PART I

Chapter 3

Preparing students for the future

What kinds of policy options do policy makers have to prepare students for the future? This chapter discusses the context, main issues and policies adopted across OECD countries to promote development of skills required for post-secondary education or for entering the labour market. The policies examined comprise those ensuring effective completion of upper secondary education, delivering quality vocational education and training (VET), improving the quality of tertiary education, and strengthening and facilitating transitions across education pathways and into the labour market.

The chapter reviews policies adopted across OECD countries between 2008 and 2014 in a comparative approach, drawing mainly from the Education Policy Country Snapshots (Part III), Education Policy Outlook Country Profiles, and OECD comparative and country-specific analysis. The reforms vary across countries, as they are influenced by context, traditions, institutional settings and specific national and regional challenges. They have been grouped according to the different policy options and their scope.

Key findings

- OECD countries are preparing students for the future, as indicated by increasing attainment rates in education. On average, 82% of 25-34 year-olds have attained at least upper secondary level in comparison to 64% of 55-64 year-olds. However, dropout remains high in some countries; labour market perspectives of young people remain challenging, and many education and VET programmes do not have strong links to the labour market. To respond to these challenges, there is a wide range of policy options to strengthen transitions across education levels and into the labour market.

- To achieve higher completion rates and provide more professional pathways into the labour market, vocational education and training (VET) has become a priority. Many countries have focused efforts in recent years on improving the quality of VET programmes and expanding work-based training or apprenticeships. Some countries have adopted comprehensive strategies, as in Portugal with a national VET strategy that introduced new VET programmes, and in Denmark and Sweden which have reformed their VET systems. Countries have also introduced new qualifications or provided more flexibility in their VET systems to ensure that students have access to higher education. Quality assurance has also been targeted, such as with Austria's Quality Management System.

- To prevent dropout and make upper secondary education more relevant to student and labour market needs, policies have focused mainly on improving curricula and supporting students at risk. For example, Poland introduced a new core curriculum listing the skills that upper-secondary students should develop, notably skills adapted to our fast-changing and technology-intensive economies. Mexico introduced a new system of upper secondary education with a new curricular framework, monitoring system and academic guidance.

- To enhance the effectiveness of tertiary education, a major driver of economic competitiveness, policies have focused on relevance to the labour market and quality control. Comprehensive strategies introduced in different countries aim to raise the quality of tertiary education provision. For example, Ireland and New Zealand introduced general strategies to set direction and priorities, while in Flanders (Belgium) and Hungary they introduced new short-degree cycles. Targeted policies aim to increase access or to improve quality assurance, as in the Netherlands.

- Many countries have adopted policies to support effective student transitions across education or into the labour market through either national strategies, youth guarantee policies or the development of Qualifications Frameworks. Australia, for example, has introduced different strategies, such as the National Partnership on Youth Attainment and Transitions and a national qualifications framework. European Union member countries have particularly co-operated in this area.

Education systems need to better prepare students for future challenges

In today's knowledge-based economies, it is important for individuals and society to ensure that students have the skills required to continue to further education and enter the labour market. According to the Survey of Adult Skills (OECD 2013a), the demand for skills continues to shift towards more sophisticated tasks, as jobs increasingly involve analysing and communicating information and technology pervades all aspects of life. Moreover, individuals require skills to help them navigate the constantly changing economy and contribute to shape its future. Across all OECD countries, it pays to prepare students for the future with upper secondary education or beyond. Salaries and employment opportunities generally rise with the education level: on average, adults with tertiary-level education earn most and have higher levels of literacy and numeracy skills, which usually also translate into better health and more active participation in society (OECD, 2013a; OECD, 2014a).

Across the OECD, young adults have higher levels of enrolment and education, as well as higher levels of key skills, such as literacy and numeracy. Since 2000, enrolment and attainment rates have increased in upper secondary education or tertiary education (OECD, 2014a). On average across OECD countries, 82% of 25-34 year-olds have attained at least upper secondary education in 2012, in comparison to 64% of 55-64 year-olds (Chapter 1, Figure 1.2). In addition, literacy and numeracy scores on the Survey of Adult Skills also indicate that young adults (16-24 year-olds) have higher levels of skills proficiency than 25-64 year-olds in most OECD countries (OECD, 2013a) (Chapter 1, Figure 1.5).

Figure 3.1. **Education attainment of 25-34 year-olds (2012)**
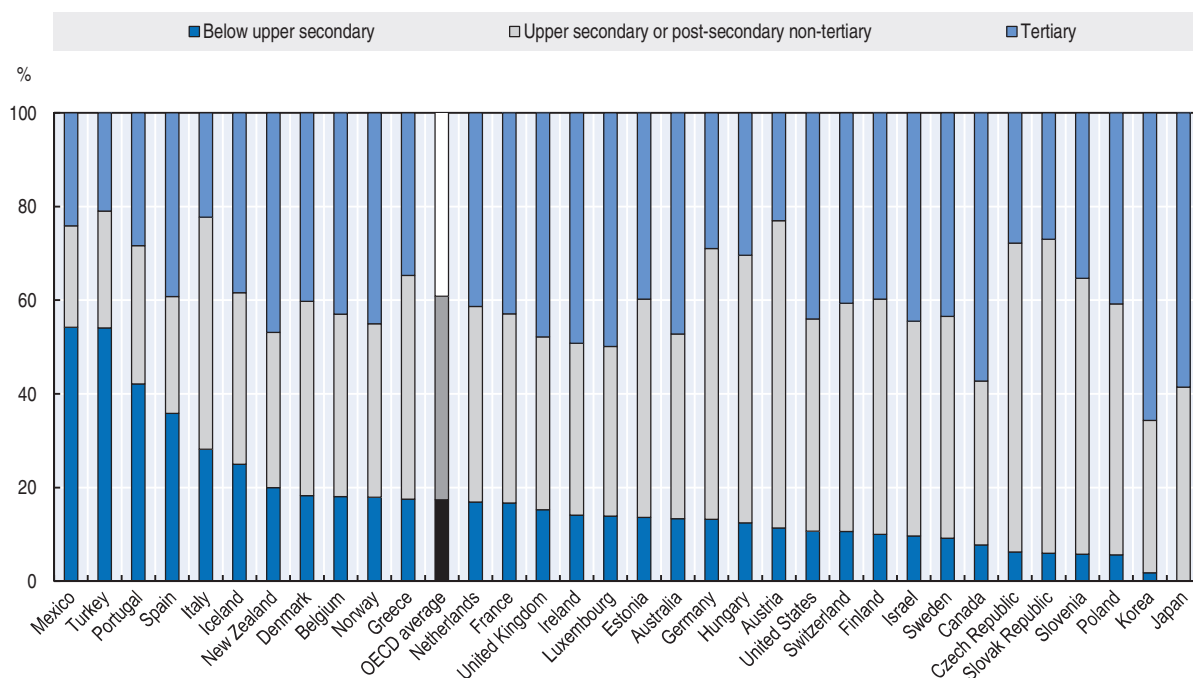
Source: OECD (2014), *Education at a Glance 2014: OECD Indicators*, OECD Publishing, Paris, Table A1.4a.

