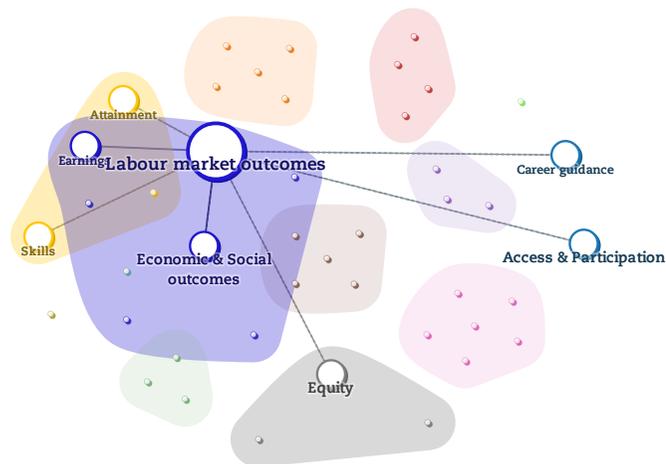


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## Labour market outcomes

Having more **education**, knowledge, and **skills** increases the chance of finding employment, of improving skills while on the job (therefore of remaining employed), and of realising higher **earnings** over a lifetime. Employment prospects depend largely on whether individuals' skills meet the requirements of the labour market. Employment and unemployment rates may provide some indications of whether education systems are producing the supply of skills the labour market needs. Employment and unemployment rates are closely related, but one cannot be inferred directly from the other due to differences in the way they are calculated. The employment rate is the proportion of employed persons in relation to the working-age population (25-64 year-old adults), which includes employed, unemployed as well as inactive individuals, i.e. those who are neither employed nor looking for a job. The unemployment rate refers to the percentage of unemployed people in the labour force, which includes those employed and those unemployed adults looking for a job.

What people know and what they can do with what they know has a major impact on labour market outcomes. A healthy labour market will absorb a range of **skills** at different levels, and to varying degrees, and will minimise mismatching of skills, which happens when the skill level of the workers or their qualifications are higher or lower than what is required for their job ('overskilling' or 'underskilling'). In an increasingly knowledge-based global economy, people with high level skills are in greater demand, while those with lower level skills are more likely to be at risk of being unemployed, especially during periods of economic downturn. Besides high-level skills typically associated with tertiary education, a well-skilled labour force also requires mid-level trade, technical and professional skills, often delivered through vocational programmes. Research has shown that the skills more highly on demand nowadays – particularly, information-processing skills – are "learnable".

Thus, it is important that both formal and alternative schooling be tuned to the current needs of the market place so that students of today are better prepared for the jobs of tomorrow. Career guidance can play an important role informing young people about current and emerging opportunities and thus facilitating better matches between supply and demand.

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Source: OECD: [Education at a Glance 2012: OECD Indicators](http://dx.doi.org/10.1787/eag-2012-en), OECD Publishing. (http://dx.doi.org/10.1787/eag-2012-en), 2012

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

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

Relevant education levels:

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## Key insights

### → Attaining at least upper secondary education is an important protection against the risk of unemployment

Unemployment rates are closely related to educational attainment. Across OECD countries, an average of 14% of adults without an upper secondary or post-secondary non-tertiary education was unemployed in 2012. Some 8% of adults who have attained upper secondary or post-secondary non-tertiary education were unemployed across OECD countries in 2012. Unemployment rates among adults with this level of education vary considerably by country, ranging from only 2% in Norway to about 24% in Greece. Across OECD countries, 5% of adults with a tertiary education were unemployed; only in Greece, Portugal and Spain did unemployment rates among tertiary-educated adults exceed 10%.

In some countries, the difference in unemployment rates between adults with high and low levels of education is narrow or even inverted. In Brazil, Korea, Mexico and Turkey, for example, unemployment rates are higher among people with an upper secondary or post-secondary non-tertiary education than for people with below upper secondary education. In Mexico, unemployment rates among adults who do not have an upper secondary or postsecondary non-tertiary education are lower than those among tertiary-educated adults.

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

Relevant education levels:

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### → Having higher levels of education increases the likelihood of being employed

Across OECD countries, over 80% of tertiary-educated people were employed in 2012 compared with over 70% of people with an upper secondary or post-secondary non-tertiary education and less than 60% of people with below upper secondary education.

