supports businesses with identifying their skills needs and developing and delivering tailored learning opportunities.

Funding models can also be designed to ensure that skills provision is well aligned with labour market needs. For instance, funding models can incentivise education and training providers to provide and stimulate enrolment in courses that train students for shortage occupations. In Ireland, funding models for FET and HE already create these types of incentives. For example, the HE funding allocation model has both top slices (i.e. funding ring-fenced for specified purposes, such as medical education and ICT skills) and performance funding (up to 10% of the allocated block grant based on verified performance against agreed targets) that provide funding for flexible and specific courses and programmes, on top of a block grant.

The speed with which new qualifications can be developed also impacts the responsiveness of education and training provision. Extensive procedures are in place to develop new qualifications in FET and HE. In particular, the QQI – the state agency responsible for promoting the quality, integrity and reputation of Ireland's FET and HE system – has an important role in these processes.

As will be examined in Opportunity 3, there are a variety of ways in which the responsiveness of education and training provision in Ireland could be further improved.

Ireland's performance in securing a balance in skills

A rapidly changing society and economy drives labour and skills shortages

Strong economic growth and a large inflow of foreign direct investment in Ireland have been driving an increase in demand for labour, resulting in labour shortages in many job categories. SOLAS' Difficult-to-fill Vacancies Survey of recruitment agencies shows that it is difficult to find workers, particularly for science, engineering and technology occupations as well as construction occupations (SOLAS, 2022^[11]). The domestic supply cannot meet these labour shortages, and migrants are already playing an increasingly important role in reducing labour pressures in several sectors, most prominently in the ICT sector (Department of Education and Skills, 2016^[4]). While some of these labour shortages might be more short-term and driven by strong economic recovery following the COVID-19 pandemic, most shortage pressures are likely to stay for the long term.

Given global megatrends (see Chapter 1), such as globalisation and the digital and green transitions, the skills required for jobs are also changing rapidly. Data from online job postings provide up-to-date insights into the skills needed for jobs in both public and private sectors, and they show that a range of transversal skills has become more important in recent years. For instance, between 2019 and 2021, vacancies in the finance sector more frequently ask for skills such as creativity, communication and mentoring. For jobs in the transportation sector, there is a growing need for skills in health and safety, customer service and contact, and sales (SOLAS, 2022^[12]). Overall, skills related to teamwork (e.g. working with others, sharing information), various digital skills (e.g. analysing digital data) and management skills (e.g. supervising people, leading and motivating) are now among the most requested skills in online job postings (Figure 2.2) (CEDEFOP, 2020^[13]).

Figure 2.2. Top ten skills in online job postings in Ireland, 2020

In percentage of all online job postings



Source: CEDEFOP (2020^[13]), *Skills in online job advertisements*, www.cedefop.europa.eu/en/tools/skills-intelligence/skills-online-job-advertisements.

StatLink  <https://stat.link/zrf72o>

Labour shortage pressures and changing skills needs have resulted in skills shortages in Ireland. In addition to an insufficient number of people available or willing to work in specific roles or sectors, the labour force does not always have all the required skills for available jobs. Stakeholders consulted during this Skills Strategy project (hereafter “project participants”) indicated that there are particularly significant shortages of digital skills (e.g. software, coding, data analytics), STEM skills (e.g. engineering,

construction) and management skills (e.g. project management, change management, and leading multicultural teams), among others. While measuring skills shortages presents challenges, the OECD Skills for Jobs database shows some evidence of shortages for different types of skills, including medicine knowledge, training and education, scientific knowledge and more (OECD, 2022^[14]).

It is a challenge that many adults in Ireland do not have the skills required for modern-day jobs, let alone jobs of the future. As mentioned in Chapter 1, 30% of adults have less than basic digital skills (including information and data literacy, digital content creation, etc.) (Eurostat, 2022^[15]). Furthermore, different surveys show that a significant share of workers in Ireland is under-qualified for their jobs – they have a qualification lower than required – although this share is not as high as in many other OECD or European Union (EU) countries (OECD, 2020^[16]; CEDEFOP, 2022^[17]). An additional concern is that only 27% of adults feel that their skill sets prepare them “very well” for future roles as the workplace evolves (Accenture, 2021^[18]).

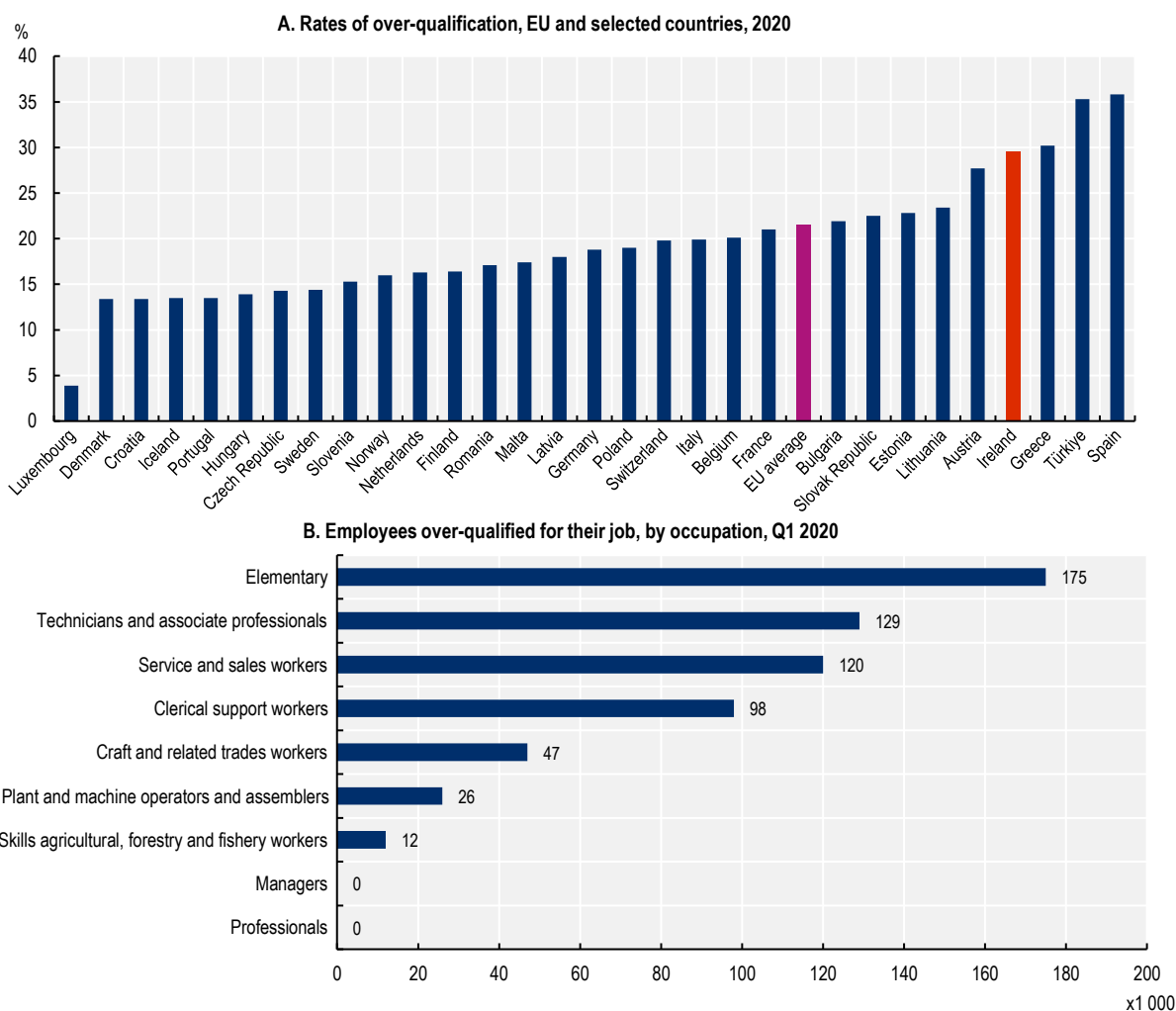
While these skills gaps present challenges for the labour market, societal implications should also not be forgotten. For instance, digital skills are increasingly becoming a prerequisite for full participation in society, and with the expansion of online learning, for learning itself. It will be crucial for all adults to be able to access learning opportunities throughout life to develop the skills needed for full participation in rapidly changing societies (see Chapter 3 on how to foster greater participation in lifelong learning). Providing adults with adequate upskilling opportunities will help ensure they are not left behind.

Many people are over-qualified for their jobs

Despite evidence of significant skills shortages, the skills of some people in Ireland are not being used to their full potential. There is a large share of over-qualified (or over-educated) workers – they have a higher qualification than that required for their jobs – which could suggest that many skills acquired in formal education are underutilised. A recent study found that three in ten tertiary graduates employed in Ireland are working in occupations where their qualifications are not formally required (Nugent, 2022^[19]). In addition, SOLAS calculated that approximately 336 000 adults employed in mid-lower and lower-skilled occupations actually have tertiary qualifications (SOLAS, 2022^[20]). It turns out that over-qualification is a larger problem in Ireland than in most other EU countries, with only Greece, Republic of Türkiye and Spain having larger shares of over-qualified workers (Figure 2.3) (Eurostat, 2020^[21]). The European Skills and Jobs survey also shows that Ireland is among the EU countries with the largest shares of people indicating that they have higher qualifications than required for their job (34%), providing further evidence of skills underutilisation (CEDEFOP, 2022^[17]).

A large majority of over-qualified workers studied in four broad areas: business, administration and law; arts and humanities; engineering, construction and manufacturing; and health and welfare (Nugent, 2022^[19]). Better using the skills of these over-qualified workers could therefore be key to addressing shortages in sectors such as construction, health and more.

There are large differences in over-qualification across sectors, ranging from 12-13% of workers in the professional and education sectors to 55-57% in the transport and wholesale sectors (Eurostat, 2020^[21]). However, in all sectors, the share of over-qualified workers is higher in Ireland than the EU average. The difference is particularly large in the health sector, where 26% of workers in Ireland are over-qualified, compared with 11% across the European Union. For occupations, it is especially in elementary occupations where many workers are over-qualified – over 175 000 employees in total – and there are large numbers of over-qualified employees found among technicians and associate professions, service and sales workers, and clerical support workers (Figure 2.3) (SOLAS, 2021^[22]).

Figure 2.3. Over-qualification in Ireland, 2020

Note: Panel A: The figure shows the estimated rates of over-qualification for those aged 20-64 in 2020. Over-qualification refers to the percentage of people aged 20-64 with higher education and working in International Standard Classification of Occupations (ISCO) 4-9. Panel B: Skills and Labour Market Research Unit analysis on data by Central Statistics Office (CSO) Labour Force Survey. Excludes those who did not state their level of education.

Source: Eurostat (2020^[21]), *Skills - Experimental statistics*, <https://ec.europa.eu/eurostat/web/experimental-statistics>; SOLAS (2021^[22]), *Spring Skills Bulletin 2021: Skills Mismatch in Ireland's Labour Market*, www.solas.ie/fi/70398/x/32c0cebd4/solas_spring-skills-bulletin-2021.pdf.

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There are diverging views on the impact of over-qualification. Some project participants noted that over-qualification is not necessarily negative and that HE levels have a broad range of benefits for both the economy and society, regardless of whether people are employed in jobs aligned with their qualifications. For instance, having a university degree is positively associated with better health outcomes, greater civic participation and the ability to adopt new technologies, among other advantages (OECD, 2023^[23]). Moreover, some studies show that over-qualification can positively shape the performance of over-qualified employees and their fellow group members. For instance, human capital advantages of over-qualified workers result in a wider perspective when problem solving, and they tend to engage more in extra-role activities (van Dijk, Shantz and Alfes, 2020^[24]). There are, however, clear disadvantages of over-qualification. Many studies demonstrate the negative effect of over-qualification on wages: on average, over-educated individuals earn 14% less than workers matched with similar levels of education

(McGuinness, Pouliakas and Redmond, 2018^[25]). While the evidence is more mixed, there are clear indications that over-qualification is also associated with lower levels of job satisfaction (McGuinness, Pouliakas and Redmond, 2018^[25]).

A number of factors drive over-qualification. To start, some level of over-qualification appears to be voluntary, with workers trading off earnings for other aspects of their jobs (McGuinness and Sloane, 2011^[26]). However, a large part is involuntary, and a long list of factors appears to explain cross-country variation in over-qualification rates. These factors include the demand for skills in the labour market, the sectoral composition, as well as how workplaces are organised (see Chapter 4 for an assessment of innovation policies, workplace practices and more) (McGuinness, Bergin and Whelan, 2018^[27]; Delaney et al., 2020^[28]; Nugent, 2022^[19]). The design of the education system also affects over-qualification. For instance, there is evidence that countries with more vocational education options and closer links to the world of work have lower over-qualification rates. However, while the significant expansion of HE is often considered the reason for the high levels of over-qualification in Ireland, there is only limited evidence for this. Across countries, there is no strong relationship between over-qualification and the share of population with tertiary education (Ordine and Rose, 2017^[29]; McGuinness, Bergin and Whelan, 2018^[27]; Delaney et al., 2020^[28]).