StatLink ⟨⟩ *http://dx.doi.org/10.1787/888933171424*

Despite increasingly positive outcomes, education challenges persist in many OECD countries, particularly in terms of ensuring access and attainment, reducing dropout and designing pathways that ensure smooth transitions and contribute to improved youth employment prospects. Among the younger population, 17% of 25-34 year-olds have not attained an upper secondary education on average across OECD countries (Figure 3.1). Labour market perspectives for 25-34 year-olds are also less than positive, as employment rates have decreased across all levels of educational attainment between 2005 and 2012, and youth unemployment remains high. In 2012, 15.0% of 15-29 year-olds were neither employed nor in education or training (NEET), ranging from 6.7% of 15-29 year-olds in the Netherlands to 29.2% in Turkey. Education and training policies will be important to effectively address the challenges countries face in preparing students for the future (OECD, 2011).

Policy options to prepare students for the future

Upper secondary education, vocational education and training (VET) and tertiary education are key education levels in which policies can be levered to prepare students for the future. After lower secondary education, in most cases students enter more complex and differentiated study programmes as they progress through secondary education and post-secondary education towards the labour market. The main objectives of these education levels and programmes are to develop citizens and foster skills that can be used in post-secondary education and to enter the labour market. Policies to improve provision, such as ensuring relevance of the curriculum, strengthening transitions between pathways and improving links to the labour market, are among the different approaches to improving student outcomes.

Policies adopted between 2008 and 2014 across OECD countries, as reported for this publication, show that countries use a variety of approaches to help prepare students for the future, in upper secondary and tertiary education and general and VET programmes. Reforms in upper secondary education mainly aim to support students who are at risk of dropping out or did not complete this level. Among the policies analysed, policies targeting VET have been most prominent, either with comprehensive strategies or with new curriculum and qualifications. Tertiary education policies aim to raise the quality of provision with new programmes and targeted policies to increase access or to improve quality assurance. In addition, this chapter analyses transversal policies which aim to support students' transitions across these education levels and into the labour market.

Overall, the analysis of policies implemented in these areas of education highlights common patterns: strategies have been developed to introduce new and more relevant qualifications or clearer qualifications structures and to improve the quality of institutions. At the same time, the types of policies adopted depend on many factors, including the structure of the education system and the specific challenges faced by different countries. European Union member states have benefitted from EU co-operation in the field of education and training to address common challenges.

Ensuring effective completion of upper secondary education

Upper secondary education plays a crucial role in education systems as it is where the great majority of youth today are enrolled (OECD, 2004). In the past, upper secondary schools were mainly designed to prepare an elite for accessing university studies, but nowadays they play a key role in ensuring that young people leave the educational system

with the basic qualifications and skills required for employability and successful functioning in society (Capsada, 2014). The OECD's annual indicators on education and associated labour market outcomes suggest that completion of upper secondary education marks the minimum threshold for successful labour market entry and continued employability. Furthermore, it is the stepping stone to opportunities in further education.

Lying between the foundation of basic education and preparation for more complex education or entrance into the labour market, upper secondary education is a pivotal stage for young people, and ensuring completion is a challenge. Building on the knowledge and skills acquired in basic education (ISCED 2), upper secondary programmes are designed to offer students more varied and specialised education through two main paths: academically-oriented programmes (ISCED 3A) and vocationally-oriented programmes (ISCED 3B). While the full upper secondary cycle is compulsory in only eight OECD countries, around 90% of the population enrols in at least one year of upper secondary education in 31 OECD countries. While attainment rates have increased in recent years, on average at least 17% of young adults across OECD have not attained upper secondary education in 2012, and in some countries, the proportion is much higher (Figure 3.1).

Among the main challenges identified by the OECD for upper secondary education is delivering relevant education that addresses varied students' needs and supports effective transitions by preparing young adults for work or further education. The OECD Skills Strategy (OECD, 2012) has recognised the need for education systems to ensure that students complete their compulsory education and that their skills (cognitive skills, interpersonal skills and higher level skills more generally) respond to the needs of the labour market (OECD, 2012).

Across the OECD, countries are adopting a range of policies to enhance quality and ensure completion of upper secondary education. Comprehensive policies involve broad strategies to reform upper secondary education in general, and content policies deal specifically with curriculum and qualifications. Targeted policies respond to the challenge of engaging students and reducing dropout from the education system (Table 3.1).

Governance and general strategies in upper secondary education have been introduced in a limited number of countries to reform the full upper secondary education system:

● Italy has taken steps to reform upper secondary education (2010) by updating, reorganising and simplifying the numerous pathways which have increased over past decades, including reviewing the curriculum. The reform limits and anchors the types of paths to identified needs, both on a national and on a regional/local level to deliver key competencies, knowledge and skills, and define the learning outcomes for each track (Ministry of Education, Universities and Research, 2014). Upper secondary education in Italy lasts five years (the first two years are compulsory schooling) and is organised into general and technical/vocational upper secondary schooling, and vocational education and training paths.

● Mexico, which has among the lowest proportion among OECD countries of population with an upper secondary education, introduced and has begun implementing a National System of Upper Secondary Education (2009) with a common curricular framework, a monitoring system, academic guidance and other educational services, and scholarships to improve access. A review by the World Bank (2013) regarding the loan awarded for this reform indicates some promising results, including implementation of a skills-based curriculum, accreditation of 658 schools as part of the network of the

Table 3.1. **Policies to increase completion of upper secondary education, 2008-14**

Comprehensive policies	Content	Targeted policies
GOVERNANCE AND GENERAL STRATEGY	**CURRICULUM AND QUALIFICATIONS**	**STUDENT DROPOUT**
Estonia: Amendment to the Basic School and Upper Secondary School Act (2013)	**Iceland:** National curriculum guidelines in upper secondary education (2011)	**Austria:** National Strategy against Early School Leaving (2012)
Italy: Reform of upper secondary education (2010-15)	**Japan:** Course of study in upper secondary education (2009)	**Belgium (Flemish community):** Action Plan on Early School Leaving (2013)
Mexico: National System of Upper Secondary Education (2009); Compulsory upper secondary education (2012)	**New Zealand:** National Certificate of Educational Achievement (NCEA) (2009)	**Canada (Quebec):** I Care About School strategy (2009)
	Poland: Curriculum reform – general and VET (2008)	**Germany:** Educational Chains Initiative (2010) for career support; VerA programme (2010)
	Slovenia: Updated subject curricula (2008)	**Mexico:** Constructing Yourself (2008)
	Sweden: A new curriculum for upper secondary education (2011)	**New Zealand:** Achievement Retention Transitions programme (2013) within the Youth Guarantee (2010)
	United Kingdom: (Northern Ireland) Entitlement Framework (2013); **(Wales)** Review of Qualifications for 14-19 year-olds (2011)	**Norway:** New Possibilities-Ny GIV- initiative (2010-13)
		Portugal: Programme to Combat School Failure and Early School Leaving (2012)
		Spain: Programme to Reduce Early Dropout in Education and Training (2008); National Reform Programme (2012)

Source: Education Policy Country Snapshots (Part III) and Education Policy Outlook Country Profiles, *www.oecd.org/edu/profiles.htm.*

National Upper Secondary Education System, and implementation of programmes to reduce student dropout. In addition, Mexico has made upper secondary education compulsory (2012).