In some countries, the gap in employment rates between people who hold a tertiary qualification and those with below upper secondary education is large. In Austria, Belgium, the Czech Republic, Estonia, Germany, Hungary, Ireland, Israel, Poland, the Russian Federation, the Slovak Republic and Slovenia, for example, there is a difference in employment rates between these two groups of at least 30 percentage points.

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

Relevant education levels:

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### → In all OECD countries, employment rates are lower among women at every educational level; the gender gap is smallest at the tertiary level

For any economy, but particularly for ageing economies, it is crucial to make full use of all the skills available to the labour market. Yet across all OECD countries and education levels, only 65% of women are employed compared with 80% of men. The gender gap is around 20 percentage points between men and women with below upper secondary education (68% for men and 48% for women); 15 percentage points for those with an upper secondary or post-secondary non-tertiary education (around 81% for men and 66% for women); and around 10 percentage points among individuals with a tertiary education (88% for men vs. 79% for women).

Although the gender gap narrows as educational attainment increases, the employment rate among tertiary-educated women across OECD countries is still considerably lower than that of men, despite the fact that in 2012 a slightly higher proportion of women (34%) than men (31%) had some type of tertiary education in these countries.

The difference in employment rates between tertiary-educated men and women is particularly large in the Czech Republic, Japan, Korea, Mexico and Turkey, where it exceeds 15 percentage points. In Iceland, Norway, Portugal and Sweden, the difference in employment rates between genders is less than 3 percentage points.

Relevant education levels:  Primary  Secondary  Tertiary

### ➔ Gender differences in unemployment rates are, on average, less pronounced than they are in employment rates

Among adults with below upper secondary education, unemployment rates are very similar for women and men (13% for women and 14% for men). Among adults who have an upper secondary or post-secondary non-tertiary education, unemployment rates are 9% for women and 7% for men. Among tertiary-educated adults, the unemployment rate is about 5% among both women and men.

Gender differences in unemployment rates are particularly large in Greece and Turkey. For instance, in Turkey, 11% of tertiary-educated women were unemployed in 2012 compared to only 6% of tertiary-educated men (in Greece, 20% and 14%, respectively). These differences were even more pronounced among adults with upper secondary education: 17% of women were unemployed compared with 7% of men (in Greece, 30% and 21%, respectively).

Relevant education levels:  Primary  Secondary  Tertiary

### ➔ Higher educational attainment increases not only the likelihood of being employed, but also of being employed full-time

The definition of full-time employment varies among countries. The minimum number of hours defining full-time employment ranges from 30 hours per week in the Czech Republic, Greece and New Zealand to 44 hours per week in Chile. Across OECD countries, 70% of earners at all education levels reported working full-time in 2012 (not every country includes self-employed individuals). Overall, the higher the educational level, the greater the likelihood of full-time employment. Among employed adults without an upper secondary degree 64% are employed full time, compared to 71% of those with an upper secondary education, and 74% of tertiary-educated workers.

Relevant education levels:  Primary  Secondary  Tertiary

### ➔ Among employed adults with a tertiary education, men are more likely than women to be employed full-time

In all OECD countries, the proportion of tertiary-educated women who work full time is considerably smaller than the share of men with the same level of education who do so, although in Estonia, Finland, Hungary, Poland and Portugal, more than 80% of tertiary-educated women and men of both age groups work full time.

The age patterns of full-time employment are also different for men and women with a tertiary degree. In almost all OECD countries, the share of 35-44 year-old men who work full time is considerably larger than the share of 55-64 year-old men who do so. No such pattern is evident among women. In fact, in many countries, the share of tertiary-educated 55-64 year-old women working full time is larger than that of 35-44 year-old women with the same level of education. Many women aged 35 to 44 have young children and often work part time. In Austria, Germany and Spain, for example, the share of tertiary-educated older women who work full time is significantly larger than the share of tertiary-educated younger women who do. In other countries, like France, Greece, Ireland, Israel, Luxembourg, Portugal and the United Kingdom, a larger share of younger women than older women works full time. The difference between the two age groups in the share of women who work full time is minimal in Belgium, the Czech Republic, Finland, Hungary, the Netherlands, New Zealand, Poland, Sweden and the United States. These differences may be associated with countries' childcare policies.

Relevant education levels:  Tertiary

### ➔ Younger adults have higher employment rates as well as higher unemployment rates than older adults

The employment rate of younger adults (25-34 years-olds) is higher than that of older adults (55-64 years-old) at every educational level. Among tertiary educated people, 80% of younger adults are employed compared to 70% of older adults. These proportions are, respectively, 75% and 55% among people with upper secondary or post-secondary non-tertiary education; for those with below upper secondary education, the rates are 60% for the younger group compared to 40% for the older adults.