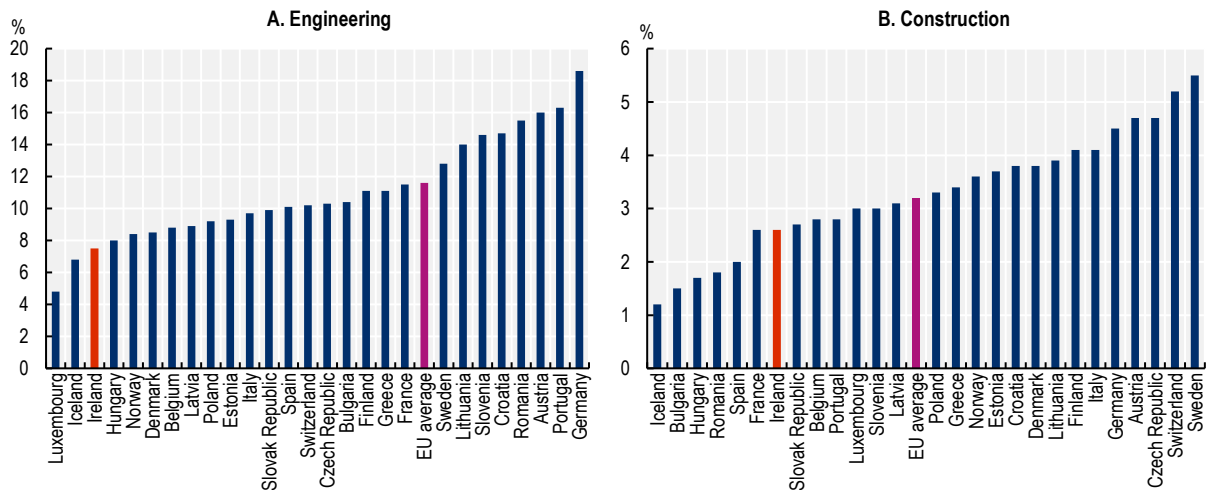
People do not always choose to develop the skills in the greatest demand

Shortages and mismatches are partly the result of many people not choosing learning pathways that are well aligned with the needs of the labour market. Consequently, graduates are sometimes forced to accept jobs that do not match their skills/qualifications.


An indication that students are not always choosing learning pathways aligned with labour market needs is that enrolment rates in fields that respond to the needs of shortage occupations are often quite low. It is positive that Ireland already has comparatively large shares of tertiary graduates in STEM studies, such as ICT (Ireland has the highest share in the European Union), which trains students directly for related shortage occupations. However, not all STEM studies are equally popular. For example, the engineering and construction sectors are facing significant shortages. However, Ireland has only a small share of students completing studies in related fields – only 8% of graduates are in engineering, compared with 15% across the European Union and less than 3% of graduates in construction (Figure 2.4) (SOLAS, 2022^[30]). Indeed, for many shortage occupations, insufficient numbers of people choose related studies.

At present, many students are choosing studies that do not offer good employment prospects. The graduate outcomes survey by HEA shows large differences in employment rates for different fields of study (Higher Education Authority, 2022^[31]). For instance, while 93% of Education graduates are employed nine months after graduation, only 53% of Arts and Humanities graduates are. Arts and Humanities is in the top-three most popular fields of study, representing 12% of graduates, surpassed only by Business, Administration and Law (26%), Health and Welfare (15%). Arts and Humanities graduates are also most likely from all fields of study to pursue further study (27% of graduates). Many of these people may choose these fields because it reflects their interest, but some might make other choices if they were well informed about their labour market prospects.

These findings highlight the importance of supporting people with high-quality information and guidance on learning opportunities (see Opportunity 1) and clear and permeable learning pathways (see Opportunity 2) to secure a balance in skills.

Figure 2.4. Engineering and construction graduates as a share of tertiary graduates in Ireland, 2020

Source: SOLAS (2022^[30]), *Monitoring Ireland's Skills Supply 2022*, <https://www.solas.ie>.

StatLink  <https://stat.link/ut32b7>

Education systems do not always provide people with the skills most in demand

Education systems will need to be responsive to changes in the labour market and provide people with the skills most in demand (see Opportunity 3). There are indications that the responsiveness of the education system could be improved in Ireland. At present, there is some level of misalignment between the skills people develop in education systems and the skills required in labour markets. For instance, in the Irish National Employer Survey from 2018, employers indicated that there are several types of skills of recent graduates that could be strengthened, including commercial awareness, entrepreneurial skills and language capability (Fitzpatrick Associates, 2019^[32]). In addition, the Survey of Adult Skills (a product of the OECD Programme for the International Assessment of Adult Competencies, PIAAC) from 2012 showed that tertiary educated 25-34 year-olds in Ireland had comparatively weak problem-solving skills, which are very important for performing in technology-rich environments (OECD, 2019^[33]).

However, both surveys pre-date the COVID-19 pandemic, which had a major impact on both the demand and supply of skills. It would therefore be important to conduct an up-to-date study on skills gaps (see also Chapter 5 on skills data), and the next round of the Survey of Adult Skills (PIAAC) data, available in 2024, will allow Ireland to examine if its performance has improved in the intervening years.

In the context of changing economies and societies, it will also be important that education systems future-proof people. Education systems play an important role in ensuring that students develop the skills that will allow them to be adaptable and resilient to changes yet to be foreseen.

Opportunities to secure a balance in skills through a responsive and diversified supply of skills

This section describes three main opportunities that were selected for Ireland to secure a balance in skills. The selection is based on input from literature, desk research, discussions with the Cross-Departmental Project Team and discussions with a broad range of project participants – e.g. government departments and organisations, employer organisations, educational establishments and other interested parties – during workshops, group discussions and several related meetings.

As a result, the following opportunities are considered to be the most relevant for Ireland’s specific context:

1. improving information and guidance for individuals on learning and career pathways
2. strengthening learning and career pathways over the life course
3. making education and training provision more responsive to changing skills needs.

Opportunity 1: Improving information and guidance for individuals on learning and career pathways

Many project participants considered the need for effective career guidance as one of the main areas for improvement in the Irish skills system. Career guidance refers to “services intended to assist people, of any age and at any point throughout their lives, to make educational, training and occupational choices and to manage their careers” and usually covers career education; career information; and career counselling (OECD, 2004^[34]). Effective career guidance can help steer young people towards careers or learning pathways for which they are well suited and hold good employment prospects (Musset and Kureková, 2018^[35]). In addition, career guidance can help adults navigate a labour market characterised by rapidly evolving skills needs (OECD, 2021^[7]). The benefits of effective career guidance are evident. For example, career guidance can help to reduce course switching and dropout rates, support successful educational transitions and improve social mobility. There is even evidence of wage premiums (UNESCO, 2021^[36]). Furthermore, career guidance will be key to addressing skills imbalances in the Irish labour market. For example, the availability of career information and guidance is positively associated with lower levels of over-qualification (McGuinness, Bergin and Whelan, 2018^[27]).

Career guidance has become more prominent in policy agendas in recent years. There has also been a move from interventions at key points in an individual’s life to a more proactive lifelong guidance perspective, with better-linked interventions over the life course (European Commission, 2020^[37]). This lifelong perspective reflects that individuals experience more frequent job transitions than in the past, as well as more diverse career pathways, and emphasises the need for an integrated approach to guidance that covers the life course.

Improving lifelong guidance is a priority for the Government of Ireland. For instance, Ireland’s NSS 2025 included a key action on how career guidance will be strengthened significantly with employer engagement (Department of Education and Skills, 2016^[4]). In addition, a major report on career guidance was published by Indecon Economic Consultants in 2019 (Indecon Economic Consultants, 2019^[5]). Due to a variety of reasons (including the COVID-19 pandemic and a recent reorganisation of the Departments), progress with the implementation of the report’s 18 recommendations has been slower than anticipated. However, the report provides an important starting point for ongoing efforts to strengthen career guidance. Recently, a National Policy Group for lifelong guidance was established, which will scope out the main themes, identify options for advancing the preparation of a strategic framework for lifelong guidance, and explore the best approaches and the need for additional structures.

Other chapters also cover topics related to information and guidance on learning and career pathways. For example, information and guidance for employers to support learning in enterprises are covered in Chapter 3; guidance services for researchers are examined in Chapter 4; and skills data that should serve as input into information and guidance for individuals is covered in Chapter 5.

Recommendation 1: Strengthen the co-ordination of lifelong guidance to support a strategic approach moving forward

In consultations with project participants, there was broad support for adopting a lifelong approach to career guidance. In fact, among a number of policy directions presented in an online survey for securing a balance in skills in Ireland, one on “strengthening a lifelong approach for career guidance by developing a dedicated action plan” was considered to be by far the most important among project participants.

As in many other countries, fragmentation in the delivery of guidance, with services only established for specific cohorts or targeted groups, is an ongoing challenge in Ireland (European Commission, 2020^[37]). Overall, the alignment of guidance services could be further improved, and it would benefit from a more integrated approach that provides people with access to information and guidance over the life course and across the full spectrum of qualification levels in the National Framework of Qualifications (NFQ) (i.e. including Level 10 students).

Ireland has already made progress in developing an integrated approach to lifelong guidance. The National Policy Group for lifelong guidance is currently preparing a coherent, long-term strategic framework for lifelong guidance, which aims to set strategic direction and strengthen guidance provision at every stage of the life course. The OECD strongly supports this initiative and encourages Ireland to continue this work. The National Policy Group for lifelong guidance is also building on existing efforts, including progress made with implementing recommendations from the *Indecon Review of Career Guidance* (Indecon Economic Consultants, 2019^[5]). Nevertheless, while this is a good start, Ireland should set up the required governance arrangements for the strategic framework to have the desired impact.

To start, involving all relevant government departments, agencies and bodies in developing the strategic framework would be important. Responsibilities for lifelong guidance services are shared across government at the national and regional level, and a range of agencies, national fora, professional bodies and other stakeholder groups are directly or indirectly involved in delivering lifelong guidance. Involving key actors for lifelong guidance in the framework's development will help ensure their buy-in. It is promising that the National Policy Group for lifelong guidance already brings together senior officials from the five departments that are considered to be key stakeholders for lifelong guidance: the Department of Education; the Department of Further and Higher Education Research Innovation and Science (DFHERIS); the Department of Children, Equality, Disability, Integration and Youth; the DSP; and the Department of Enterprise, Trade and Employment. However, when moving towards implementing the strategic framework, the National Policy Group for lifelong guidance should also engage with other relevant stakeholders on the ground, including education providers, guidance counsellors and other actors providing guidance services.

Strong co-ordination at the national level can support the implementation of lifelong guidance policies and the delivery of guidance services. Services and initiatives for lifelong guidance generally work best when standards, monitoring, support and quality control are defined centrally. Strong strategic leadership at the national level, including clearly identifying who has policy and administrative responsibility, is important for the effective co-ordination and a coherent and consistent provision of services and initiatives (European Commission, 2020^[37]). One way to establish strong strategic leadership is to assign full responsibility for overseeing lifelong guidance to a single department or organisation. For example, Skills Norway (Kompetanse Norge) is an example of a formal entity in charge of strategic leadership, quality and systems development of career services at the national level (Box 2.3).

In Ireland, there is no single organisation with full responsibility for lifelong guidance. However, the National Policy Group for lifelong guidance has recently played an important role in strengthening leadership and national co-ordination on lifelong guidance. For the implementation of the long-term strategic framework, it will be important that Ireland has more permanent structures in place that could help to ensure continuity of policy design, a shared understanding of Ireland's vision for lifelong guidance, and a clear set of roles of responsibilities for departments and other stakeholders. The National Policy Group for lifelong guidance could possibly remain active and continue to co-ordinate the delivery of lifelong guidance, as well as the broader implementation of the strategic framework.

Box 2.3. Relevant international example: Strategic leadership for lifelong guidance

Norway: Skills Norway (Kompetanse Norge)

Norway's Ministry for Education and Research has tasked Skills Norway (Kompetanse Norge), the ministry's directorate for lifelong learning, to lead the development of career services in co-operation with the Norwegian Directorate for Education and Training. It is responsible for the strategic leadership of career guidance policy, aiming to strengthen co-operation and co-ordination among stakeholders, widen access to vulnerable groups, and increase the quality of lifelong guidance services. Skills Norway established the National Unit for Lifelong Guidance as a national centre to develop and co-ordinate guidance policy and implementation and to share knowledge and resources. Skills Norway also chairs a National Forum for Career Guidance, the Future Skills Needs Committee and other expert committees. In addition, Skills Norway launched a national digital career guidance service and developed a national quality framework for career guidance services across sectors.

Source: European Commission (2020^[37]), *Lifelong Guidance Policy and Practice in the EU: Trends, Challenges and Opportunities*, <https://op.europa.eu/en/publication-detail/-/publication/4dfac3fa-7a0b-11ea-b75f-01aa75ed71a1/language-en>.