Revising curriculum and qualifications: While some countries have introduced broad curriculum reforms that also included upper secondary education (Chapter 4) others focused on revising the content that guides upper secondary education, focusing on key competences to respond to student and labour market needs:

● Poland introduced a modification of the national core curriculum for general education and school vocational training programmes (2008), to be implemented from 2012 to 2015. Designed to help students acquire and develop concrete skills during their upper secondary education (3-4 years), the new curriculum includes reading, mathematical thinking, scientific thinking, communication skills, use of ICT, and critical thinking, as well as problem-solving skills, self-assessment and teamwork. School principals have autonomy to manage instruction time for subjects in the curriculum framework and to ensure skills attainment.

● New Zealand reformed its upper secondary school-leaving certificate, the National Certificate of Educational Achievement (NCEA, 2009), to better align it to the national curriculum. In post-compulsory upper secondary education, the NCEA corresponds to three levels attained by completing a certain number of credits in particular subjects. In 2013, about 70% of students in Year 11 achieved NCEA Level 1 and the same share of Year 12 students achieved NCEA Level 2. In their final year (Year 13), 57% of students achieved NCEA Level 3 (New Zealand Qualifications Authority, 2014).

Preventing student dropout: Student dropout is a complex process of disengagement that can be explained by a variety of factors, such as academic performance, students' personal and family background, system-level policies and labour market conditions (OECD, 2012). Examples of policies adopted to prevent students from leaving the education system and dropping out before attaining a minimum level of education include:

- A common objective among European countries under the European 2020 Strategy (2010) is to reduce rates of early school leaving to below 10% by 2020 (a goal for the whole of the European Union) (EC, 2014a). Early school-leavers refer to 18-24 year-olds who have left education and training with a lower secondary education or less and are no longer in education or training (EC, 2013). Each European country has translated this target to reflect its specific context (EC, 2014b).

- The Austrian National Strategy against Early School Leaving (2012) was implemented to further reduce the proportion early school leavers. While this proportion is low in Austria (7.6%) compared to other countries, the strategy aims to prevent early school leavers at the system level through structural improvements to the education system, at the school level through improvements of the teaching and learning environment, and at the student level by supporting students at risk, through initiatives such as youth coaching (EC, 2013).

- Spain's National Reform Plan (2012) laid out objectives to meet the European Union 2020 strategy and reduce dropout rates to 15% by 2020. Between 2009 and 2012, Spain decreased early school leaving rates by 6.3 percentage points to 24.9% and will aim to reduce it further to achieve its targets (EC, 2013). In the past, Spain also introduced the Programme to reduce early dropout in education and training (*Programa para la reducción del abandono temprano de la educación y la formación*, 2008) which provided funding for preventive measures and has shown a small impact on reducing dropout. More recently, the LOMCE reform (2013) also aims to reduce drop out.

- Norway's national New Possibilities-Ny GIV initiative (2010-13) aimed to boost the upper secondary completion rate from 70% to 75% by 2015 with specific measures for low-performing students and to re-engage in education 16-21 year-olds who are neither in school nor in employment. Key measures include support for students in the final year of lower secondary education and in upper secondary education, training and support for teachers to improve the quality of teaching, common indicators to have comparable statistics, improved collaboration between relevant government authorities, and engaging stakeholders. This reform also introduced some VET initiatives, such as the Certificate of Practice Scheme.

Delivering quality vocational education and training (VET)

VET programmes in upper secondary and tertiary education can play a central role in preparing students for work and responding to labour market needs (OECD, 2010a). VET programmes have sometimes been perceived by students and the general public as having second class status (OECD, 2010a), and directed at low performing students, rather than being considered equivalent to general academic programmes. However, VET increasingly plays a central role in preparing students for the future by combining academic and more relevant training to develop skills needed in the labour market. VET programmes can also prepare students for further education, and many countries are increasingly recognising

that the quality of initial VET can make a major contribution to economic competitiveness (OECD, 2012).

VET refers to education and training programmes at upper secondary (initial) or post-secondary level that generally lead to a recognised qualification and a specific career or type of job (OECD, 2010a). It combines learning relevant theory with practical training, with a special focus on the latter. One of the elements that often differentiates VET from other educational pathways is the importance of workplace training, with the proportion of time spent at a workplace varying by programme (OECD, 2010a). At least 70% of upper secondary students in Austria, Belgium, the Czech Republic, Finland and the Slovak Republic are enrolled in pre-vocational or vocational programmes, while in Greece, Japan, Korea, New Zealand and the United Kingdom, it is less than 30% (Figure 3.2). In most countries, more tertiary students enter tertiary type-A programmes (theory-based programmes) although in Belgium, Chile, Korea, and New Zealand, entry rates for tertiary-type B programmes (technical programmes) are more than 35% compared to the OECD average of 18% (OECD, 2014a).

Figure 3.2. **Students enrolled in upper secondary general and vocational programmes (2012)**
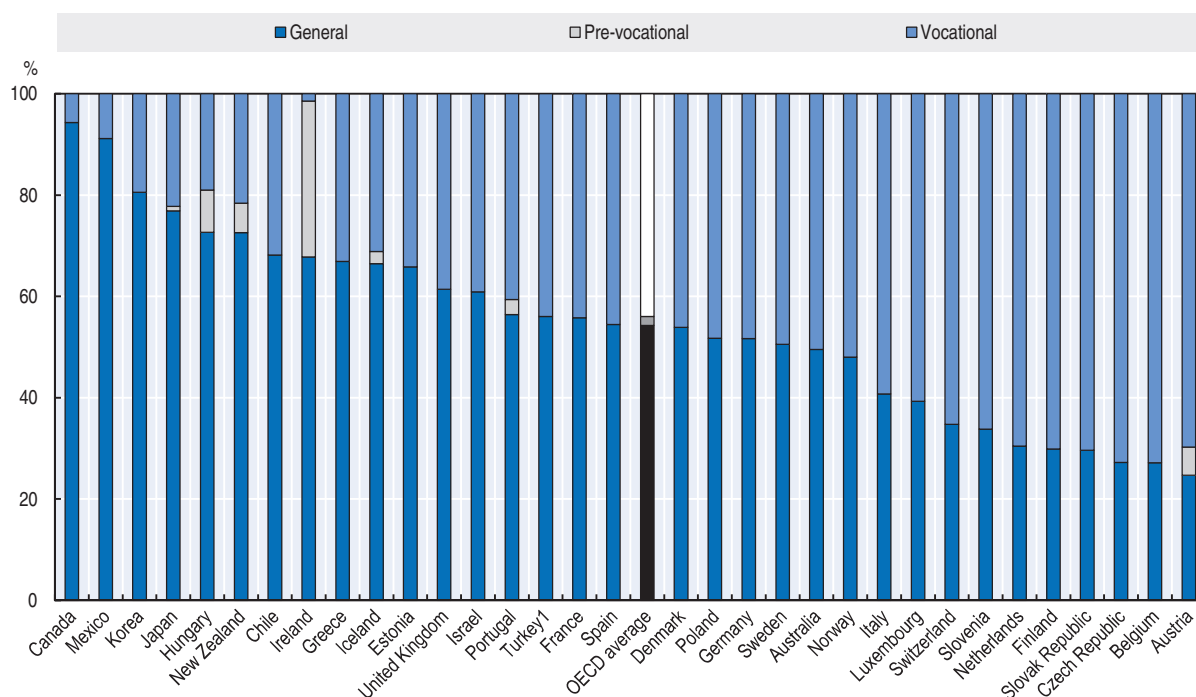
Note: Different duration of upper secondary programmes between countries must be taken into account when comparing enrolment rates at this level of education.
1. Excludes ISCED 3C.
Source: OECD (2014), *Education at a Glance 2014: OECD Indicators*, OECD Publishing, Paris, Table C1.3.