The largest gap between age groups and educational attainment are seen in Austria, Luxembourg, the Russian Federation, Slovenia and Turkey. For example, in Slovenia, 80% of younger adults with upper secondary or post-secondary non-tertiary education are employed while only 30% of older adults with the same level of education are.

Interestingly, while young people have higher employment rates than older people, they also have higher unemployment rates. This is true at all levels of education, and is largely explained by inactivity rates among older adults. At the tertiary level, unemployment rates are 7% for younger adults compared to 4% for older adults. For those with an upper secondary or post-secondary non-tertiary degree, these proportions are 10% among younger adults and 7% among older workers. The age gap grows substantially among those with the least education. In particular, for those who have not attained an upper secondary education, 20% of younger adults are unemployed compared to 10% of older individuals.

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Source: OECD: [Education at a Glance 2014: OECD Indicators](http://dx.doi.org/10.1787/eag-2014-en), OECD Publishing. (<http://dx.doi.org/10.1787/eag-2014-en>), 2014

Relevant education levels:  Primary  Secondary  Tertiary

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### ➔ Among young adults between the ages of 15 and 29, the higher the level of educational attainment the higher the employment rate, and the lower the share of voluntary and involuntary part-time work

Among 15-29 year-olds who have completed their initial education, the level of education completed is positively associated with employment rates. On average across OECD countries, in 2012, 16% of 15-29 year-olds who had not completed upper secondary education were employed as compared with 42% of those who had completed upper secondary or post-secondary non-tertiary education, and 62% of those who had completed tertiary education.

Both part-time and full-time work is more frequent among the more qualified workers, but the share of part-time workers among the employed decreases with educational attainment, as does the share of involuntary part-time work. In 2012, 21% of employed 15-29 year-olds with below upper secondary education who were no longer in education worked part time, while only 13% of employed 15-29 year-olds with tertiary education who were no longer in education worked part time. The relative share of both voluntary and involuntary part-time work in employment also decreases with increasing levels of education: in 2012, 12% of employed 15-29 year-olds with below upper secondary education who are no longer in education worked part time voluntarily, while 7% of employed 15-29 year-olds with tertiary education who are no longer in education did so; 9% of those with below upper secondary education who are no longer in education worked part-time involuntarily, compared to 6% of tertiary-educated people.

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Source: OECD: [Education at a Glance 2014: OECD Indicators](http://dx.doi.org/10.1787/eag-2014-en), OECD Publishing. (<http://dx.doi.org/10.1787/eag-2014-en>), 2014

Relevant education levels:  Secondary  Tertiary

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### ➔ Across OECD countries about one in six young adults (15-29 years-old) is neither employed, nor in education and training

The unemployment rate among young adults is not a good indicator of the difficulties that young people face in finding jobs because it refers only to individuals who are in the labour market (those employed and those unemployed adults looking for a job). A better indicator is one that looks at the proportion of the entire youth population that is neither in employment nor in education and training (NEET).

A large NEET population is a source of concern for governments: Young adults who have difficulty finding jobs are likely to withdraw from the work force entirely and drop out studying. The consequences for these individuals over a lifetime are enormous as are the costs for governments: they are less likely to obtain more education, more likely to be involved in the informal economy (thus with no taxed revenue), and more likely to rely on public assistance.

On average across OECD countries, 15% of 15-29 year-olds were NEET in 2012 (6.6% unemployed and 8.4% inactive). This rate was 7% among 15-19 year-olds (2.8% unemployed and 4.6% inactive) and 19% among 25-29 year-olds (8% unemployed and 11.3% inactive). Inactivity is, therefore, more prevalent among this population than unemployment. The NEET proportion varies across countries and may reflect factors such as the proportion of women who are neither employed nor in education because they are raising families. In Chile, Ireland, Italy, Mexico, Spain and Turkey, more than 20% of 15-29 year-olds were NEET in 2012, while in Austria, Germany, Iceland, Luxembourg, the Netherlands, Norway, Sweden and Switzerland, fewer than 10% of 15-29 year-olds were.