Recommendation 1: Strengthen the co-ordination of lifelong guidance to support a strategic approach moving forward

There is strong support in Ireland for strengthening a lifelong approach to career guidance. The delivery of guidance is fragmented, and more could be done to ensure everyone can access guidance at all stages in life. Work by the National Policy Group for lifelong guidance on developing a coherent, long-term strategic framework for lifelong guidance provides a good starting point. However, Ireland should set up the required governance arrangements for the strategic framework to have the desired impact.

Ireland can undertake the following specific actions to strengthen co-ordination of lifelong guidance to support a strategic approach moving forward:

- 1.1. **Continue actively involving all relevant actors in developing a coherent, long-term strategic framework for lifelong guidance.** To ensure buy-in and ownership of recommendations of the strategic framework, all relevant departments should be involved in its development. It is already positive that the National Policy Group for lifelong guidance comprises senior officials from the Department of Education, DFHERIS, the Department of Children, Equality, Disability, Integration and Youth, the DSP and the Department of Enterprise, Trade and Employment. For the implementation of the strategic framework, Ireland should involve stakeholders on the ground, including education providers, guidance counsellors and other actors providing guidance services.
- 1.2. **Strengthen national co-ordination of lifelong guidance services, including by establishing clear roles and responsibilities.** A strategic and integrated approach to the provision of lifelong guidance requires strong national co-ordination and leadership. Building on the National Policy Group for lifelong guidance, Ireland should develop a structure that promotes continuity for policy development, a shared understanding of Ireland's vision for lifelong guidance, and a clear set of roles of responsibilities for the different departments to avoid duplication.

Recommendation 2: Consolidate and improve online information on learning opportunities and careers to improve navigability, accessibility and relevance

An important part of lifelong guidance is the provision of online learning and career information. Because of its accessibility and ability to reach many people, online information should complement other guidance services. This section will examine the provision of information on learning opportunities, career pathways, and more, for individuals specifically, whereas Chapter 3 examines the information needs of employers in the context of lifelong learning.

There is a wealth of online information on learning opportunities and careers available in Ireland, with several portals providing people with information about career and learning choices (Table 2.1). As a result, the Internet is already the most important source of information on learning and careers, and 82% of adults agree that this information is easy to find (CEDEFOP, 2020^[38]). However, a consistent message in consultations was that navigating online information on learning opportunities and careers can be challenging. Some project participants described the current provision of learning and career information as a “minefield” for users. The complexity of navigating the plethora of “one-stop-shops” discouraged engagement with these portals, reducing their effectiveness. In addition, there are clear indications that Ireland could improve the information presented on the different portals, which is often considered outdated and/or incomplete and lacking granularity.

Table 2.1. Online portals with information about learning and career guidance in Ireland

| Portal name | Short description | Responsible actor(s) |
|---|---|--------------------------------|
| CareersPortal | The site was developed to create a one-stop national career information portal for students, adult learners, job seekers, parents and guardians, and career guidance providers. Durrow Communications Ltd. developed it as a direct response to a report by the Expert Group on Future Skills Needs in 2007. Supported by public and private organisations, the site has become an integral tool for guidance professionals nationwide. | Public and private partners |
| Central Applications Office (CAO) website | Within its role in processing applications for undergraduate courses in Irish HEIs, the CAO website provides course information to applicants, parents/guardians and schools. In addition to an overview of courses, it provides information on available places, entry to specific studies (e.g. Medicine), access routes, restrictions and more. | CAO |
| Fetchcourses | Fetchcourses.ie lists all SOLAS-funded FET programmes. It is a live database presenting courses currently open for registration and for which places are still available. | SOLAS |
| Generation Apprenticeship | Generation Apprenticeship presents all available information on apprenticeships for career seekers, career advisors and employers. It includes an overview of apprenticeship jobs, information for employers on how to employ apprentices, news and events related to apprenticeships and more. | National Apprenticeship Office |
| Mycareerpath.ie | Mycareerpath is a free service available to people in the workplace, returners to education, entrepreneurs looking to upskill, and people looking to accelerate their careers and progress within their organisations (Box 2.5). | Human Capital Initiative |
| Qualifax | Qualifax is Ireland’s National Learners’ Database and a one-stop-shop for learners and the public. Comprehensive, annually updated information is provided about FET and HE options in Ireland and further afield. Articles and links are also provided to assist students, job seekers, parents, guidance professionals and graduates in making informed choices for education, training and career pathways. | QQI |
| SmartChoices | The SmartChoices platform provides accessible LMI and analysis, FET information and other resources. In addition, the platform allows different user groups to explore information from two dashboards and other interactive tools to assist career choices and pathways. | SOLAS |
| Smart Futures | Co-ordinated and managed by Science Foundation Ireland, in partnership with 200+ organisations from research and academia, as well as many other partners, Smart Futures aims to provide STEM career resources to students, teachers, guidance counsellors and parents in Ireland and stimulate an interest in STEM subjects in secondary school and at tertiary level. | Science Foundation Ireland |
| The Right Course | The Right Course has been developed as an initial step as a one-stop-shop for the online provision of career information and tools. It describes courses and training opportunities available to employers and employees, as well as information on grants, other financial supports and career guidance. | DFHERIS |

Note: The portals are listed in alphabetical order. The table aims to provide an overview, not an exhaustive list.

Ireland should improve linkages between portals to consolidate online information. While each of the existing portals provides important information and has its strengths, the portals tend to target specific but overlapping groups and often present relatively comparable information. For example, lists of available learning opportunities can be found on the CareersPortal, the Central Applications Office (CAO) website, Fetchcourses, Qualifax, Generation Apprenticeship and the Right Course. There are already some links between these websites – e.g. the CAO website has a direct link to Fetchcourses – but generally, these interlinkages could be further improved. Better co-ordination between the entities that are managing and funding the various portals will be key to reducing duplication of information.

While improving linkages would be a good start, merging online information could be the next step. Project participants broadly supported the objectives of better centralising information by moving towards a centralised portal. To this end, Ireland could map the existing provision and develop a clear plan on how the information could be consolidated, ideally on a one-stop-shop portal. In consultations, there were diverging views on whether consolidation should result in: 1) an entranceway portal that directs learners to other portals specific to their needs (the Citizens Information website was considered to be a good example of a central portal bringing together multiple resources); or 2) a one-stop-shop website that absorbs all information, i.e. guidance tools, LMI, learning opportunities in both FET and HE and more (also see the section on the services continuum in Chapter 3). There was broad consensus among project participants that existing websites should be used as a basis for a centralised portal rather than developing a new website. Ireland should also take into consideration OECD best practice principles for one-stop-shops, including the importance of political commitment and leadership, communication, and monitoring and evaluation (OECD, 2020^[39]). The Government of Ireland acknowledges the need for a centralised portal, and DFHERIS recently established an oversight group for a single portal on career guidance.

Online information on learning and career information could also be made more accessible and user-friendly to improve navigability (Indecon Economic Consultants, 2019^[5]). This is important for existing online portals and a possible new centralised portal. Online information should be “learner-centred”, i.e. driven by the needs of the final user, and learners should be guided on their journey to find the information they need as quickly as possible. This could involve making the information more tailored to their specific needs by allowing visitors to filter results better and creating multiple points of access for different groups. For example, portals could ask visitors questions about their specific needs (e.g. searching for specific learning opportunities, support measures, etc.) or characteristics (e.g. employed versus unemployed, current student or new learners, etc.) before presenting more targeted information. In consultations, the portal Knowledge Transfer Ireland and its Research Development and Innovation (RD&I) Funding Tool was mentioned as a good example. The provision of interactive tools could also make information more accessible and user-friendly. In particular, self-assessment tools could help people identify their skills and learning needs and the courses and programmes most relevant to them (see Box 2.4 for an example of a website with these tools in Flanders, Belgium).

Box 2.4. Relevant international example: Interactive career guidance tools

Flanders, Belgium: My Career (Mijn Loopbaan) and interactive tests

The Vlaamse Dienst voor Arbeidsbemiddeling en Beroepsopleiding (VDAB), the Flemish public employment service, plays the role of career planner for all adults in Flanders. It operates the website My Career (Mijn Loopbaan), which provides tips on how to look for a job and how to take stock of skills, information on occupations with good labour market prospects, and information on how to train for these occupations via VDAB programmes and partners. An interesting element of the VDAB website is several interactive tests for visitors. For example, there is a test to see which jobs people might like (<https://orientatie.vdab.be/>); a tool that automatically extracts people’s skills from their Curriculum Vitae

(CVs) and then shows them the jobs most aligned with these skills (<https://jobbereik.vdab.be/>); and a test for career pathways that help people identify relevant next steps in their careers (<https://loopbaantest.webleren.be/>). The website also steers people towards in-person guidance, including by allowing people to apply for career guidance vouchers (*loopbaancheques*). These vouchers offer seven hours of subsidised career guidance every six years with a mandated career coaching centre, resulting in a personal development plan.

Source: VDAB (2023^[40]), *Welcome to VDAB*, www.vdab.be/.

Portals should also facilitate contact with counsellors either on line or in person as a second line of support. The use of blended tools that combine online information with access to counsellors was also recommended in the *Indecon Review of Career Guidance* (Indecon Economic Consultants, 2019^[5]). There are good examples of this already in Ireland, such as Mycareerpath, which combines an interactive website with direct access to a career and learning pathway advisor (Box 2.5). A smart, centralised portal could help reduce the workload of guidance counsellors, allowing them to focus their energies on those most in need, or could enable counsellors to provide support to greater numbers of individuals. Project participants noted that the ideal centralised portal would also be useful to learners and guidance counsellors by presenting information that could be used as input for their services.

Box 2.5. Relevant national example: Career guidance websites providing access to advisors

Ireland: Mycareerpath.ie

Mycareerpath is a free service available to people in the workplace, returners to education, entrepreneurs looking to upskill, and people looking to accelerate their careers and progress within their organisations. After registering, learners can meet with a career and learning pathway advisor and access various interactive tools, career assessments and short e-learning courses. The services available to employers include identifying employees' upskilling and training needs and developing learning pathways, including potential courses at the Atlantic Technological University. Project participants frequently mentioned Mycareerpath as a good example of how, by combining online information and access to career advisors, guidance services can be more effective and better tailored to the needs of individuals. Mycareerpath is supported by funding from the Human Capital Initiative.

Source: Mycareerpath (2023^[41]), *Home page*, <https://mycareerpath.ie/>.

Another area for improvement is the dissemination of LMI on online portals (see also Chapter 5 on improving skills data). LMI includes a range of data on the labour market that can be qualitative (i.e. career pathways, vacancy information, job descriptions, etc.) or quantitative (i.e. employment statistics, occupational forecasts, etc.) (European Commission, 2020^[37]).

The two main online portals for LMI are CareersPortal and SmartChoices. CareersPortal provides career information and resources to a broad range of target end-users. It offers a wide range of career guidance resources, including LMI on key sectors of the economy and over 1 000 occupations, including their skills requirements, entry routes and more. It also provides information on jobs in high demand, including the education and training options that can lead to employment in those occupations (CareersPortal, 2022^[42]). SmartChoices was developed by SOLAS and includes an interactive LMI portal, which provides information on employment prospects for occupations (e.g. employment rates, growth rates, etc.) alongside an overview of FET training options (SOLAS, 2022^[43]). While both portals provide a wide range of useful skills information, the information on the two portals could be better integrated to avoid duplication. Currently, there is considerable overlap in the LMI presented on the two websites, and the information is often based on the same sources.

Project participants also noted that some important skills information is currently missing from both websites, including information on skills mismatches, skills and labour shortages/surpluses, as well as information on the skills supply and demand by region linked to relevant education and training options. Existing granular information on the specific skills in demand (e.g. from RSF, CEDEFOP, etc.) could also be made available in a more interactive, user-friendly way (e.g. with interactive dashboards and short infographics). There was strong agreement on the need to improve the dissemination and user-friendliness of information on education and training outcomes in both HE and FET (e.g. completion rates and employment outcomes of graduates). At present, information on HE graduates' outcomes from both the Graduates Outcomes Survey and administrative data are visualised on HEA's and CSO's websites (Higher Education Authority, 2022^[31]). However, information is not integrated into SmartChoices or CareersPortal.

Efforts to consolidate and improve online information on learning opportunities and careers could support the overall lifelong guidance system, as described in Recommendation 1. As with that recommendation, involving all relevant departments and stakeholders in better consolidating and improving online information would be important. The final users (e.g. students, adult learners and guidance counsellors) should also be involved in consolidating and improving online information to ensure it meets their needs.

Recommendation 2: Consolidate and improve online information on learning opportunities and careers to improve navigability, accessibility and relevance

A wealth of online information on learning opportunities and careers is available in Ireland. Nonetheless, navigating the plethora of online portals is challenging for people searching for information. There are also clear indications that the information on the different portals could be improved (e.g. information is outdated and/or incomplete, insufficiently granular, etc.).