StatLink 🔗 *http://dx.doi.org/10.1787/888933171438*

To prepare students for the future, VET programmes need t o ensure that they have the skills needed to successfully enter the labour market as well as continue to further learning. But achieving this is challenging. The Survey of Adult Skills indicates that adults with VET qualifications have, on average, lower literacy and numeracy scores than those in

general programmes, although these data may reflect selected effects (OECD, 2013a). VET programmes face many challenges including balancing students' preferences with employers' needs, determining which mix of skills VET programmes should provide, engaging employers in VET programmes, and developing and providing adequate career guidance (OECD, 2010a). With increasing specialisation and horizontal differentiation in VET, programmes offer students more learning and working options. This wide range of opportunities makes decisions harder and career perspectives more complex (OECD, 2010a).

The analysis of recent policies shows that countries have been extremely active in response to their challenges to strengthen the delivery of VET. Countries have mainly introduced comprehensive general strategies and curriculum-related reforms, with some focusing on quality assurance (Table 3.2).

Table 3.2. **Policies to develop quality vocational education and training, 2008-14**

Comprehensive policies	Content	Targeted policies
GENERAL STRATEGY AND STRUCTURE	**CURRICULUM AND QUALIFICATIONS**	**QUALITY ASSURANCE**
Denmark: Reform of system structure (2008-09); Better and more attractive VET programmes (2014)	**Austria:** Apprenticeships and upper secondary certificate (2008)	**Australia:** Skills Quality Authority (2011)
Estonia: Vocational Educational Institution Act (2013)	**Belgium (French Community):** Reorganisation of curriculum by units of study (2010)	**Austria:** Quality Management System – QIBB (2012)
Germany: Information campaign (2011)	**Denmark:** VET programme with academic examination (2010)	**Slovenia:** Central Register of Participants in Education Institutions (CEUVIZ) (2011), Higher Vocational Education Database.
Hungary: System-level reforms (2011-13)	**Estonia:** Vocational Education Standards (2013)	**Sweden:** Swedish National Agency for Higher Vocational Education (NAHVE, 2009)
Ireland: Education and Training Boards Act – Education and Training Boards (2013); SOLAS – New National Education and Training Authority (2013)	**France:** Reforms of VET at upper secondary levels (2009)	
Italy: Agreement between the State and Regions (2010); Higher Technical Institutes (2011)	**Germany:** New regulations (2009)	
Japan: Guidelines for developing VET education (2011)	**Luxembourg:** The Vocational Training Reform (2008)	
Netherlands: Vocational professionalism agenda (2011)	**New Zealand:** Secondary-Tertiary Programmes (Trades Academies, 2009); Service Academies (2009); Vocational pathways as part of the Youth Guarantee (2010)	
Portugal: Vocational Reference Schools (2012); National integrated strategy (2012-14), including Centres for Qualification and Vocational Education (2013)	**Norway:** Certificate of Practice Scheme (2008); Working Life Course for lower secondary students (2009)	
Spain: Introduction of dual VET (2012)	**Poland:** Curriculum reform – general and VET (2008)	
Sweden: New upper secondary VET system, including apprenticeships (2011)	**Portugal:** Specific Vocational Programmes (2012); VET upper secondary syllabi (2013)	
Turkey: Specialised Vocational Training Centres Project (2010-15); Vocational and Technical Education Strategy Paper and Action Plan (2013-17)	**Slovenia:** Competence-based approach in VET curricula (2008-11)	
	Spain: Under LOMCE (2013), optional vocational pathways and new VET diploma.	
	Turkey: Vocational Education Project for Employment (2009); New Trends in Illumination Project (2009) and Railway Operation in European Credit System (2011-13)	

Source: Education Policy Country Snapshots (Part III) and Education Policy Outlook Country Profiles, *www.oecd.org/edu/profiles.htm.*

Introducing general strategies or modifying the structure: The main objectives of comprehensive VET policies are to introduce guiding principles for the development of VET and to change the structure of VET programmes and/or governance. Some examples:

● Denmark has actively reformed VET. In 2008, the government reformed the structure of VET to reduce student dropout among VET students by redefining the system structure into 12 main study areas. In 2014, the Better and More Attractive VET Programmes (2014) Agreement intends to improve the supply of VET programmes. Targets for 2020 include increasing the share of students entering and completing upper secondary VET; providing professional development for teachers; enhancing guidance counselling and transition to the labour market or higher education; and increasing engagement of stakeholders.

● Portugal has made multiple efforts to improve VET through different related measures brought together under a national integrated strategy (2012-14). It includes multiple actions to increase the number of youth enrolled in VET, improve co-ordination and links to the labour market, and strengthen guidance counselling. Portugal has reformulated the VET upper secondary syllabi (2013) and introduced Vocational Reference Schools (EREP, 2012) and a network of Centres for Qualification and Vocational Education (CQEP, 2013). EREP schools target a particular economic activity in a region while CQEPs provide guidance and counselling to students and adults. Portugal is also piloting new VET programmes (2012) in primary education and lower secondary education (starting at age 13).

● Following recommendations from the Central Council of Education, Japan also aims to improve the quality of VET education with the introduction of guidelines for enhancing VET provision at different levels of the education system.

● Italy has reformed its VET governance structure (2010) to ensure coherence between VET provision offered by the state and by the regions. The state VET system lasts five years and is offered by technical and vocational institutes, while the regional VET system is provided by agencies and institutes accredited by the regions and can last three to four years (Eurypedia, 2013). Further VET qualifications can be obtained in post-secondary non-tertiary education through higher technical education and training pathways or through courses organised by regional VET systems. Additionally, in 2011, Italy introduced post-secondary non-tertiary Higher Technical Institutes offering 2-3 year programmes, which are managed by foundations involving VET schools, accredited training centres, universities and research centres, enterprises and their associations. Curricula are designed in partnership with sectors and companies.