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Source: OECD: [Education at a Glance 2014: OECD Indicators](http://dx.doi.org/10.1787/eag-2014-en), OECD Publishing. (<http://dx.doi.org/10.1787/eag-2014-en>), 2014

Relevant education levels:  Secondary  Tertiary

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### ➔ Individuals with a vocational upper secondary education are more likely to find employment and less likely to be unemployed or inactive compared to people with a general upper secondary education

Across OECD countries for which data were available in 2012, 75% of individuals aged 25-64 with a vocational upper secondary or post-secondary non-tertiary qualification were employed compared to 70% of individuals of this age group with a general upper secondary education.

Unemployment rates were lower among individuals with vocational upper secondary or post-secondary non-tertiary education (8%) than among adults with a general upper secondary education (9%). In Denmark and Slovenia, unemployment rates among individuals with vocational upper secondary or post-secondary non-tertiary education were at least 3 percentage points lower than those of individuals with a general upper secondary or post-secondary non-tertiary degree. The opposite pattern was

observed in Greece and Ireland. The inactivity rate among individuals with a vocational upper secondary or post-secondary non-tertiary education was also about 6 percentage points lower, on average, than among individuals with a general upper secondary education.

Learning specific skills that are immediately needed in the labour market might make it easier for individuals who completed vocational education and training (VET) to find work, especially their first job, as compared to their peers with a general education. The fact that many students in vocational programmes participate in apprenticeships or other workplace learning arrangements also facilitates their entry into the labour market as those opportunities give them direct exposure to prospective employers. A potential drawback is that skills acquired through a vocational path might be of limited relevance in a rapidly changing labour market.

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

Relevant education levels:  Secondary  Vocational

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### → Unemployment rates vary among graduates from different fields of study

The advantages of obtaining a tertiary-level education are clear in all the OECD countries: individuals who completed this level of education are less likely to be unemployed and more likely to earn more over their working life compared to those with lower levels of education. This does not mean, however, that all graduates at the tertiary level benefit since employment outcomes vary considerably depending on the type of degree obtained. In the United States, for example, earnings are higher for graduates in engineering and computer fields compared to those in education and social services, but so are the unemployment rates: about 5% for the former, higher paying field vs. only 2% for graduates of the relatively low-paying secondary teaching programmes (one of the lowest unemployment figures of any programme). Graduates in some fields of study faced both below-average salaries and higher-than-average unemployment rates (9% for history graduates and 8% for philosophy and religious studies graduates), while other programmes, such as mechanical engineering and nursing, had both relatively high salaries and low unemployment rates (3% for each). In Canada, unemployment rates were found to range from 3% for graduates in agriculture, health, and engineering, to 8% for those in education. These findings illustrate the complexity and diversity in outcomes for tertiary graduates entering the labour force.

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

Source: OECD: [Education at a Glance 2013: OECD Indicators](http://dx.doi.org/10.1787/eag-2013-en), OECD Publishing. (http://dx.doi.org/10.1787/eag-2013-en), 2013

Relevant education levels:  Tertiary

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### → What people know and what they can do with what they know has a major impact on labour market outcomes

It is not only degrees that count: how people apply their knowledge greatly influences their odds of being employed and their level of income. For example, results from the Survey of Adult Skills conducted in 2012 show that the median hourly wage of workers who score high in literacy – those who can make complex inferences and evaluate subtle truth claims or arguments in written texts – is more than 60% higher than for workers scoring at low levels – those who can, at best, read relatively short texts to locate a single piece of information or to understand basic vocabulary. Those with low literacy skills are also more than twice as likely to be unemployed.

Those relationships hold not just for individuals, they also apply to countries: per capita incomes are higher in countries with larger proportions of adults who reach the highest levels of literacy or numeracy proficiency and with smaller proportions of adults at the lowest levels of proficiency. Moreover, the distribution of skills has implications for income distribution: higher levels of inequality in literacy and numeracy skills are associated with greater income inequality.

Taken together, these results underscore the crucial importance of information-processing skills in adults' participation in the labour market. Accessing, analysing, and communicating information as well as solving problems are all highly transferable skills that are relevant in many social contexts and work situations. Countries are well advised to take stock of how their citizens are equipping themselves with the skills demanded in the 21<sup>st</sup> century. Labour shortages in different sectors and occupations – typically associated with ageing populations entering retirement and with fast advances in technology and science - have been identified as the main factor hampering economic growth.