Ireland can undertake the following specific actions to consolidate and improve online information on learning opportunities and careers to improve navigability, accessibility, and relevance:

- 2.1. Develop a centralised online portal for all information on learning opportunities and careers by better co-ordinating and consolidating information.** To improve the navigability of online information in Ireland, consideration should be given to creating strong interlinkages between existing portals and better co-ordination among the entities managing and funding the various portals to reduce duplication of information. Ireland should move towards a “one-stop-shop” based on an existing portal that either is an entranceway portal that directs learners to other portals specific to their needs or a one-stop-shop portal that provides all the information needed by all learners and job seekers on a single site. The portal should be developed with the active involvement of users (e.g. students, adult learners and guidance counsellors).
- 2.2. Ensure that online information is user-friendly and tailored to individual learners' needs by using filters, self-assessment tools and direct access to advisors.** For both existing online portals and a possible new centralised portal, Ireland should guide visitors to information tailored to their needs. For example, portals could ask visitors questions about their specific needs (e.g. searching for specific learning opportunities, support measures, etc.) or characteristics (e.g. employed versus unemployed, current student or new learners, etc.) before presenting the information. Also, self-assessment tools could help personalise information, for instance, by helping people identify their skills and learning needs. The portal should also facilitate and provide direct access to career and learning pathway advisors, either on line or in person.

2.3. Improve the dissemination of information on skills shortages and mismatches, learning outcomes and pathways. Consideration should be given to better integrating skills information on existing portals (especially CareersPortal and SmartChoices) and possibly on the new centralised portal to avoid duplication and ensure that users have all the information they need in one place to make informed choices. Moreover, information on current skills mismatches and surpluses should be disseminated more widely and more interactive, as well as information on the skills supply and demand by region linked to the education and training options available in the region. Finally, information on education and training outcomes (e.g. completion rates, employment outcomes of graduates) for HE and FET could be disseminated more widely.

Recommendation 3: Expand and strengthen guidance services to ensure that everyone can access high-quality guidance over the life course

In addition to providing learning and career information, guidance services such as in-person meetings with advisors will help ensure that all people are aware of available learning and career pathways. However, the reach of online information is restricted by the fact that their use requires a certain level of digital skills. As mentioned, 30% of adults have less than basic digital skills in Ireland (Eurostat, 2022^[15]). Moreover, the use of online information depends on people's willingness to search for information. In Ireland, the share of adults actively seeking information on learning activities is only middling in international comparison (Eurostat, 2020^[44]). To ensure everyone can access education and career guidance, a wide variety of career guidance services are already available to youth and adults in Ireland, as described in this chapter's overview and performance section. However, there are clear indications that this provision of career guidance services could be further improved.

To start, the quality of guidance counselling services in schools could be further strengthened by providing appropriate support to guidance counsellors. Currently, counsellors are typically teachers with a postgraduate guidance counselling qualification at Level 8/9; it is positive that these specific qualifications are a legal requirement for providing counselling services (European Commission, 2020^[37]). Guidance counsellors should receive high-quality and up-to-date information and tools to support them in providing effective guidance to learners. Especially up-to-date LMI is relevant for counsellors, as well as information on the skills requirements of different jobs and possible learning pathways for students. Some project participants noted that there are currently insufficient guidance counsellors (sometimes only 1 for every 500 students in non-DEIS [Delivering Equality of Opportunity in Schools] schools). This means that not enough time is dedicated to guidance counselling and that students do not have good access to guidance (even though recently, the number of guidance hours allocated to schools for guidance counselling has been increased). A question raised by some is whether a more diversified approach with guidance provided by more different actors, i.e. less relying on teacher-led provision, could be a way forward.

Guidance counselling services in schools should also make better use of employers' insights. Establishing close links between industry and career guidance professionals could make guidance counsellors better informed about the current and future skills needs of industry. In particular, engagement between career advisors and enterprises at the local level (e.g. with site visits) is important to better understand career opportunities and skills needs in the area. Representatives from industry could also be involved more directly in guidance activities (e.g. mentoring, giving talks, providing work experience, etc.). Consideration should be given to the necessary governance arrangements to facilitate employer engagement (see also Chapter 5). For example, project participants suggested that RSF could be more active in linking enterprises with guidance counselling services.

Project participants broadly supported starting guidance at an earlier age in schools. It could help inform important school decisions already made in the second year of secondary school. Various studies also describe the need for early action since children typically begin to form their career preferences in early childhood, and guidance counselling services in schools could help to further develop and solidify these preferences. In recent years, an increasing number of schools in Ireland have already introduced modular guidance in the Junior Cycle under the well-being umbrella.

The Transition Year programme could also play an important role in providing guidance to students. Approximately 73% of students in the Senior Cycle take a Transition Year (Department of Education, 2021^[45]), which is designed to provide students with skills beyond traditional academic skills, and does include work experience or social engagement. The Transition Year is currently being revised as part of the ongoing broader redevelopment (herein referred to as the reform) of the Senior Cycle (Department of Education, 2022^[9]). The revised Transition Year programme will build on the current programme's strengths and offers the scope to include the offering of diverse experiences to help young people decide what they are good at and what they want to do. In particular, obtaining workplace experience and developing transversal skills could support students at this age.

Guidance counselling services in schools appear to often place much emphasis on the Leaving Certificate. While guidance counselling services are already intended to be holistic in Ireland – i.e. covering not only career guidance but also educational guidance and personal guidance – project participants mentioned that in practice, there is an over-emphasis on progression from Senior Cycle to HE. Consideration should be given to ensuring that guidance counsellors consider and present the wider range of learning and career pathways available to students, including, for instance, STEM careers, apprenticeships, and programmes in FET more generally (see also Recommendation 4).

Ireland should also consider the accessibility and inclusion of guidance counselling services in schools. Although four out of five students in schools accessed one-on-one guidance and lessons in schools (Indecon Economic Consultants, 2019^[5]), there are indications that some groups are left behind. The Indecon Economic Consultants report noted the need to pay particular attention to learners with special education needs who currently have no additional or separate guidance support.

In FET and HE, there is an extensive provision of services in the ETBs and HEIs for their students and prospective learners. However, this segregated provision is not supportive of Ireland's objective to move towards a more unified tertiary system (see also Recommendation 5) (DFHERIS, 2022^[10]). Services in FET and HE are considered to be essential to help steer students to the right learning and career pathways, but ideally, there would be a service that looks at the system in a more integrated way.

Improving the accessibility and availability of guidance services for adults should be one of the most important priorities for Ireland's lifelong guidance system. Adults need to be supported with the transitions resulting from a rapidly changing labour market and the nature of work. In recent years, there has been an increase in the demand for career guidance for adults across OECD countries (OECD, 2021^[7]). For Ireland, a main challenge is that institutional support and guidance for adults could be strengthened. There are the Intreo offices, which only provide guidance to job seekers and the long-term unemployed, and the AEGIS within ETBs. However, project participants mentioned that AEGIS still needs to be significantly developed, linked more closely to online resources, and there is a lack of awareness about their services. In addition, it could be argued that the ETBs are not the ideal entity for providing guidance services to all adults since their information might be biased towards their own education and training offers. More broadly, there is a need for independent and comprehensive career guidance services accessible to all adults. There is a clear role for the National Policy Group for lifelong guidance to address this issue.

Ireland could consider a more joined-up service as part of a lifelong guidance approach. The service would cover all guidance services from schools to employment, could be linked to a centralised portal (see Recommendation 2), and would result in a whole-of-life guidance system (see Box 2.6 for an example of an all-age career service in Scotland [United Kingdom]). The *Indecon Review of Career Guidance*

recommended integrating services in a consistent learner guidance and support service (Indecon Economic Consultants, 2019^[5]). While this would be ideal, developing such a centralised service would require significant resources and might not be viable in the short term.

Box 2.6. Relevant international example: A whole-of-life guidance system

Scotland (United Kingdom): Skills Development Scotland (SDS)

Skills Development Scotland is Scotland’s national skills body, which also provides all-age career services throughout individual life paths from school into further learning opportunities and employment. SDS has careers information, advice and guidance services that connect people with professionally qualified careers advisors. In addition, SDS runs local career centres across Scotland and manages “My World of Work”, Scotland’s career information and advice website. SDS also promotes the continuous professional development of career practitioners, collects national sustainable data to monitor the quality of services, and co-operates with a wide range of agencies and stakeholders in the provision of services. The careers guidance service also builds on a robust evidence base to support its website and to improve the relevance and quality of its advice. SDS also promotes the involvement of employers in education through national development programmes and regional employer groups.

Source: Skills Development Scotland (2022^[46]), *Home page*, www.skillsdevelopmentscotland.co.uk/.

A lifelong guidance system can also comprise multiple services as long as co-ordination and strategic leadership are provided. There are examples of countries with a patchwork of guidance centres that are part of a broader lifelong guidance system (e.g. in Denmark), with varying levels of continuity between providers (European Commission, 2020^[37]). However, in some countries, the provision is more cross-sectoral, with a strong mandate for linking the provision with lifelong learning and offering a degree of continuity between different guidance contexts. Within the European Union, systems in Finland and France resemble this system the most (Box 2.7) (European Commission, 2020^[37]). Furthermore, experiences from Germany and Flanders (Belgium) show how public employment services can also have a more proactive role in providing guidance to both unemployed and employed workers (OECD, 2021^[7]).

Box 2.7 Relevant international example: Co-ordinated guidance centres

Finland: Regional Centres for Economic Development, Transport and the Environment

In Finland, co-ordination and collaboration of lifelong guidance and policy development at the national level is managed through a National Lifelong Guidance Working Group, and work is led by the Finnish National Lifelong Guidance Strategy 2020-2023. Regional Centres for Economic Development, Transport and the Environment have been tasked with co-ordinating the lifelong guidance provision and development work in their own region by means of regional lifelong guidance working groups with representatives of both the service providers and key stakeholders. With this initiative, Finland has supported establishing regional one-stop guidance centres with targeted in-service training programmes focusing on multi-professional and cross-disciplinary teamwork. The centres have been implemented in accordance with national strategic goals for lifelong guidance, and the 15 regional working groups report their activities to the National Lifelong Guidance Working Group.

Source: European Commission (2020^[37]), *Lifelong Guidance Policy and Practice in the EU: Trends, Challenges and Opportunities*, <https://op.europa.eu/en/publication-detail/-/publication/4dfac3fa-7a0b-11ea-b75f-01aa75ed71a1/language-en>.

Ireland should aim to target those groups of adults who would benefit the most from access to guidance services. To start, Ireland should ensure that under-represented groups most distant from the labour market have access to high-quality guidance services. Ireland has a comparatively high long-term

unemployment rate (29.9% vs 28.4% in the OECD in 2021), and while the inactivity rate (19.7%) is below the OECD average (22%), it is still 9 percentage points above that of a top performer such as Sweden (10.9%) (OECD, 2022^[47]; 2022^[48]). People with disabilities are broadly considered to be an important under-represented group in need of more support (Kelly and Maitre, 2021^[49]; OECD, 2021^[50]). The Pathways to Work Strategy 2021-2025 already re-emphasised Ireland's ambition to expand labour market participation among under-represented groups, including with employment rate targets for people with disabilities and the plan to implement an Early Engagement Roadmap for job seekers with disabilities, among other proposed actions (Department of Social Protection, 2021^[51]).

Ireland could also consider targeting more guidance to people working in declining sectors and occupations (e.g. due to automation risks) to support them in transitioning to ones with better prospects. New guidance tools could be used to identify possible career pathways for these adults. The main jobs website in Ireland, JobsIreland.ie, which Intreo manages, already offers a free job advertising service that enables job seekers to create a profile to match their skills and experience with available jobs while helping employers to promote jobs and match their requirements to job seeker profiles using the latest technology. These tools could potentially be expanded to identify possible transitions from jobs in low- to high-demand jobs (e.g. by examining overlap in education, skills requirements and salaries) (SOLAS, 2022^[12]). In the Pathways to Work Strategy 2021-2025, efforts to support just transitions and better outreach are medium- to long-term priorities (2023-25) (Department of Social Protection, 2021^[51]).

Recommendation 3: Expand and strengthen guidance services to ensure that everyone can access high-quality guidance over the life course

Guidance services by education and training providers and other entities help ensure that all people are aware of available learning and career pathways. In Ireland, a wide variety of career guidance services are already available to youth and adults, but there are indications that the provision of career guidance services could be further improved.

Ireland can undertake the following specific actions to expand and strengthen guidance services to ensure that everyone can access high-quality guidance over the life course:

- 3.1. Strengthen the quality of guidance counselling services in schools by giving guidance counsellors appropriate time and resources and involving employers further in the provision of guidance services.** Guidance counsellors in schools should have access to relevant, up-to-date information and support tools, especially on LMI, skills requirements, and available learning and career pathways. Consideration could also be given to increasing the number of counsellors and/or increasing the time available to provide guidance counselling services. Ireland should also aim to establish close links between industry and career guidance professionals by setting up the necessary governance arrangements. Employers could be more actively engaged (e.g. mentoring, giving talks, work experience, etc.), particularly at the local level, to ensure a good link between guidance and industry needs.