Reforming VET curriculum and qualifications: Policies have been introduced in a number of OECD countries to introduce or reform curricula, define qualifications or improve flexibility between pathways. Some examples:

● According to an OECD review of post-secondary VET, work-based learning can provide a strong learning environment, facilitate recruitment and respond directly to employers' needs (OECD, 2014b). Slovenia introduced a competence-based approach with a modular structure in VET curricula (2008-11), and increased the share of practical training. Evidence suggests that practical training in the work place increased, and 20% of the curriculum is now designed in co-operation with social partners, particularly local companies. In Norway's pilot programme, the Certificate of Practice (2008) allowed students at risk to opt for a two-year training programme, which combined both school-

based education (one day per week) and workplace training (four days per week). A summative evaluation of this programme indicated positive results (CEDEFOP, 2011).

- In Germany, where there is a well-developed VET system and strong co-operation between educational institutions, employers and other social partners, reforms to introduce more flexibility in VET have aimed to facilitate access to higher education for youth who have an advanced VET degree but do not have a general higher education access qualification.

- To further engage students in education and provide vocational skills, New Zealand introduced the Trades Academies (2009) to target upper secondary students interested in careers in trades or technology. The initiative aims for collaboration between schools, tertiary institutions, industry training organisations and employers. New Zealand also created six vocational pathways to provide upper secondary students with more choice and to better integrate core curriculum subjects with industry-recognised pathways.

- As a way to align education and labour market needs, countries have engaged stakeholders in the design of curricula and developed provision through apprenticeships (OECD, 2010a; OECD, 2014b). In Luxembourg, the state co-operates with employers' and employees' chambers in the Committee for Vocational Training to adapt orientations of the training programmes to job market developments and skills needs. The six chambers consist of three for employers (Chamber of Industry and Commerce, Chamber of Craft Trades and Chamber of Agriculture) and three for employees (Chamber of Labour, Chamber of White-Collar Workers and Chamber of Civil Servants and Public Servants). They each represent their respective occupation and supervise VET. Curricula are set by National Training Commissions, which include representatives of each secondary school concerned as well as professionals.

Strengthening quality assurance: Quality assurance is challenging, as VET delivery is complex, with many providers and different types of qualifications and governance structures (OECD, 2013b). Some examples of countries working to strengthen VET quality assurance:

- Under the National Vocational Education and Training Regulator Act of 2011, the Australian Skills Quality Authority (ASQA, 2011) seeks greater national consistency and increased rigour in registering training providers, accrediting courses and monitoring system quality, by using the VET Quality Framework and the Standards for VET Accredited Courses.

- The Swedish National Agency for Higher Vocational Education (NAHVE, 2009) covers higher education VET, analyses labour market demands, decides which vocational programmes are provided as higher vocational education and allocates public funding to education providers. It monitors and audits education quality and outcomes. It is also responsible for co-ordinating a national framework for prior learning and validation and serving as the national co-ordination point for the European Qualifications Framework, which is designed to facilitate comparability of qualifications within the European Union.

Supporting the development of tertiary education

In our knowledge-driven economies, access to quality tertiary education has become more important than ever before to foster economic competitiveness (OECD, 2008). Tertiary education includes both academic-oriented programmes, traditionally referred to as

higher education (tertiary-type A programmes) and vocational or professional programmes delivered by polytechnics, university colleges or technological institutions (tertiary-type B programmes). The expansion of tertiary education has led to a greater diversification of study programmes aiming to better address the connection between education and the labour market, improve social and geographical access to education and cater to practical training needs (OECD, 2008).

Both participation and attainment have expanded in tertiary education. Since 2000, entry rates of tertiary type-A programmes have increased over 10 percentage points on average to 58%, while entry rates of tertiary-type B programmes have increased at a slower pace, 2 percentage points to 18%. Higher participation rates are reflected in higher attainment rates: 39% among 25-34 year-olds compared to 24% among older adults (55-64 year-olds) on average across OECD countries (Figure 3.3).

Figure 3.3. **Percentage of population that has attained tertiary education, by age group (2012)**
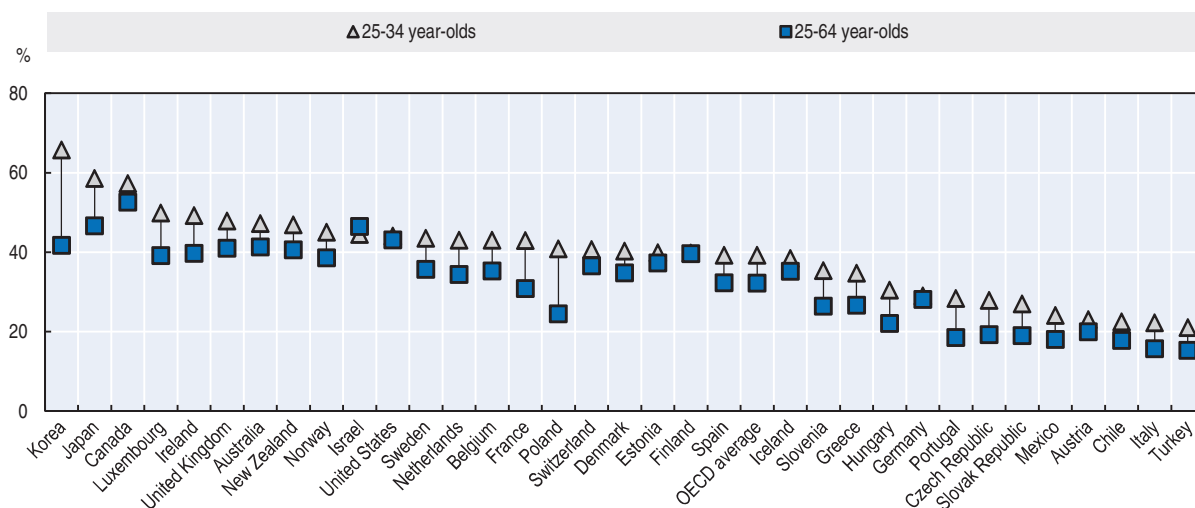
Source: OECD (2014), Education at a Glance 2014: OECD Indicators, OECD Publishing, Paris, Table A1.3a.

StatLink ᴥᴤᴩ http://dx.doi.org/10.1787/888933171448

Given increased access and attainment in tertiary education, key challenges remain for all countries. These include assuring and improving quality and equity in tertiary education in a context of increased decentralisation and institutional autonomy; promoting internationalisation; and ensuring greater relevance to the needs of the labour market. This requires more actively involving labour market actors, to ensure that institutions are responsive to employer demands and students achieve positive labour market outcomes (OECD, 2008).

Among the diverse range of policies adopted to improve the quality of tertiary education, OECD countries have developed broad comprehensive reforms, more specific qualifications reforms, and targeted policies on access, quality assurance and internationalisation (Table 3.3). Countries have also aimed to improve tertiary education through funding policies (Chapter 6).