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

Relevant education levels:  Secondary  Vocational  Tertiary  Adult

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### → Skills will only translate into better economic outcomes if they are used effectively

A mismatch between the supply of skills acquired in education and on the job and those required in the labour market has a potentially negative impact on the economy. For a number of reasons, some workers are likely to be employed in jobs that do not fully use their qualifications. Often, more highly skilled workers use their skills less intensively than less proficient workers do, indicating mismatches between skills and their application in the workplace.

At the individual level, the under-use of skills in specific jobs may lead to eventual skills loss. Workers whose skills are under-used in their current jobs earn less than similarly-skilled workers who are well-matched to their jobs. This situation tends to generate more employee turnover, thus affecting a firm's productivity and reducing the pace at which more efficient

technologies and approaches to work are adopted. The consequences are increased unemployment and reduced GDP growth for the country. The fact that employers in some countries report skills shortages during times of high unemployment indicates that a population's stock of skills – and the investment made to develop those skills – may be partly going to waste.

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

Relevant education levels:  Secondary  Vocational  Tertiary  Adult

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## Policy options

### → Develop relevant skills

The demand for highly skilled workers has never been so high. This challenges governments to take initiatives over a large number of areas in order to stimulate the development of the right sets of skills required to maintain competitiveness in the market place. To that end, efforts should be made to identify changes in skills demand; to encourage high quality education and training programmes that translate those skills into relevant curricula; to incentivize a structure of shared costs in education by designing tax policies that reward both individuals and employers for investing in post-compulsory education; to promote equity by investing in initial schooling as well as programmes to help disadvantaged students and second-chance training options; and to invest in human capital at the local and global levels (by facilitating entry for skilled migrants, the development of skills abroad, and the retention of international qualified workers). Governments will benefit from creating an integrated framework within which to promote these actions and from maintaining a long-term perspective on skills development even during economic crises.

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

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

Relevant education levels:  Primary  Secondary  Vocational  Tertiary  Adult

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### → Strengthen links between tertiary education and the labour market

Given the critical role that tertiary education plays on labour market outcomes, it is no surprise that many countries look at this education level as a strategic area for aligning education outputs to labour market demands.

It is difficult to forecast future supply of and demand for different types of skills given rapid technological change and change in the behaviour of individuals. However, it is useful to undertake forecasting exercises using different assumptions to help governments and others act to reduce possible shortages or over supply.

Optimising education provision to meet labour markets, however, is never an easy task. Public officials often express concern that the fields in which students enrol correspond poorly to the needs of the labour market. Finding the balance between individuals' choices and countries' priorities is a difficult challenge, but a range of policy actions is possible. Some countries where the governments are the major investors in tertiary education, for example, try to control the number of study places available by setting enrolment caps for fields where the supply exceeds the demand or, conversely, by establishing funding incentives (lower tuition, loans, grants) where there are expected shortages. Other measures include steering individuals' choices by improving information (students may pursue high-demand fields of study if they know of their greater labour market outcomes) and encouraging educational institutions' responses by using financial mechanisms that help with the alignment of supply and demand (such as increasing or decreasing public funding offered to institutions based on the types of disciplines they offer).

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

Relevant education levels:  Tertiary

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### → Include labour market perspectives and actors in the development of tertiary education policies and in governance structures of tertiary institutions

Educational authorities could involve various labour market actors in bodies that provide advice and analysis to policy makers as well as strategic input and governance. This would include business, not-for-profit organisations, professions, public sector entities (e.g. directors of schools or hospitals), as well as key government officials who bear responsibility for employment and skills policies. Public authorities can also encourage a wider participation of such actors in strategic bodies and governance structures of tertiary institutions. Such participation has the potential to improve the responsiveness of institutions to market demands.

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

Relevant education levels:  Tertiary

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## → Encourage tertiary education institutions to play a greater role in lifelong learning and in improving the skills of individuals already in the labour force

In most countries tertiary education institutions need to enhance their role in the renewal and improvement of the skills of those already in the labour force. Tertiary institutions should widen opportunities for lifelong learning by increasing the flexibility of provision (e.g. part-time and distance provision) and designing education and training alternatives tailored to the needs of employers and given industries. This could be complemented by policy initiatives which grant financial support to address the difficulties facing low-income workers and a framework which allows tertiary institutions to raise revenues from these activities.

The participation of tertiary institutions in lifelong learning can be seen in the broader context of strengthening the partnerships with the business sector. Practices to be sustained across the tertiary system include internships for students and teachers in industry, offices in tertiary institutions to liaise with the business sector, and the participation of employers in the daily activities of institutions (including governance and curriculum development).