- 3.2. Strengthen guidance counselling services in schools by making them more widely available and covering a wide range of possible learning and career pathways.** Ireland should continue to expand access to guidance at an earlier age in schools. Furthermore, through the reform of the Senior Cycle, the Transition Year programme could build on its current strengths and play an even more important role in providing guidance to students (e.g. with workplace experiences). Ireland should also ensure that under-represented groups, and especially learners with special education needs, can access guidance services, including additional or separate guidance support. Finally, training and support for guidance counsellors should be strengthened to ensure they can present the wide range of learning and career pathways available to students, including, for instance, STEM careers, apprenticeships and programmes in FET more generally.
- 3.3. Improve the availability and accessibility of independent and comprehensive career guidance services beyond initial education by strengthening institutional support for adults.** Despite the guidance services provided by Intreo offices for adult job seekers, AEGIS within ETBs, and careers offices in HEIs, there would be a benefit in seeking to strengthen institutional support for adults. Ireland should make independent and comprehensive career guidance services more accessible to all adults. This could be achieved with a more joined-up service, covering all guidance services from schools to employment and linked to a centralised portal (see Recommendation 2) – or creating a less centralised system of providers with adequate co-ordination and strategic leadership.
- 3.4. Target guidance services for adults to groups most distant from the labour market and at risk of losing jobs.** Ireland should ensure that under-represented groups in the labour market (e.g. people with disabilities) can access high-quality guidance services. People working in declining sectors and occupations could also be better targeted with guidance services to support them in transitioning to growing ones, including new skills-matching tools for transitions.

Opportunity 2: Strengthening learning and career pathways over the life course

In addition to improving information and guidance on learning and career pathways, the pathways should be clear, flexible and accessible to all students and adults. Furthermore, these pathways should not only exist within the education and training system (e.g. from schools to FET and HE and within the tertiary system) but also after leaving initial education (e.g. the transition from education towards employment and returning from employment to education).

These pathways are relevant for aligning skills demand with supply since a well-balanced education and training system with flexible and permeable pathways (i.e. the ability to progress to programmes at a higher level, regardless of the pathway already chosen) will facilitate the development of an adaptable and diversified supply of skills that will make society more responsive to changes in skills demand. In addition, well-developed pathways can help to effectively address labour and skills shortages. For example, by improving the flexibility of pathways, people can respond faster to signals of changing skills needs in a way that reduces the duration and magnitude of shortages.

Ireland provides students with a diverse range of learning pathways (Figure 2.1), but there are indications that their flexibility and permeability could be improved. Creating clearer pathways was a recurring topic in conversations with project participants, and especially the need for pathways into FET and apprenticeships, was considered important, as well as pathways between FET and HE (Department of Education, 2021^[45]).

Recommendation 4: Promote and strengthen pathways from schools into further education and training and apprenticeships to develop a well-balanced tertiary system and diversified supply of skills

Project participants highlighted that there is arguably too much focus on pathways towards HE, pushed by schools, parents and broader society. Cultural values around HE, limited exposure to vocational education in schools, and high retention rates in upper secondary education, all contribute towards a greater emphasis on HE admission over other routes, such as FET. This is also reflected in transition rates from schools to FET and HE. Transition rates from post-primary to HE have steadily increased (from 64% in 2016 to 66% in 2020), and transition rates from post-primary to FET have dropped (27% in 2016 to 24% in 2019) (Department of Education, 2021^[45]). At present, Ireland has one of the largest shares of young people with a tertiary degree among OECD countries (OECD, 2023^[52]).

Ireland should aim to move towards fostering a balanced tertiary system that is capable of developing a more diversified supply of skills, one which is better aligned with the needs of the labour market. While FET, HE and apprenticeships (in both FET and HE) complement each other and each has its strengths, developing a more diversified supply of skills with more diverse, flexible and permeable pathways is important for several reasons.

First, a more diversified supply of skills could help address shortages. There are currently shortages in occupations such as science, engineering and technology, construction, health, financial services, transport and logistics. Although many of the required skills will need to be met by HE, FET and apprenticeships also have an important role to play in meeting this demand (SOLAS, 2022^[11]). For instance, FET and apprenticeships are well-positioned to respond to some of the most urgent skills pressures in the construction and health sectors. In addition, the demand for workers in sectors and occupations linked to FET pathways and apprenticeships is projected to remain high. For example, construction and the health and social care sectors are among the sectors projected to expand the most in the upcoming decade (CEDEFOP, 2022^[53]).

Second, promoting more diverse pathways can help ensure that people choose pathways for which they are best suited. Because of societal pressures and a perceived higher value of HE, some young people might be directed towards education for which they are perhaps not best suited. Some project participants expressed concern about HE completion rates, particularly by students who were not among the top performers in the Leaving Certificate. A study by the HEA on completion rates for undergraduate entrants to HE in 2008/09, 2009/10 and 2010/11 showed that for those who entered with less than 300 Leaving Certificate points, only 49% completed, compared with 93% of those that entered with over 500 points, and 76% for all students on average (Higher Education Authority, 2021^[54]). While students with less than 300 Leaving Certificate points represent only 16% of all new entrants, they represent 33% of those not completing their studies. Some project participants argued that FET or apprenticeships would have been a better fit for many of these students.

Third, more diverse learning pathways might help reduce skills mismatches in Ireland. As described earlier, Ireland has a comparatively large share of employees that are over-qualified for their jobs, with only Greece, Türkiye and Spain having larger shares in the European Union (Eurostat, 2020^[21]). There is evidence that countries with more vocational education options and closer links to the world of work have lower over-qualification rates (Nugent, 2022^[19]; McGuinness, Bergin and Whelan, 2018^[27]; Delaney et al., 2020^[28]).

Driven by a renewed interest in workplace learning in recent years, many improvements have been made to the FET sector and apprenticeships. The FET sector has moved towards a more strategic, integrated, quality and outcomes-focused system, and a new comprehensive strategy for FET was published in 2020 (SOLAS, 2020^[6]). In addition, the expansion of the formal apprenticeship system across both FET and HE is possibly one of the most significant changes in Ireland's vocational education and training (VET) system

in recent years (Condon and Burke, 2020^[55]). Between 2016 and 2020, the number of programmes increased from 27 to 60 (with an additional 18 in the application process), and the apprenticeship population doubled (DFHERIS, 2021^[56]). The Action Plan for Apprenticeship 2021-2025 sets out the current vision for the apprenticeship system (DFHERIS, 2021^[56]). Despite these positive developments, there are various areas for improvement.

To start, Ireland could do more to foster a cultural shift that would have FET and apprenticeships seen as more viable and attractive learning and career paths. In an online survey among stakeholders in Ireland for this project, 52% of respondents considered this essential – only a policy direction for lifelong guidance was seen to be more important. FET and apprenticeships are often considered less desirable career paths, even though they offer good career opportunities and could be a better fit for the interests and skills of many students.

Career guidance (see also Opportunity 1) could play an important role in changing perceptions of FET and apprenticeships, including by raising awareness about the available learning options and informing students, parents and schools about the diverse types of available programmes. More importantly, career guidance could help to better demonstrate the value and benefits of FET and apprenticeships, including possible pathways to HE, the stackable nature of programmes in FET, and the “earn and learn” nature of apprenticeships. Guidance should also highlight the strong labour market outcomes – e.g. qualification holders at Level 6 have a higher labour participation rate than graduates with HE qualifications at Level 6/7, resulting from a strong labour market orientation of FET Level 6 programmes (e.g. craft apprenticeship, healthcare assistants, etc.) (SOLAS, 2022^[30]). Possible job opportunities and salaries could also be highlighted, for example, with occupational route maps (see Box 2.8 for an example from the United Kingdom). As also described under Recommendation 3, engaging employers and bringing industry into schools would be key to raising the profile of FET and apprenticeships in schools.

Box 2.8. Relevant international examples: Mapping apprenticeships and routes for progression

United Kingdom: Occupational route maps for apprenticeships

In 2017, the UK Department for Education established the Institute for Apprenticeships and Technical Education. One of its first actions was to develop a common framework of 15 occupational route maps, documenting all the skilled occupations that can be achieved through an apprenticeship or T-level qualification. In these maps, occupations are grouped to show linkages between them and possible routes for progression. The route maps are owned and regularly reviewed by Route Panels, made up of industry and assessment experts to ensure that they remain accurate, up-to-date and forward-looking. These Route Panels maintain a strategic overview of their sectors, using occupational maps to identify potential skills gaps or overlaps and ensure that new qualifications work together to provide clear pathways for career progression. Panel members meet every eight weeks to consider submissions from trailblazer groups (groups of employers who come together to create new apprenticeships) and T-level panels (groups of employers and training experts who work together to create new technical qualifications).

Source: Institute for Apprenticeships and Technical Education (2023^[57]), *Occupational maps*, www.instituteforapprenticeships.org/occupational-maps/.

Learning and career information on FET and apprenticeships could be complemented with more active and targeted outreach. To start, existing public relations campaigns could be expanded. Exposing students to the experiences of past graduates of FET and apprenticeships could help raise the profile and attractiveness of these pathways. For example, the National FET Strategy introduced FET ambassadors, who could more actively share their experiences and provide inspiration and insights (SOLAS, 2020^[6]). For apprenticeships in particular, project participants mentioned the possibility of a broader rebranding to

make them more attractive and to better highlight their “earn and learn” character. Some stakeholders even proposed to drop the word “apprenticeship” altogether since the current terminology has many unfortunate connotations, including that it is only for men, which does not help to overcome the current challenge of under-representation by women. At present, however, rebranding apprenticeships is not a policy objective of the Government of Ireland.

Increased exposure to more WBL in schools could positively impact secondary-level students’ perspectives on the learning pathways available to them. As highlighted in the FET Strategy, exposing second-level students to practical courses and modules with a vocational nature could help raise awareness about FET options and vocational pathways (SOLAS, 2020_[6]). VET in schools could come in different forms, including inviting volunteers into schools to bring the world of work into the classroom, job shadowing, workplace visits, work placements, enterprise competitions and more (UNESCO, 2021_[36]).

The Senior Cycle could be designed to provide students with more real, work-based experience. The current Senior Cycle is perceived to have a narrow focus and mainly functions as a filter to tertiary education (OECD, 2020_[58]). There is little emphasis on vocational learning. A large and growing majority of students pursue the Leaving Certificate Established programme (LCE) (71.2% of students), with much smaller shares pursuing the Leaving Certificate Vocational Programme (LCVP) (23.0%) and the Leaving Certificate Applied programme (LCA) (5.8%), with the latter being the programme with the most vocational (Department of Education, 2022_[59]). A recent OECD assessment of the Senior Cycle noted that stakeholders questioned the extent to which the LCVP, in particular, is a real vocational option as it “only” offers two vocational modules as add-ins (OECD, 2020_[58]). Among the plans for the reform of the Senior Cycle, however, is to make it more flexible so that the different types and styles of learning (including work-based) are made available to all students. Some initial steps towards such an integrated Leaving Certificate have been made. For example, since 2022, students pursuing the LCA programme have been able to access mathematics from the LCE. The Transition Year could also play an important role in increasing exposure to vocational options. There are already good examples of schools piloting apprenticeship taster offerings in the Transition Year.

The design of mechanisms for assessing applications should also be considered when promoting pathways outside HE. In the current system, the CAO processes applications for undergraduate courses in Irish HEIs by matching students’ results with HEIs’ requirements and places available for each subject. However, the CAO does not accept applications for FET and apprenticeships; students need to apply individually to each FET institution and, as apprenticeships are employment contracts, to employers directly. This distinction reinforces the widespread belief that FET and apprenticeships do not deserve the same consideration as more traditional academic options (OECD, 2020_[58]). A positive development is that information on FET programmes and apprenticeships has been included on the CAO website since 2021, with links to Fetchcourses and Generation Apprenticeship (SOLAS, 2020_[6]). The *Progressing a Unified Tertiary System for Learning, Skills and Knowledge* report proposed a reform of the CAO to ensure that further connections into FET and apprenticeships are made available (DFHERIS, 2022_[10]).

The complexity of the FET system is its own obstacle to greater participation in FET. It can be difficult to navigate the various options of FET, ranging from PLCs to traineeships, and provided by ETBs, the independent community, voluntary secondary schools and more. As outlined in the FET Strategy, simplifying its structure and learning pathways, including by consolidating programmes, is an objective (SOLAS, 2020_[6]). At present, there is arguably also too much emphasis on accreditation and certification in FET – e.g. aiming to maximise the number of graduates. The quality of services, as well as its responsiveness to changing skills, could be further improved. The FET Strategy highlights the need to modernise the FET system (e.g. building and equipment), which could help to address these quality concerns (SOLAS, 2020_[6]).

With respect to apprenticeships, both their demand by students and supply by employers create obstacles to its continued expansion. To this end, the incentives currently in place for both apprentices and employers will need to be evaluated.