Introducing general strategies or modifying the structure: In a number of countries, comprehensive policies serve to set the national agenda to guide tertiary reforms in the coming years. In decentralised environments, where tertiary education institutions may be

Table 3.3. **Policies to strengthen quality and access in tertiary education, 2008-14**

Comprehensive policies	Content	Targeted policies	
GENERAL STRATEGY	**QUALIFICATIONS**	**ACCESS**	**QUALITY ASSURANCE**
Austria: Mapping Process for the Austrian Higher Education System (2011)	**Belgium (Flemish community):** A national qualifications' structure (2009-13)	**Australia:** Higher Education Participation and Partnerships Program (2010)	**Australia:** Tertiary Education Quality and Standards Agency (2011); MyUniversity website (2011); Advancing Quality in Higher Education (2012) Quality Indicators for Learning and Teaching measures (2014)
Belgium (French Community): Landscape Decree (2014)	**Norway:** National Qualifications Framework for Higher Education (2009)	**Austria:** Additional places in universities of applied sciences (2012-15)	
Czech Republic: Strategic Plan for the Scholarly, Scientific, Research, Development, Innovation, Artistic and other Creative Activities of Higher Education institutions (2011)	**Turkey:** National Qualifications Framework for Higher Education (2010)	**Finland:** Reform of student admissions and the central government transfer system (2011)	**Belgium (Flemish Community):** Parliamentary Act (2012)
France: University Communities (2013)		**Greece:** Law on the Structure, Operation, Quality-Assurance of Studies and Internationalisation of Higher Education Institutions (2011)	**Chile:** Superintendent of Higher Education (2011)
Ireland: National Strategy for Higher Education to 2030 (2011)			**Denmark:** Revision of tertiary standards (2009)
Italy: University Reform – Law No. 240 (2010)		**Hungary:** Decree on the Admission Procedure in Higher Education (2012); Decree on National Higher Education Excellence (2013)	**Iceland**: Quality Council for Universities (2010)
New Zealand: Tertiary Education Strategy (2010-15; 2014-19)		**Netherlands:** Quality in Diversity in Higher Education law: student guidance (2013)	**Netherlands:** Performance agreements (2012-15)
Spain: Proposals for reform and improvement of quality and efficiency of the Spanish university system (2013)		**Turkey:** Two-stage university exams (2010)	**Slovenia:** Quality Assurance Agency for Higher Education (2010); Electronic higher education information system (2012)
STRUCTURE		**INTERNATIONALISATION**	
Belgium (Flemish Community): Short-cycle tertiary education as part of the national qualifications process (2009)		**Australia:** New Colombo Plan (2013)	
Hungary: National Higher Education Act (2011)		**Finland:** Strategy for the Internationalisation of Higher Education Institutions (2009-15)	
Turkey: Consultation on restructure and redesign of tertiary education system (2012)		**Japan:** International Students Plan (2008); Revitalisation Strategy (2010); Go Global Japan (2012); Initiative for Emerging Global University (2014)	
GOVERNANCE			
Finland: Universities Act (2009); Polytechnics reform (2011-14)			
Slovak Republic: Amendment to the Higher Education Act (2012)			

Source: Education Policy Country Snapshots (Part III) and Education Policy Outlook Country Profiles, *www.oecd.org/edu/profiles.htm.*

autonomous or guided by local or regional governments, broad general strategies can provide overall coherence and clarity (OECD, 2008). Other comprehensive policies aim to reform tertiary programmes or governance structures, for example:

● The French Community of Belgium has introduced the *Landscape Decree* (2014) which aims to define the higher education system and academic organisation of schooling to harmonise students' school trajectories from all types of higher education institutions. The policy also sets up the Higher Education and Research Academy (ARES) to enable co-ordination of the higher education system and serve as a platform for dialogue.

- New Zealand has introduced the Tertiary Education Strategy (TES) for 2014-19, a follow-up to its 2010-15 strategy. The TES sets the government's five-year direction and priorities in tertiary education, and aims to promote a more outward-looking and engaged tertiary education system. It also aims to improve funding, research and internationalisation. A TES progress report provides updates on achievements regarding the objectives of these higher education strategies.

- To better meet the demands of the labour market, Hungary's National Higher Education Act (2011) has introduced short degree cycles (associate degrees) into the tertiary education system. In addition, Hungary also aims to strengthen the partnership between tertiary education institutions and the industrial sector through practical training.

- Italy has undergone a comprehensive reform of tertiary education. Under the University Reform Law n°240/2010, Italy introduced new requirements for all Italian universities, such as strengthening institutional autonomy, offering student welfare services, and introducing a new quality assurance and accreditation system. This new system includes periodical evaluation as well as standards and criteria for institutions to establish doctoral programmes.

Strengthening qualifications systems: National qualifications frameworks can be instrumental in providing coherent links between the various programmes and qualifications offered by different higher education institutions (OECD, 2008). Qualifications frameworks for higher education have been introduced in Norway and Turkey as part of the 2005 Bologna Process, which aims for countries to adopt a qualifications framework to support transferability of credits and student mobility in the European Higher Education Area (EHEA).

Ensuring access to tertiary education institutions: Despite growing participation in many OECD countries, access to tertiary education is still a challenge some countries are trying to address.

- In Austria, additional places (approximately 4 000 by the end of 2015) will be added in the Universities of Applied Sciences to meet the needs of technical and business professions. National reports have shown an increase in the overall student body from 16 782 in 2011/12 to 17 956 in 2012/13.

- Hungary has reformed admissions to university study programmes. As part of the Decree on the Admission Procedure in Higher Education (2012), Hungary is gradually raising minimum university admission requirements by increasing the score required between 2013 and 2016. Additionally, under the Decree on National Higher Education Excellence (2013), the quota system for selection of applicants was replaced by minimum score requirements per study programme and admission based on programme capacities. These policies aim to increase the quality of candidates entering tertiary education.

Strengthening quality assurance: In a context of decentralisation and institutional autonomy, quality assurance has been increasingly introduced to hold institutions and stakeholders accountable.

- Many countries, including Chile and Iceland, have introduced or reformed quality assurance agencies, which evidence suggests can help ensure institutions are providing quality education that is relevant to labour market needs (OECD, 2008). Iceland has the Quality Council for Universities, an independent institution made up of the heads of the higher education institutions in Iceland, students and members of the Science and

Technology Committee. The Superintendent of Higher Education bill in Chile, introduced in 2011 and passed in 2013, supports quality assurance in tertiary education, aiming to increase monitoring and promote quality in higher education.

● Under the Parliamentary Act (2012), the Flemish Community (Belgium) introduced quality assurance reviews in line with accreditation processes of tertiary education programmes.

Internationalising tertiary education: Countries are also aiming to promote internationalisation of tertiary education with different objectives, such as to attract international students to enhance the pool of skilled workers, attract skilled workers, generate revenue, foster exchange and co-operation, or support access to foreign-based study programmes as a cost-effective alternative to domestic provision (OECD, 2008). Across the OECD, approximately 8% of all students in tertiary education are international students. In Japan, 4% of students in tertiary education are international (OECD, 2014a), and various efforts are being made to increase the number of international students in Japan through the International Students Plan (2008). The Japan Revitalisation Strategy (2010) aims to double the number of Japanese students overseas by 2020. Other policies, such as Go Global Japan (2012), aim to support the capacity of universities to develop foreign languages.