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

Relevant education levels:  Tertiary  Adult

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## → Ensure vocational education and training meets labour market needs

Vocational education and training (VET) systems are under intensive scrutiny to determine if they can deliver the skills required for today's economy, and to ensure that they adapt to fast-changing labour market needs. Many skills requirements are volatile and technological change has increased the demand for higher level technical skills. While strong vocational programmes can increase competitiveness, some programmes fail to meet labour market needs and to prepare young people for employment.

It is, therefore, essential to connect vocational education more fully to the needs of the economy. This means making sure that VET provision reflects changing employer needs as well as student preferences. A number of mechanisms are available to do so, including incentive mechanisms, the assessment of future skills needs, and effective career guidance. To achieve the optimal mix of programmes, it is essential to share costs between students, employers and the government, consistent with broader funding principles for education.

VET programmes need to provide the right mix of skills for the labour market, but also generic and transferable skills to support occupational mobility and lifelong learning. Employers and unions should be involved in the development of curricula. VET programmes should include an element of workplace training since, the learning benefits aside, such kind of training reflects labour market demand for the skills acquired in the VET programme. Blending school and workplace learning is also a powerful and effective method to develop many soft skills and prepare young people for jobs. General skills of numeracy and literacy are increasingly important in the labour market and vocational programmes need to give sufficient weight to these skills. Students should be systematically assessed at the point of entry to vocational programmes so as to ensure a basic minimum of these skills and to identify those in need of targeted support.

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

Relevant education levels:  Vocational

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## → Engage stakeholders to strengthen links between vocational programmes and labour market needs

Vocational education and training (VET) systems do not exist in isolation and their effectiveness depends essentially on their links to the labour market. For strong links between vocational programmes and labour market needs, the involvement of key VET stakeholders, including employers and trade unions, is crucial. The engagement of stakeholders ensures that employers have the opportunity to communicate their skills needs, and to negotiate the provision of these skills with other stakeholders. Effective stakeholder involvement also helps ensure that the content of VET curricula and qualifications is relevant to the labour market.

Stakeholder engagement can be facilitated by appropriate bodies at a national level, regionally, according to industrial sectors, or at the level of the individual institution. Depending on the broader country context, they may have an advisory role or a decision-making one. It is important to ensure that institutions and mechanisms to engage employers with the VET system represent the diverse perspectives and opinions found within employers' groups. For instance, employers as a whole have very strong interest in general transferable skills, while individual employers and sectoral groupings often have narrower interests. Trade unions can voice the student and employee interest in transferable as well as firm-specific skills. Governments need to support the interests of students and balance the perspectives of employers and unions.

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

Relevant education levels:  Vocational

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## → Coordinate labour market and education policies

Education Ministries are typically responsible for financing and regulating tertiary education institutions and their activities. Responsibility for labour market institutions, employment, and worker training rests elsewhere, in Ministries of Labour, as do expertise and data analysis. A low level of integration between these two complementary policy domains may lead to inadequate attention devoted to labour market concerns, such as the provision of lifelong learning opportunities and flexible study options, and to the inadequacy of data and analysis with respect to graduate labour market outcomes. Governments should consider institutional arrangements that integrate education, training, and employment, such as, for example, the institution of a cabinet-level committee for human capital (or "human capabilities").

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

Relevant education levels:

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### → Improve data and analysis about the labour market outcomes of tertiary graduates

The lack of sufficient data and analysis with respect to graduate labour market outcomes impairs students' responsiveness to labour market signals, the capacity of public officials to adapt resource allocation to labour market needs, and the ability of tertiary institutions to systematically learn about and respond to labour markets. Greater investments in this type of data collection and analysis may be needed.

If students are to respond to labour market signals when making enrolment choices, they need information about wages and employment among recent graduates that is: (i) easily accessible and frequently updated; (ii) disaggregated to the level of study field; and (iii) able to reveal the variability in wages and employment across tertiary institutions where degrees are completed. For a given field of study, indicators could include graduate numbers by gender, the proportion of graduates in employment, the proportion in employment within the area covered by the programme, average salary at different stages of career, status of employment (e.g. full-time, part-time or unemployed, whether in self-employment) and employment growth rates. This could be complemented by the requirement that institutions conduct surveys of recent graduates provided that they do not represent an excessive administrative burden.

Improved data analysis in public systems can facilitate the identification of current and emerging needs for better allocation of study places as well as permit the tracking of long-term labour market outcomes beyond wages and unemployment following graduation (e.g. career mobility, occupational change, job mismatch and over-education).