Some project participants noted that student demand is low not only due to negative perceptions about apprenticeships but also the relatively low pay apprentices receive. Apprentices have employment contracts in Ireland, and pay rates are mostly determined by employers and sectoral employment orders, which may vary depending on the occupation and employer. While they increase each year of the programmes, overall, the pay rates are generally considered to be quite low. For example, in a first year of a construction apprenticeship, the pay is one third of the fully qualified pay, at EUR 6.84 per hour, compared with a minimum wage of EUR 10.50 per hour. This raises as a percentage (75%) of the qualified rate for each subsequent year of the apprenticeship. In addition, across OECD countries, it is not uncommon that compensation for apprentices is below the minimum wage, which reflects the comparatively low productivity of apprentices and the training investments on the employer side.

Employer demand for apprentices can also be strengthened since many people willing to do an apprenticeship cannot find a company. This is partly driven by a lack of awareness about the benefits of apprenticeships, which could be shared more actively with employers, and insufficient knowledge of the ten-step process to set up apprenticeships.

Financial obstacles are often a reason for employers not to set up apprenticeships. This is especially the case for New Apprenticeships (e.g. in ICT, finance and hospitality), which complement the Craft Apprenticeships (e.g. for carpentry, plumbing, motor mechanics and electrical apprenticeships). This new model for apprenticeships in new sectors was introduced in 2016 after a review of the Craft Apprenticeships model. Both models are currently operational and not only differ in terms of sectors but also in how they are organised (e.g. all Craft Apprenticeships are four years long, while New Apprenticeships vary between two and four years). A key feature of the New Apprenticeships is that the development and rollout are overseen by industry-led groups, called consortia, working with education and training providers and other partners. Because of the active role of enterprises and other stakeholders in designing apprenticeships in specific sectors, the New Apprenticeships are diverse in terms of training models, delivery models and target groups.

A major change compared to the Craft Apprenticeships is that the employer pays the apprentice for the duration of the programme. In contrast, for Craft Apprenticeships, the employer only pays during the on-the-job phases of the training (the relevant ETB pays for the off-the-job training periods). Project participants indicated that the higher cost to employers of New Apprenticeships relative to Craft Apprenticeships presents a stark contrast for employers and that the cost of New Apprenticeships should be reduced. Since 2022, employers of New Apprentices have received a grant of EUR 2 000 per eligible apprentice to compensate for these higher costs. In a way, this employer grant for New Apprenticeships plays a similar role as training allowances do for Craft Apprenticeships (which are payments by the state to ETBs to compensate for the off-the-job training provided by them), insofar as they both intend to reduce the costs to employers of hiring apprentices. However, many project participants, and in particular employers, commented that this grant is insufficient, noting that it does not cover the costs associated with training the apprentice and, as a result, often makes apprentices financially unfeasible.

However, evidence of the effectiveness of subsidies for apprenticeships is mixed (Kuczera, 2017^[60]). Financial incentives for apprenticeships often only have modest effects and usually involve substantial deadweight losses, i.e. they subsidise apprenticeships that would have been provided anyway. If introduced, it is important to ensure that employers provide good quality WBL, and the incentives should be carefully monitored and evaluated (Kuczera, 2017^[60]). It is therefore important that Ireland carefully evaluates the funding mechanisms for the New Apprenticeships, including the impact of the EUR 2 000 grant for employers.

Promoting apprenticeships among employers requires not only financial incentives but also non-financial measures that improve the cost-benefit balance of apprenticeships (e.g. the programme duration, support structures for employers, etc.) (OECD, 2019^[11]). The design of the New Apprenticeships was another topic of discussion, with project participants indicating that apprentices now often have off-the-job training (i.e. in the classroom) for long periods of time (e.g. six months of training was mentioned for ICT apprenticeships), creating staffing issues for employers, for example when they rely on apprentices for day-to-day operations. Consulted employers indicated that it would be better if off-the-job training were offered over longer periods but with shorter durations (e.g. four days of work, one day of learning). This would make it easier for employers to manage the periods when they are not on the work site. The design of New Apprenticeships, including the length of on-the-job and off-the-job training, is agreed upon during the development of a New Apprenticeship by the consortia and could be changed by these industry-led groups if they are creating practical difficulties for employers. Given the large diversity in approaches of these consortium-led apprenticeships, a recent review by QQI highlighted that flexible and bespoke supports are needed to foster their development and growth (QQI, 2022^[61]).

The need for a single point of contact for employers to support them with setting up and managing apprenticeships was also discussed in consultations. The Government of Ireland has established a National Apprenticeship Office (NAO) with responsibility for all aspects of the management, oversight development and review of the apprenticeship system and for implementing the Action Plan for Apprenticeship 2021-2025 (DFHERIS, 2021^[56]). The NAO has brought together the apprenticeship offices of SOLAS and HEA, and the two organisations have shared responsibility for the NAO. In addition, the NAO will co-develop an integrated communications and marketing strategy and support the provision of apprenticeships in various ways, including by planning and managing capacity for apprenticeship programmes, providing support for the operation and development of consortia-led apprenticeship programmes and more. However, while this Office is a great step forward and will help to create a single unified and valued apprenticeship system, it will not function as a single point of contact for employers, with practical support and information on how to engage with apprenticeships, as responsibility for craft programmes currently remains with SOLAS.

Another obstacle to the continued expansion of apprenticeships is the system's overall capacity. There is a lack of instructors, particularly for apprenticeships in sectors with large shortages (e.g. construction). Possibly, a more flexible model for apprenticeships could help reduce pressure. For example, Ireland could consider mechanisms where groups of enterprises that employ apprentices share the responsibility for apprentice training (see Box 2.9 for an example of such an approach in Norway).

While this section has focused on FET and apprenticeships, Ireland should also explore other ways to produce more graduates exposed to WBL and work environments. Several project participants expressed that WBL should be promoted at all levels. For example, this could involve making apprenticeships available at the secondary level, developing tertiary vocational qualifications pathways for Levels 5-8 for priority skills and occupations (e.g. nursing, engineering), as well as strengthening intermediate-level sub-degree technical and vocational qualifications in both initial and continuing VET (QQI, 2020^[62]). Ireland might also consider expanding internships at all levels of education.

Box 2.9. Relevant international example: Enterprises sharing responsibility for apprentice training

Norway: Training offices supporting employers with apprenticeships

Training offices in Norway (*opplæringskontor*) are sector-specific, cross-company intermediary organisations that assist enterprises in recruiting and training apprentices. They are separate legal training institutions owned and operated by a group of enterprises (often small and medium-sized enterprises [SMEs]) that employ apprentices and share the responsibility for apprentice training.

Training offices were established in the mid-1990s in response to the need to encourage employer participation in apprentice training. They can help to reduce the administrative burden on individual enterprises by assisting them with apprenticeship administration. This is especially useful for individual SMEs who may struggle to meet the minimum requirements and quality for apprentice training. The offices are funded by government training subsidies.

Over the last two decades, the use of training offices in Norway has shown strong growth, reflecting employers' willingness to join. The number of training offices reached over 300 in 2020, accounting for approximately 80% of all apprenticeship contracts. The role of training offices in administrative and training matters is pivotal to deepening links between schools, young apprentices and employers. In addition, the model has given employers a greater role and influence in training.

Source: OECD (2022^[63]), *Good Practices in Europe for Supporting Employers to Promote Skills Development*, www.oecd.org/skills/Good-practices-in-Europe-for-supporting-employers-to-promote-skills-development.pdf.

Recommendation 4: Promote and strengthen pathways from school into further education and training and apprenticeships to develop a well-balanced tertiary system and diversified supply of skills

Ireland should aim to move towards a balanced tertiary system producing a more diversified supply of skills. More diverse, flexible and permeable pathways can improve the system's responsiveness, thereby allowing it to address shortages and reduce mismatches. At present, there is arguably too much emphasis on pathways towards HE in Ireland. Ireland needs to better promote pathways into FET and apprenticeships to create a more diversified supply of skills.

Ireland can undertake the following specific actions to promote and strengthen pathways from school into FET and apprenticeships to develop a well-balanced tertiary system and diversified supply of skills:

- 4.1. Change perceptions of further education and training and apprenticeships through improved career guidance, communication and rebranding.** Ireland should aim to change people's perspectives about FET and apprenticeships so that they are seen as more viable and attractive learning pathways. Career guidance (see Recommendation 3) should play an important role, including by raising awareness about these pathways; their value and benefits, including the "earn and learn" character of apprenticeships; and possible job opportunities. Building on existing promotional campaigns for FET and apprenticeships, Ireland should actively reach out to people to promote these pathways by, for example, sharing the experiences of successful graduates. For apprenticeships in particular, a rebranding may be needed to better highlight their "earn and learn" character, change societal perceptions of these learning pathways, and thereby improve their attractiveness to learners and those who influence their decisions.

- 4.2. Better promote pathways into further education and training and apprenticeships by strengthening work-based learning in schools and developing a unified application process.** Ireland should expose second-level students to more practical or vocational courses, modules, and traineeships to help raise awareness about FET and apprenticeship pathways. This would involve strengthening the provision of WBL in schools. The ongoing reform of the Senior Cycle should continue to allow for more permeability between different Leaving Certificate programmes, to make different types and styles of learning (including work-based) attractive and available to all students. The Transition Year should also continue to expose students to potential vocational pathways, building on current good practices (e.g. apprenticeship taster offerings). Further integrating application processes for FET, HE and apprenticeships by the CAO also could help promote equal consideration of the different options.
- 4.3. Increase take-up of apprenticeships by identifying and overcoming financial obstacles for employers.** Ireland should evaluate its subsidies for apprenticeships to strengthen employer demand for apprentices. Ireland will need to ensure that apprenticeships are financially feasible for employers and allow them to provide good quality WBL. Especially funding mechanisms for the New Apprenticeships need to be reassessed since the higher cost to employers of New Apprenticeships relative to Craft Apprenticeships makes apprentices less attractive to employers. As part of this reassessment, Ireland should also evaluate the impact of the grant to employers of EUR 2 000 per eligible apprentice, including if it is sufficient to incentivise employers to take on new apprentices.
- 4.4. Continue to address non-financial obstacles for employers to take on apprentices by providing employers with practical support and information and promoting more flexible forms of apprenticeship.** Ireland should ensure that employers have sufficient access to support and information for engaging with apprenticeships. To this end, Ireland could consider setting up a single point of contact for employers seeking information on apprenticeships, possibly building on the recently created NAO. Ireland should also address the shortage of classroom instructors of apprentices and promote more flexible models for apprenticeships, possibly by promoting that groups of enterprises with apprentices share the responsibility for apprentice training.

Recommendation 5: Improve pathways between further education and training and higher education to support the move towards a truly unified tertiary system

Ireland should aim for a more joined-up approach to FET and HE, whereby the sectors work together more actively to better align their programmes and improve pathways between them. The objective of better integrating the FET and HE systems has been mentioned in several strategic documents and is a policy priority for Ireland. The restructuring of the departments in Ireland and, more specifically, the creation of DFHERIS has already contributed to bringing together the two sectors (alongside the research and innovation [R&I] sector). *Progressing a Unified Tertiary System for Learning, Skills and Knowledge* also describes how to develop a well-functioning, unified tertiary system for knowledge and skills, composed of complementary FET, HE and R&I sectors (DFHERIS, 2022^[10]). Several other strategies and studies highlight the need for an integrated system, including the NSS 2025, Future Funding in Higher Education, the National FET Strategy and an action plan by the Transitions Reform FET-HE working group, among others (Department of Education and Skills, 2016^[4]; SOLAS, 2020^[6]; DFHERIS, 2022^[64]).

A particularly important aspect of an integrated tertiary system is smooth pathways between FET and HE. Greater permeability between these pathways provides students with more diverse and flexible learning

options, contributing to a more diversified skills supply, and could help to make the education and training system more responsive to needs in the labour market.

Currently, the tertiary system's pathways are predominantly moving in one direction, from FET to HE. Project participants noted that pathways from HE to FET are effectively non-existent, while studies show that between 27% and 30% of FET graduates are in HE a year after completing programmes (SOLAS, 2020^[65]; CSO, 2019^[66]). Studies also demonstrate that students from FET do comparatively well in HE, with, for instance, higher retention rates (SOLAS, 2020^[6]). Overall, the number of applicants to HE from FET has grown significantly but remains relatively low. While FET should not just become a stepping stone to HE, the permeability between FET and HE is needed to allow FET students to enrol in HE if they choose to do so. In this way, what Ireland needs is a tertiary system where there are no dead ends.

Pathways between FET and HE are already supported by the HELS, which allows FET learners with specific degrees to apply to a wide range of third-level courses in most of Ireland's HEIs. There are, however, some conditions, including that the learner needs to have a full Level 5 or Level 6 Major Award, with at least 120 credits. Individual HEIs might also ask for more specific requirements, including a specific Major Award, specific grades in specific courses, an additional Award requirement (e.g. mathematics), and/or that all credits used as part of the score were achieved in one "single sitting". If these requirements are met, the learner can apply for a place in the first or second year of a HE programme through the CAO.