Facilitating transitions across education pathways and the labour market

Securing smooth transitions across upper secondary and tertiary pathways and into the labour market have been an issue for OECD countries, to ensure effective completion and youth employment (OECD, 2010b). As OECD economies have become more knowledge-based, young people are expected to have solid basic skills to participate actively in society and in the labour market. Education systems have to ensure that youth can attain a minimum level of skills that are transferable and useful, not only across occupations and jobs, but also to other spheres, such as family and social life. Yet, across OECD countries, young people drop out and do not benefit from available education opportunities or enter the labour market (OECD, 2010b).

Challenges remain in helping students to make transitions through the various education levels and into the labour market. Across OECD countries on average in 2012, 15% of individuals from age 15-29 were considered neither employed nor in education or training (NEET) (Figure 3.4). Since 2008 the share of NEET population has increased by 1.3 percentage points among 15-29 year-olds but has decreased for younger cohorts, from 7.8% to 7.2% for 15-19 year-olds in 2012 (OECD, 2014a). In some countries, the proportion of NEET population in 2012 was low (6.7% in the Netherlands, 8.2% in Luxembourg and 8.4% in Norway), while in others, the proportion was much higher than average among 15-29 year-olds (29.2% in Turkey, 25.8% in Spain and 24.6% in Italy) (Figure 3.4). Furthermore, students face other challenges such as transferability of diplomas across different education pathways and across countries, and securing effective transitions into the labour market, especially for more disadvantaged youth

To improve transitions, prevent dropout and increase the share of youth in education and employment, OECD countries are adopting a range of policies that are transversal in nature. Countries have introduced broad comprehensive strategies, which aim to engage students and help them in their transitions, and defined qualifications frameworks (Table 3.4). It is important to note that specific policies in upper secondary education and VET can also help facilitate transitions across education pathways and the labour market (Tables 3.1 and 3.2).

Figure 3.4. **Young adults not in education or employed (2012)**
NEET population among 15-29 year-olds and change between 2008 and 2012
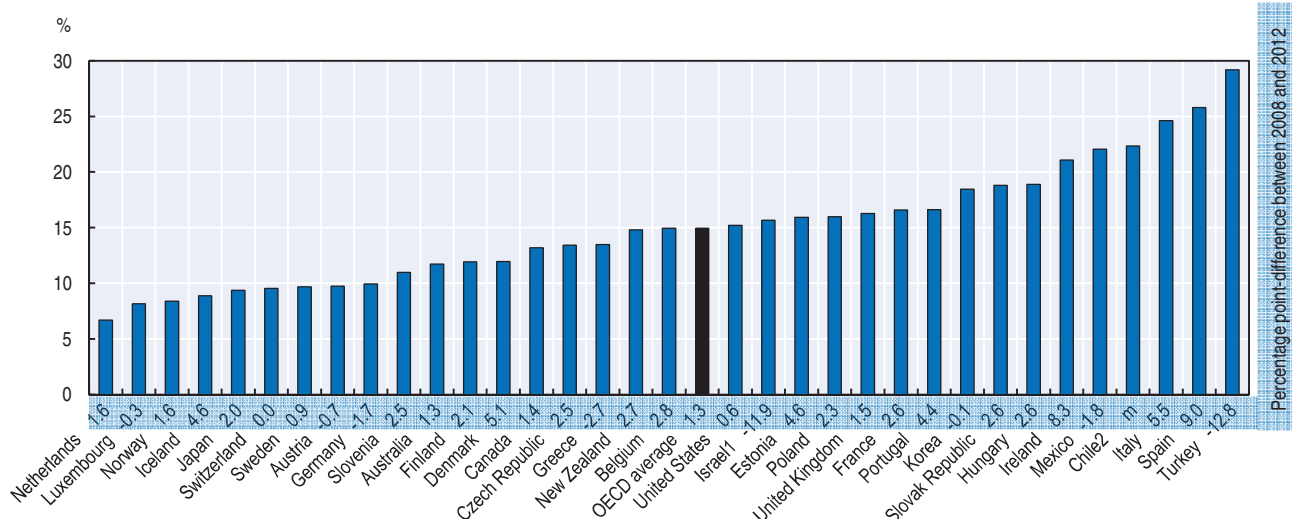
Note: Countries are ranked in ascending order of the 2012 percentage of NEET population among 15-29 year-olds with upper secondary or post-secondary non-tertiary education.
1. 2011 and 2012 data are not comparable. See Methodology section.
2. Year of reference 2011.
Source: OECD (2014), *Education at a Glance 2014: OECD Indicators*, OECD publishing, Paris, Table C5.3d, available online (*www.oecd.org/edu/ eag.htm*).

StatLink 🛒📉 *http://dx.doi.org/10.1787/888933171451*

Table 3.4. **Policies to improve transitions between education and the labour market, 2008-14**

Comprehensive policies	Content
GENERAL STRATEGY	**QUALIFICATIONS FRAMEWORK**
Australia: National Agreement for Skills and Workforce Development (2009); National Partnership on Youth Attainment and Transitions (2009-13); National Partnership Agreement on Skills Reform (2012)	**Australia:** Australian Qualifications Framework (2011)
	Czech Republic: National System of Occupations (NSO) and National Qualifications System (NQS) (2011)
Belgium (Flemish Community): An Agreement between the Flemish Government and the Social Partners on Professional Careers (2012)	**Finland:** National Framework for Qualifications and Other Learning (2012)
Canada (New Brunswick): Labour Force and Skills Development Strategy (2013)	**Germany:** Recognition Act (2012); German Qualifications Framework (DQR, 2013); *Länder* Recognition Acts (2014)
France: Law of 22 July 2013 to promote integration in the labour market	**Greece:** Law on Organisation and Operation of the Institute of Youth and Lifelong Learning and of the National Organisation for the Certification of Qualifications and Vocational Guidance and Other Provisions – accreditation of non-formal learning (2013)
Ireland: Springboard programme (2011); Action Plan for Jobs (2012)	**Korea:** Learning Accounts (2009); The National Competency Standards (2013)
YOUTH GUARANTEE	**New Zealand:** Qualifications Framework (2010)
Finland: Youth Guarantee (2013)	**Norway:** National Qualifications Framework for Lifelong Learning (2011)
New Zealand: Youth Guarantee (2010)	**Slovenia:** Slovenian Qualification Framework under adoption (2013)
Slovenia: Youth Guarantee (2014)	

Source: Education Policy Country Snapshots (Part III) and Education Policy Outlook Country Profiles, *www.oecd.org/ edu/profiles.htm*.

Introducing general and youth guarantee strategies: Some countries aim to improve transitions between education and employment through overarching strategies, for example:

- To ease transitions between education and the labour market, Australia has implemented multiple national partnerships involving the Australian state and territory governments agreeing to structural reforms to improve the training system in exchange for funds. In particular, the National Partnership on Youth Attainment and Transitions (2009-13) aimed to retain 15-24 year-olds in education and improve their transition to further education, training or employment through school partnerships with training organisations. Evaluation of the policy suggests that there have been improvements in participation and attainment (Dandolopartners, 2014).

- New Brunswick (Canada) launched the Labour Force and Skills Development Strategy (2013) to strengthen student pathways, support learning and skills development, and retain/attract skilled individuals to participate in the New Brunswick labour market. In part, the strategy aims to align K-12 and post-secondary education with labour-market needs so that students can gain the knowledge and skills needed to transition more easily into the workforce.