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

Relevant education levels:

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### → Explore the potential of national qualifications frameworks and quality assurance systems

A formal qualifications framework has the potential to be the reference instrument to co-ordinate the demands of employers, the expectations of students, and the offerings of institutions. The promises of a well-functioning qualifications framework are many: employers can specify competencies for employment; educational institutions can design programmes to develop these competencies in students; and students know what competencies they need in order to become employable. A well-functioning qualifications framework also makes transfers among fields of study, and among institutions, more flexible. This allows students who realise they are in the wrong field of study to change, both reducing these kinds of mismatches and potentially allowing greater responsiveness to changing labour market patterns. It also has the potential to assist the assessment and recognition of prior learning. However, it needs to be recognised that designing effective national qualifications frameworks involves great complexities with the risk that it may not provide clear signals to students, institutions and employers.

Quality assurance systems also play a role in strengthening the ties between the labour market and tertiary education institutions as they seek to ensure that the latter delivers quality outcomes. They will require the inclusion of actors who bring questions of working life and employability to bear not only in defining quality criteria but also in assessment panels.

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

Relevant education levels:

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### → Activate the skills supply

Encouraging people to offer their skills and taking steps to retain skilled workers in the labour market is critical for economies to activate their talent pool. On the one hand, it is important to identify inactive individuals, to understand the reasons for their inactivity, and to create incentives to have them return to the labour market. On the other hand, efforts are needed to retain qualified individuals longer, for example, by discouraging early retirement or by staunching the brain drain. Keeping people active may require a number of actions, such as the creation of financial incentives (e.g. childcare services, tax and benefit systems) that make working more beneficial than not working; the dismantling of non-financial barriers to work (e.g. flexible work arrangements to accommodate adults with care obligations and disabilities); and a reassessment of early retirement options (e.g. Is it worth to maintain them? Should the official pensionable age be raised? Are there adjustments needed to correct distortions in financial incentives for early retirement?). These initiatives will require a concerted effort from government, employers, and trade unions.

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

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

Relevant education levels:  Secondary  Vocational  Tertiary  Adult

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## ➔ Put skills to effective use, creating a better match between people's skills and job requirements

It is not enough to encourage the development of skills on demand in the labour market. It is necessary to put these skills to use where they are needed the most. Utilizing the pool of skills available is, therefore, a key factor in converting talents into economic value for individuals and the country.

Making sure information is accessible about the skills needed and those available is an important way to facilitate potential matches between employers and prospect employees; coherent and easy-to-interpret qualifications should help in recruitment and matching efforts. In addition, career guidance is a critical part of any skills strategy as are government support schemes to help low skilled workers find job placements/improve their skills as well as help young people to gain a foothold in the labour market. Another challenge: Required skills might not be locally available so reducing costs and other barriers associated with internal mobility may also stimulate better matches between employers and employees.

Taking seriously the inventory of skills needed and current demand is, however, only one part of the equation. Governments can proactively encourage the creation of more high-skilled and high value-added jobs by fostering competition for goods and services among employers and by stimulating entrepreneurship. Education and training institutions also have a role here in training students to identify opportunities and to convert them into successful ventures, as well as in promoting new technologies and training that will develop new skills for the future.

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

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

Relevant education levels:  Secondary  Vocational  Tertiary  Adult

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## ➔ Prioritise investment and design skills policies that balance short- and long-term considerations

Effective skills policies need to respond to structural and cyclical challenges - such as periods of rising unemployment or, conversely, economic booms - but also need to support long-term strategic planning for the skills that are most relevant in a competitive, and fast-changing market.

In periods of depressed economic conditions, governments tend to cut investments in human capital first, which may be short-sighted as a skilled workforce will play a crucial role in generating future jobs and growth. If cuts to public spending have to be made, they should be based on the long-term cost/benefit ratios of alternative public investments. On these grounds, there is a strong case to be made for maintaining public investment in skills and in using them effectively.

Moving from a reliance on initial education towards fostering lifelong, skills-oriented learning will help countries better balance the allocation of resources for optimal returns. Taking the approach that skills are to be developed over a lifetime has implications for various policy fields (education, science and technology, employment, economic development, migration, and public finance) that will need to be aligned for an understanding of policy trade-offs and to avoid duplication of efforts.