HELS has strengthened pathways between FET and HE, but the pathways could be still further improved. To start, current pathways consist of individual FET courses providing access to specific HE courses, but a more systematic approach is needed with clear pathways between the two systems and at a broader level for groups of programmes and courses (e.g. a cohort-based system). A more systematic approach will help make pathways more transparent and widely accessible. In addition, it still happens that some FET courses and credentials are not recognised in HE, and as a result, students cannot always skip certain parts of HE programmes that were already covered in FET. In this context, recognition of prior learning (see Chapter 3) could also be strengthened to ensure that skills acquired in FET are recognised in HE. Furthermore, some programmes in HEIs have quotas for the number of places for FET students, which limits these pathways.

Addressing these challenges will require greater collaboration between the two systems. In recent years, progress has been made in bringing the two systems together, building trust between the systems, but obstacles still exist to collaboration. The Government of Ireland has been trying to overcome this with awareness-raising measures and soft policies that aim to link the systems (e.g. including FET on the CAO website). However, various project participants showed support for going beyond awareness raising and looking at more tangible measures, and perhaps even bodies and institutions to strengthen co-ordination across FET and HE. Since decisions made in each system have implications for the other (e.g. increasing HE places has knock-on effects on FET demand and vice versa), and with an overlap in provision at Level 6, there is a clear argument for co-ordinated decision making and collaboration.

Much work is underway in Ireland to strengthen the pathways between FET and HE. In *Progressing a Unified Tertiary System for Learning, Skills and Knowledge*, a range of specific short-term actions are listed that provide a good starting point for moving towards a truly unified tertiary system. It is particularly promising that the government is planning to develop a set of principles and an overarching policy framework to strengthen FET-HE transitions, as well as a set of recommendations for the next steps in delivering on this objective (DFHERIS, 2022^[10]). There is also a Pathways Advisory Group in the FET system working on how to improve FET and HE pathway models, among other activities (SOLAS, 2020^[6]).

The criteria for allowing transitions between the two systems must be universal and consistent to ensure that pathways between FET and HE are more systematic. These criteria could build on or be an extension of the existing arrangements of the HELS. Further efforts to develop these criteria should involve strong engagement from across the tertiary education sector, as well as mechanisms to ensure that the criteria remain relevant and up to date in a continuously evolving tertiary sector. Ireland should also aim to move

towards cross-system recognition of credits and ensure that courses and credits obtained in FET are also recognised by HE.

The co-development and co-delivery of programmes by FET and HE could support pathways between the two sectors. This is one of the objectives listed in *Progressing a Unified Tertiary System for Learning, Skills and Knowledge* (DFHERIS, 2022^[10]) and an area for which there was much support among project participants. In December 2022, the Government of Ireland made concrete steps to deliver on this objective by announcing the establishment of the National Tertiary Office. Tasked with developing joint FET-HE programmes with 13 disciplines being advanced in its first year, the Office will be created within the HEA and jointly managed by the HEA and SOLAS. The programmes that will be developed will allow students to commence their third-level experience in FET and complete the remainder in HE colleges. For 2023, the Office will have a budget of EUR 2 million to develop these courses. While the Office was not discussed in consultations for this project, its objectives are very well aligned with views shared by project participants. In particular, the Office puts into practice a proposed Tertiary Fund in *Progressing a Unified Tertiary System for Learning, Skills and Knowledge*, which was extensively discussed in consultations. Despite the introduction of the National Tertiary Office, Ireland should still review if there are additional ways it could support the co-development and co-delivery of programmes. For instance, it could explore if co-development could be a requirement of other funding arrangements and initiatives (e.g. developing sectoral qualifications across FET and HE).

More broadly, the funding models of the FET and HE sectors are limiting co-operation, and their competitive funding models and their role in facilitating pathways should be examined (see also Recommendation 6) (DFHERIS, 2022^[64]). At present, funding mechanisms create incentives to keep students in their own systems, which restricts co-operation on transitions where, for instance, FET provides access to a second or third year of HE programmes. The HE funding strategy, “Funding the Future”, already aims to address this issue (DFHERIS, 2022^[64]).

Collaboration between FET and HE to strengthen pathways can take other forms, for example, by sharing expertise and infrastructure. This could involve the shared use of physical spaces, co-ordinated investment in digital infrastructure, as well as promoting knowledge sharing for staff development and creating cross-FET-HE career pathways (e.g. with secondments and joint posts). In addition, collaboration on student planning could be considered. This is already happening to some extent. For example, Ireland aims to develop an integrated plan for a coherent tertiary response to meet residential construction skills needs (DFHERIS, 2022^[64]). Nevertheless, it is important to recognise that FET and HE enrolment impact each other, and student planning could be a relevant next step. Some project participants noted, however, that Ireland should not move towards a cap-based system.

Developing a unified tertiary system with universal and consistent criteria for transitions, cross-system recognition of credits, co-development and co-delivery of programmes, and other types of collaboration between FET and HE, would require strong governance arrangements. One way of doing so is by building these partnerships at the local level with “place-based” approaches. In the United Kingdom, place-based political agendas are increasingly gaining traction in various policy areas (Alway et al., 2022^[67]) (see Box 2.10 for an example from Wales [United Kingdom]). An advantage of this approach is that FET providers and HEIs are well placed to identify local and regional needs and align their priorities with national objectives, and it could help to reduce competition between providers. These initiatives will need to be led by the providers but should involve employers and other key stakeholders. In addition, there are a number of elements that are considered to make these partnerships effective, including clearly defined and agreed roles, mutual trust between leaders and institutions, dedication to clear pathways, a co-ordinated approach for employer engagement, and alignment with local socio-economic needs and national priorities (Alway et al., 2022^[67]).

Box 2.10. Relevant international example: Place-based approaches

Wales (United Kingdom): Implementing a place-based approach

The Partnership for Innovation and Engagement brought together universities, colleges and industry in South Wales to create a regional cluster to support curriculum development in multiple FE and HE institutions and graduate employment, develop new cross-sector relationships and encourage new strategic joint projects. Funded with GBP 1.2 million (British pound sterling) from the Higher Education Funding Council Wales, the partnership works to develop regional resources, expertise, resilience and industry engagement across the creative industries; compound and semiconductor projects; and design. As a result of the project, HE, FE and WBL have a more connected and clearer offer, and there is now a mechanism in place for identifying and tackling gaps and changes in requirements. FE partners are connected with HE staff, who are leading in their industry and academic field, and industry and HE are more aware of FE talent, expertise and how the sectors can support and complement each other.

Source: Alway et al. (2022^[67]), *Going Further and Higher: How Collaboration Between Colleges and Universities Can Transform Lives and Places*, www.collegecommission.co.uk/going-further-and-higher.

Project participants responded favourably to the development of these place-based approaches. Some noted, however, the importance of involving not only the formal FET and HE sectors but also non-formal and adult education and community, voluntary, charity and social enterprise (CVSE). In addition, these networks could also support bringing together other regional players (e.g. Skillnet, Intreo offices) (see also Chapter 5 for a section on these arrangements). Project participants responded favourably to the development of these place-based approaches. Some noted, however, the importance of involving not only the formal FET and HE sectors but also non-formal and adult education and community, voluntary, charity and social enterprise (CVSE). In addition, these networks could also support bringing together other regional players (e.g. Skillnet, Intreo offices) (see also Chapter 5 for a section on these arrangements).

Recommendation 5: Improve pathways between further education and training and higher education to support the move towards a truly unified tertiary system

Ireland needs a more joined-up approach for FET and HE, where the sectors work together more actively, better align programmes and improve pathways between them. While the number of applicants to HE from FET has grown, the numbers remain relatively low. Good examples of effective pathways between FET and HE already exist, but Ireland needs a more systematic approach, as well as more co-development and co-delivery of programmes and other types of collaboration.

Ireland can undertake the following specific actions to improve pathways between FET and HE to support the move towards a truly unified tertiary system:

- 5.1. **Develop universal and consistent criteria for facilitating transitions between further education and training and higher education and cross-system credit recognition.** Ireland should ensure that pathways between FET and HE are more systematic, with clear pathways between the two systems available at a broader level for groups of programmes and courses (e.g. a cohort-based system), which could make pathways more transparent and more widely accessible. To achieve this, Ireland should create criteria for transitions between the systems that are universal and consistent. These criteria could build on, or be an extension of, the existing arrangements of HELS, and developing these criteria would involve strong engagement

from across the tertiary education sector. Ireland should also aim to move towards cross-system recognition of credits to ensure that FET courses and accreditations are recognised in HE.

- 5.2. Expand the co-development and co-delivery of programmes by further education and training and higher education by supporting the newly established National Tertiary Office, among other initiatives.** Ireland should move ahead with operationalising the National Tertiary Office within HEA tasked with developing joint FET-HE programmes, where students start in FET and finish in HE. The 13 disciplines being advanced and the budget of EUR 2 million in 2023 provide a good starting point. Ireland could possibly consider complementary measures to strengthen collaborative programme design, development and delivery by FET and HE on a conjoint basis, for instance, by making it a requirement of other funding arrangements or initiatives (e.g. developing sectoral qualifications across FET and HE).
- 5.3. Better promote the development of “place-based” networks (or partnerships) between further education and training and higher education to strengthen local collaboration on improving pathways.** Ireland should develop strong governance arrangements that could help make collaboration long-term, sustainable and inclusive. To this end, Ireland could promote “place-based” networks (or partnerships) that bring together FET providers and HEIs at a local level. These initiatives will need to be led by the providers but should involve employers and other key stakeholders, including non-formal and adult education and community, voluntary, charity and social enterprise (CVSE). In addition, these networks could also support bringing together other regional players (see Chapter 5). To be fully effective, they need clearly defined and agreed roles, mutual trust, dedication to clear pathways, co-ordinated employer engagement and alignment with local and national priorities.

Opportunity 3: Making education and training provision more responsive to changing skills needs

The skills required for jobs and participation in society are changing rapidly and are expected to continue to do so. The digital and green transitions, in particular, will have important implications for the types of skills required to participate fully in societies and economies in the future (see also Chapter 1). Digital skills are fast becoming a prerequisite to actively participate in more complex, interconnected societies. They are needed in most professions, while new skills are demanded to adapt to climate change and to limit global warming, loss of biodiversity and pollution. In addition to informing and guiding learners towards suitable learning opportunities (see Opportunity 1) and strengthening pathways across learning opportunities (see Opportunity 2), there is also a need to adapt education and training provision itself to prepare people to respond effectively to changing skills needs.

Education and training provision needs to respond effectively to these changes, providing people with the knowledge, skills, abilities and attitudes needed to be adaptable and resilient in a rapidly changing world. To this end, the responsiveness of education and training systems at all levels will need to be assessed and improved as necessary. A responsive education and training system provides adequate incentives to institutions to offer courses in areas currently and anticipated to be in high demand and encourages and incentivises students to enrol in these courses.

Improving education and training provision responsiveness has been highlighted as an objective in several of Ireland’s strategic documents. Ireland can already build on an extensive range of programmes and initiatives that aim to improve the flexibility and responsiveness of the provision (Department of Education and Skills, 2016^[4]; SOLAS, 2020^[6]; DFHERIS, 2022^[64]). However, there are still areas for improvement.

In this section, the main emphasis will be on strategic planning and funding models to strengthen the responsiveness of FET and HE. Engaging employers more fully in the design and delivery of courses and

programmes is also important for improving the responsiveness of the education and training system. This latter topic is examined in Chapter 5 as part of a broader discussion on employer engagement.

Recommendation 6: Ensure that the provision of further education and training and higher education is aligned with strategic skills needs and responds to changes in demand

Ireland will need to establish a long-term, strategic vision for the skills that need to be developed in FET and HE. These objectives can serve as the basis for assessing and improving the responsiveness of education and training provision. For instance, Ireland should consider the need for interventions to boost enrolment in programmes of strategic importance. A long-term strategic vision would also allow Ireland to link the skills agenda to the broader vision for Ireland's economy and society, including, for instance, its ambition to achieve the twin aims of digital transformation and a just transition (DPER, 2021^[68]) (see also Chapter 4 for a section on skills as part of the innovation agenda). In addition, having a clear overview of strategic skills needs will help ensure that skills remain at the top of the policy agenda.

Applying a more strategic approach to the development of skills could contribute to securing a long-term balance in skills. Project participants noted that a lack of planning for skills and the graduate supply contributed to existing skills imbalances. For example, the move away from Craft Apprenticeships post-2008 contributed to the critical shortage of workers in construction and craft professions that Ireland is now experiencing. Longer-term, strategic planning could have foreseen that demand for these Craft Apprenticeships would not fully disappear and resulted in steps being taken to ensure that apprenticeship opportunities did not disappear during periods of economic downturn.