- Ireland's Springboard programme (2010) has improved access for individuals by providing free higher education courses of up to 12 months to people who recently became unemployed, with a particular focus on skills requirements in the manufacturing sector, ICT and international financial services. The programme has been running since 2011, with over 10 000 people enrolled in courses to date and 40% of participants back in work six months after their course. Additionally, the Further Education and Training (FET) Sector in Ireland is undergoing significant reform, including introducing a new National Education and Training Authority (SOLAS, 2013) and 16 Educational and Training Boards (ETBs, 2013).

- To support transitions for young people, the European Union introduced the Youth Guarantee (2013) as a recommendation to EU members to provide young people under age 25 with access to employment, apprenticeship or traineeship within four months of leaving education or becoming unemployed (EC, 2013). Many EU countries have introduced Youth Guarantee strategies (EC, 2014c). For example, Finland's Youth Guarantee provides everyone under age 25 and recent graduates under age 30 either a job, a traineeship, a study place, or a workshop within three months of becoming unemployed. Slovenia's Youth Guarantee (2014) guarantees a job, formal education or a training opportunity to any 15-29 year-old who is currently unemployed, as well as to the 37 000 people in that age range who annually register in the employment service.

Introducing qualifications frameworks: Transitioning between education levels and the labour market can be facilitated by well-functioning qualification frameworks, which provide a reference for the competencies students should attain in formal education and training, employers' demands for skills and employment, and programme offerings of educational institutions (OECD, 2008). Qualifications frameworks can help clarify the level of competencies that should be associated with different qualifications (diplomas or awards) and how different qualifications relate to one another, and also improve flexibility between the multiple programmes (OECD, 2013b). However, creating coherent national

qualifications frameworks requires a high level of collaboration and co-ordination among institutions and employers (OECD, 2008).

● The development of the European Qualifications Framework for lifelong learning (EQF, 2008) has been a catalyst for development of national qualifications frameworks (NQFs) in European countries (CEDEFOP, 2013). Each country's NQF is contextualised within the national environment and is comparable across Europe through the use of the EQF as a reference. For example, in the Czech Republic, NQFs (2011) developed for vocational qualifications and for higher education qualifications are linked to the EQF and aim to respond to the qualifications demanded in the labour market. In Ireland, as in other European countries, qualifications frameworks aim to increase the balance in perceived quality between VET and tertiary education qualifications awarded at the same NQF levels.

● Through the Recognition Act (2012) and the *Länder* Recognition Acts (2014), Germany has introduced a qualifications framework for both those who have obtained qualifications in Germany and foreigners who have gained qualifications abroad. In addition, Germany's Qualifications Framework is linked to the EQF.

● Korea's Learning Account system (2009) allows individuals to accumulate and manage their learning experiences, providing credits and qualifications for career development.

Bibliography

Capsada, Q. (2014), "Preparing students for the future: Key issues and analytical framework for the Education Policy Outlook", draft working paper for this publication.

CEDEFOP (European Centre for the Development of Vocational Training) (2013), "Analysis and overview of NQF developments in European countries: Annual report 2012", *Working Paper*, No. 17, Publications Office of the European Union, Luxembourg, *www.cedefop.europa.eu/EN/Files/6117_en.pdf* (accessed 12 July 2014).

CEDEFOP (2011), "Norway: Certificate of Practice pilot project produces good results", *www.cedefop.europa.eu/EN/articles/19198.aspx* (accessed 12 July 2014).

Dandolopartners (2014), "Evaluation of the National Partnership on Youth Attainment and Transitions: A Report for the Department of Education", *http://docs.education.gov.au/system/files/doc/other/np_yat_final_evaluation_report.pdf* (accessed 12 July 2014).

EC (European Commission) (2014a), Europe 2020 website, *http://ec.europa.eu/europe2020/index_en.htm* (accessed 15 September 2014).

EC (2014b), "Overview of Europe 2020 targets", *http://ec.europa.eu/europe2020/pdf/targets_en.pdf* (accessed 15 September 2014).

EC (2014c), "National Youth Guarantee Implementation Plans", Employment, Social Affairs and Inclusion, *http://ec.europa.eu/social/main.jsp?catId=1090&langId=en* (accessed 15 September 2014).

EC (2013), "Reducing early school leavers: Key messages and policy support", Education and Training, November 2013, *http://ec.europa.eu/education/policy/strategic-framework/doc/esl-group-report_en.pdf* (accessed 15 September 2014).

Eurypedia (2013a), "Italy: Organisation of Vocational Upper Secondary Education", *https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Italy:Organisation_of_Vocational_Upper_Secondary_Education* (accessed 12 July 2014).

New Zealand Qualifications Authority (2014), "Annual Report on NCEA and New Zealand Scholarship Data and Statistics (2013)", *www.nzqa.govt.nz/assets/About-us/Publications/stats-reports/ncea-annualreport-2013.pdf* (accessed 12 July 2014).

OECD (2014a), *Education at a Glance 2014: OECD Indicators*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/eag-2014-en*.

OECD (2014b), *Skills beyond School: Synthesis Report, OECD Reviews of Vocational Education and Training*, OECD Publishing, Paris, *http//dx.doi.org/10.1787/9789264214682-en*.

OECD (2013a), *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264204256-en*.

OECD (2013b), *Synergies for Better Learning: An International Perspective on Evaluation and Assessment, OECD Reviews of Evaluation and Assessment in Education*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264190658-en*.

OECD (2012), *Better Skills, Better Jobs, Better Lives: A Strategic Approach to Skills Policies*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264177338-en*.

OECD (2011), *Reviews of National Policies for Education: Improving Lower Secondary Schools in Norway 2011*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264114579-en*.

OECD (2010a), *Learning for Jobs, OECD Reviews of Vocational Education and Training*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264087460-en*.

OECD (2010b), *Off to a Good Start? Jobs for Youth*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264096127-en*.

OECD (2008), *Tertiary Education for the Knowledge Society: Volume 1 and Volume 2*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264046535-en*.

OECD (2004), *Completing the Foundation for Lifelong Learning: An OECD Survey of Upper Secondary Schools*, Studienverlag Ges.m.b.H./OECD Publishing, *http://dx.doi.org/10.1787/9789264103733-en*.

World Bank (2013), "WB/Mexico: Improvements in Upper Secondary Education Continue, Reaching More Than 4 Million Students", December, *www.worldbank.org/en/news/press-release/2013/12/16/wb-mexico-secondary-education-students* (accessed 12 July 2014).
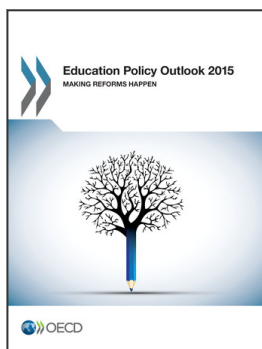
From:
Education Policy Outlook 2015
Making Reforms Happen

Access the complete publication at:
https://doi.org/10.1787/9789264225442-en