High-quality skills forecasting and workforce planning should be key inputs for such a long-term strategic approach. However, Ireland will need to strengthen its methods for assessing trends in skills needs (see also Chapter 5 on improving the relevance and granularity of skills forecasts). Some skills will become more important, for example, digital skills across all disciplines – as is recognised in Ireland's digital framework (Department of the Taoiseach, 2022^[69]) – as well as STEM skills, 21st-century skills, such as critical thinking, working with others, communicating and more (Department of Education and Skills, 2016^[4]). However, it would be important to understand at a more granular level what the skills gaps are nationally, regionally and locally, for both the short-, medium- and long-term. In addition, better workforce planning in both the short-, medium- and long-term is needed to inform objectives for the graduate supply.

Both SOLAS and the HEA have an important role to play in identifying strategic skills needs and implementing a longer-term strategic vision for skills. Not only do these agencies lead the strategic dialogue with FET and HE providers, but they are also responsible for allocating funding to education institutions.

In the FET sector specifically, longer-term strategic objectives for the skills that need to be developed could be embedded in existing Strategic Performance Agreements (SPAs). These three-year SPAs between SOLAS and each of the 16 ETBs set out the context, strategic priorities, key commitments, the ETB's role in delivering relevant policies and strategies and more. The agreements are the product of extensive dialogue and engagement between SOLAS and each ETB (SOLAS, 2019^[70]). Based on a recent FET funding model review, Ireland already plans to adapt the current model to further encourage growth and reform in key strategic areas, as well as to apply a simpler, fairer and more transparent approach to defining levels of funding for individual ETBs (SOLAS, 2022^[71]).

In the HE sector, Ireland can build on a system performance framework, which describes national priorities and key objectives for HE; the HEA manages institutional performance through strategic dialogue and performance funding. The funding model of HEIs also plays an important role in ensuring that HEIs align their offers with a long-term strategic vision. At present, the funding model comprises three separate but related elements – a block grant, top slices and performance funding – and is based on a system of agreed three-year, mission-based compacts with targets set by the HEI, subject to challenge by an external expert panel, and formally agreed in a dialogue process (Higher Education Authority, 2022^[72]). The system performance framework, supported by strategic dialogue and performance funding, has strengthened

dialogue and co-ordination between HEIs and national-level policy makers. The framework's objectives are broadly supported in HEIs.

However, there are various areas for improvement. For instance, there is little evidence of the direct effects of the framework on long-term institutional behaviour in HEIs (OECD, 2022^[73]; O'Shea and O'Hara, 2020^[74]). Ireland already launched a HE funding and reform strategy, "Funding the Future", which describes the characteristics of Ireland's HE funding and reform framework (DFHERIS, 2022^[64]). The framework considers the level of core funding required to deliver enhanced performance, identifies reform and performance priorities, commits to reviewing the appropriateness of the current funding distribution model and reflects the role of HEA in steering the strategic process and institutional priorities.

Furthermore, Ireland could build on several existing and planned initiatives that facilitate a more long-term approach to skills and student planning. In particular, Ireland plans to expand the development of sectoral qualifications frameworks by QQI across FET and HE (DFHERIS, 2022^[10]). These sectoral qualifications frameworks describe the key skills, standards and qualifications required by specific sectors and link these to FET and HE programmes. By doing so, the sectoral qualifications frameworks create a link between workforce planning initiatives and the provision of education and training.

A longer-term, strategic vision for meeting skills demand will need to be complemented with a skills system that effectively responds to both immediate skills pressures and anticipated skills needs. To start, this means that the programmes and courses' content reflects current and future skills needs. At present, there is evidence of some misalignment between the skills that people develop in education systems and the skills that are required in labour markets. For instance, employers report that there are several types of skills of recent graduates that could be strengthened, including commercial awareness, entrepreneurial skills and language capability (Fitzpatrick Associates, 2019^[32]). Engaging employers more fully in the design and delivery of courses and programmes is crucial for ensuring that the content of programmes and courses reflects current and future skills needs (see Chapter 5 for a related recommendation on employer engagement). Consideration should also be given to the processes behind adapting curricula and the content of programmes and courses. In consultations, it was also mentioned that the design, accreditation and approval of courses in post-secondary education would need to be accelerated to keep pace with changing skills needs. Funding arrangements for education institutions are important for ensuring the responsiveness of provision (e.g. by making funding conditional on performance metrics). As described above, Ireland already makes use of performance funding and is currently working on further improving its FET and HE funding models.

A responsive skills system concerns not only the content of programmes and courses (i.e. ensuring that they are reflective of current and future skills needs) but also the delivery of programmes and courses. People need to be able to access flexible learning opportunities that help them quickly acquire the skills needed to respond to changing demands. To this end, learning pathways should be permeable to allow students to adjust their learning trajectory based on evolving trends. In addition, flexibility in format (e.g. part-time, online) and design (micro-credentials, modular courses) are important since modular and "bite-size" courses provide opportunities for quick responses to more immediate skills needs (see also Chapter 3 for a section on flexible learning opportunities for adults).

There are various indications that the flexibility of education and training provision could be further improved in Ireland. For example, education institutions currently have incentives to keep students in their own system for as long as possible, thereby limiting flexibility and pathways between different systems (e.g. between HE and FET; see Recommendation 5) and, by extension, reducing opportunities to adjust learning pathways along the way.

The funding approach should be designed to support flexibility in the provision of, and pathways between, FET and HE programmes (OECD, 2017^[75]; 2017^[76]). At present, funding approaches in Ireland often impede the responsiveness of education and training provision. For example, in the FET sector, resources and operational regulations currently reinforce programme silos, thereby reducing flexibility in learning

pathways (SOLAS, 2020^[6]). In addition, in the HE sector, there are not enough resources available for part-time learning (DFHERIS, 2022^[64]; OECD, 2022^[73]). Again, it is promising that Ireland already aims to address these issues. SOLAS expressed the ambition to reform the funding model to move away from approaches that reinforce programme silos (SOLAS, 2020^[6]). Moreover, Ireland is working on implementing a new five pot funding model for FET, which aims to simplify the current model with 34 programme-specific funding streams, providing ETBs with greater flexibility to respond to learner needs (SOLAS, 2022^[71]). For HE, the ongoing “Funding the Future” reform intends to extend support to more flexible forms of learning, including blended/online and part-time (DFHERIS, 2022^[64]).

Resource constraints are an overarching challenge for education and training provision and planned reforms of funding models that will make FET and HE more responsive to changing skills needs. Underfunding in the sector can have unintended consequences for education and training provision. For example, inadequate core funding in the HE sector incentivises HEIs to provide places in programmes with lower running costs (DFHERIS, 2022^[64]). Moreover, project participants emphasised the need for sufficient funding to deliver on the objectives of ongoing reforms, such as “Funding the Future”. There are some indications that funding could indeed be increased. For instance, spending on tertiary education (in USD per student) is just below the OECD average in Ireland, and (in purchasing parity terms) spending falls below other high-performing countries (e.g. Finland is 3% higher, Netherlands 19% higher, and the United Kingdom 64% higher) (OECD, 2022^[73]). Spending per full-time-equivalent student also decreased in recent years. In terms of a positive development, EUR 307 million has recently been identified and agreed for increasing core funding to deliver enhanced performance, strategic reforms and strengthened quality of outcomes (DFHERIS, 2022^[64]). This funding will be prioritised and invested through the budgetary process over the coming years.

Recommendation 6: Ensure that the provision of further education and training and higher education is aligned with strategic skills needs and responds to changes in demand

Education and training provision should allow people to develop the skills relevant for full participation in economies and societies and make them more resilient to future changes. The provision should therefore be responsive to the changing skills needs of the economy and society, both in terms of content and delivery. Ireland could do more to improve the responsiveness of FET and HE provision. In particular, FET and HE funding models can play an important role in incentivising the education and training system to respond to changing skills needs.

Ireland can undertake the following specific actions to ensure that the provision of FET and HE is aligned with strategic skills needs and responds to changes in demand:

- 6.1. Establish a vision for long-term strategic skills needs in Ireland to inform and strengthen further education and training and higher education performance frameworks and funding models.** A more strategic approach could help foster a long-term vision for the skills needed to benefit from future opportunities and secure a balance in skills. Based on high-quality skills forecasting and workforce planning, Ireland should identify its strategic skills needs and use this information to incentivise and support education and training providers to offer skills development opportunities in these areas. Both SOLAS and the HEA have an important role to play in identifying strategic skills needs and implementing the longer-term strategic vision, including by incorporating these strategic insights into performance frameworks and funding models – e.g. through SPAs in FET. In this context, Ireland can build on ongoing work to further

improve FET and HE funding models, as described in the FET Funding Model review and the HE funding and reform framework presented in “Funding the Future”.

- 6.2. Better incentivise education institutions to offer permeable learning pathways and flexible learning opportunities that allow individuals to acquire new skills quickly in response to changing skills needs.** Ireland should remove incentives for education institutions to keep students in their own system for as long as possible. Instead, Ireland should make learning pathways more permeable so students can easily adjust their learning plans in response to evolving needs. Ireland should also expand flexible learning opportunities (e.g. part-time learning, modular courses) (see also Chapter 3 on flexible learning opportunities for adults) to facilitate the quick acquisition of new skills in response to changing skills needs. Achieving this will require adapting FET and HE funding models to provide the right incentives to education providers. It is promising that ongoing reforms of FET and HE funding models already aim to improve the flexibility of education and training provision. However, to deliver on these reforms' objectives, adequate funding must also be made available.

Summary of policy recommendations

Table 2.2. Summary of policy recommendations for securing a balance in skills through a responsive and diversified supply of skills

| Recommendation | Specific actions |
|---|--|
| Opportunity 1: Improving information and guidance for individuals on learning and career pathways | |
| 1. Strengthen the co-ordination of lifelong guidance to support a strategic approach moving forward | 1.1. Continue actively involving all relevant actors in developing a coherent, long-term strategic framework for lifelong guidance. 1.2. Strengthen national co-ordination of lifelong guidance services, including by establishing clear roles and responsibilities. |
| 2. Consolidate and improve online information on learning opportunities and careers to improve navigability, accessibility and relevance | 2.1. Develop a centralised online portal for all information on learning opportunities and careers by better co-ordinating and consolidating information. 2.2. Ensure that online information is user-friendly and tailored to individual learners' needs by using filters, self-assessment tools and direct access to advisors. 2.3. Improve the dissemination of information on skills shortages and mismatches, learning outcomes and pathways. |
| 3. Expand and strengthen guidance services to ensure that everyone can access high-quality guidance over the life course | 3.1. Strengthen the quality of guidance counselling services in schools by giving guidance counsellors appropriate time and resources and involving employers further in the provision of guidance services. 3.2. Strengthen guidance counselling services in schools by making them more widely available and covering a wide range of possible learning and career pathways. 3.3. Improve the availability and accessibility of independent and comprehensive career guidance services beyond initial education by strengthening institutional support for adults. 3.4. Target guidance services for adults to groups most distant from the labour market and at risk of losing jobs. |
| Opportunity 2: Strengthening learning and career pathways over the life course | |
| 4. Promote and strengthen pathways from schools into further education and training and apprenticeships to develop a well-balanced tertiary system and diversified supply of skills | 4.1. Change perceptions of further education and training and apprenticeships through improved career guidance, communication and rebranding. 4.2. Better promote pathways into further education and training and apprenticeships by strengthening work-based learning in schools and developing a unified application process. 4.3. Increase take-up of apprenticeships by identifying and overcoming financial obstacles for employers. 4.4. Continue to address non-financial obstacles for employers to take on apprentices by providing employers with practical support and information and promoting more flexible forms of apprenticeship. |

| Recommendation | Specific actions |
|--|--|
| 5. Improve pathways between further education and training and higher education to support the move towards a truly unified tertiary system | 5.1. Develop universal and consistent criteria for facilitating transitions between further education and training and higher education and cross-system credit recognition. 5.2. Expand the co-development and co-delivery of programmes by further education and training and higher education by supporting the newly established National Tertiary Office, among other initiatives. 5.3. Better promote the development of “place-based” networks (or partnerships) between further education and training and higher education to strengthen local collaboration on improving pathways. |
| Opportunity 3: Making education and training provision more responsive to changing skills needs | |
| 6. Ensure that the provision of further education and training and higher education is aligned with strategic skills needs and responds to changes in demand | 6.1. Establish a vision for long-term strategic skills needs in Ireland to inform and strengthen further education and training and higher education performance frameworks and funding models. 6.2. Better incentivise education institutions to offer permeable learning pathways and flexible learning opportunities that allow individuals to acquire new skills quickly in response to changing skills needs. |

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Notes

1. In this report, “skills policies” are understood to encompass all policies governing skills development and use over the life course, which contrasts with how skills policies are typically understood in Ireland (i.e. only those policies governing higher education HE and further education and training).
2. In this chapter, “Levels” refer to Ireland’s National Framework of Qualification Framework (NQF). Please note that there are differences with the European Qualification Framework (EQF).
3. Technological University Dublin, established January 2019; Munster Technological University (MTU), established January 2021; Technological University of the Shannon: Midlands Midwest, established October 2021; Atlantic Technological University, established April 2022; South East Technological University, established May 2022.



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