Finally, effective skills policies are everybody's business, and countries need to address the tough question of who should pay for what, when and how, particularly for learning beyond school. Employers can do a lot more to invest and support learning; some individuals can shoulder more of the financial burden; and governments can do a lot to design more rigorous standards, provide financial incentives, and create a safety net so that all people have access to high-quality education and training. A productive strategy should incorporate an even broader range of actors such as professional and industry associations and chambers of commerce, trade unions, and education and training institutions.

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

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

Relevant education levels:  Primary  Secondary  Vocational  Tertiary  Adult

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## ➔ Tap into the pool of internationally mobile talent

Internationally mobile talent provides countries with an additional source of skilled labour and can help fill skills shortages. However, many OECD countries and a growing range of non-member economies aim to attract the same pool of highly skilled talent. Relying extensively on international flows and mobility policies to fill existing or future gaps in supply may, therefore, entail risks.

To encourage the circulation of talent and knowledge, governments aiming to attract skilled people should build absorptive capacity, open labour markets to foreign students, and ensure that the tax regime does not penalise mobile skilled workers. Migration regimes for the highly skilled should be efficient, transparent and simple; enable short-term movements; and support connections to nationals abroad. Formal recruitment channels, including for low skilled migration, might be needed to close skills gaps. Policies need to be coherent with the wider migration agenda and with countries' efforts in the development and aid arena, so as to contribute to the effective management of migration overall.

Migration flows can also have a positive impact on the stock of human capital in countries of origin: returning migrants bring back knowledge and experience as well as business links that are of use to their home country. To reap these advantages, countries can facilitate and encourage return migration. Returning migrants need to be able to re-enter local labour markets at a level that is appropriate for their skills and knowledge. Financial incentives, such as income tax concessions, and measures that allow social security contributions or rights to "migrate" with the individual can help to enable migrants to return.

Skills policies increasingly need to adopt a global perspective in addition to catering to the needs of the national economy. Co-operation on skills policies between source and destination countries can increase benefits to both. Cross-border skills policies can be promoted by investing in skills abroad and by encouraging cross-border tertiary education.

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

Source: OECD: [The OECD Innovation Strategy: Getting a Head Start on Tomorrow](http://dx.doi.org/10.1787/9789264083479-en), OECD Publishing, 2010

Relevant education levels:

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## Links

- [OECD Education at a Glance \(http://www.oecd.org/edu/eag.htm\)](http://www.oecd.org/edu/eag.htm)
  - [OECD Education at a Glance - Country notes \(http://www.oecd.org/edu/education-at-a-glance-2014-country-notes.htm\)](http://www.oecd.org/edu/education-at-a-glance-2014-country-notes.htm)
  - [OECD Thematic Review of Tertiary Education \(http://www.oecd.org/edu/skills-beyond-school/thematicreviewoftertiaryeducation.htm\)](http://www.oecd.org/edu/skills-beyond-school/thematicreviewoftertiaryeducation.htm)
  - [OECD Thematic Review of Tertiary Education - Country reviews \(http://www.oecd.org/edu/skills-beyond-school/thematicreviewoftertiaryeducation-countryreviews.htm\)](http://www.oecd.org/edu/skills-beyond-school/thematicreviewoftertiaryeducation-countryreviews.htm)
  - [OECD Thematic Reviews of Vocational Education and Training \(VET\) \(http://www.oecd.org/education/vet\)](http://www.oecd.org/education/vet)
  - [OECD Vocational Education and Training \(VET\) - Country studies \(http://www.oecd.org/edu/skills-beyond-school/countrystudies.htm\)](http://www.oecd.org/edu/skills-beyond-school/countrystudies.htm)
  - [OECD Thematic Review on Adult Learning \(http://www.oecd.org/edu/adultlearning\)](http://www.oecd.org/edu/adultlearning)
  - [OECD Skills Strategy \(http://skills.oecd.org/\)](http://skills.oecd.org/)
  - [OECD Skills Surveys \(http://www.oecd.org/site/piaac/\)](http://www.oecd.org/site/piaac/)
  - [OECD work on employment \(http://oecd.org/employment\)](http://oecd.org/employment)
  - [OECD work on labour markets, human capital and inequality \(http://www.oecd.org/economy/labour\)](http://www.oecd.org/economy/labour)
  - [European Centre for the Development of Vocational Training work on Forecasting skill demand and supply \(http://www.cedefop.europa.eu/EN/about-cedefop/projects/forecasting-skill-demand-and-supply/index.aspx\)](http://www.cedefop.europa.eu/EN/about-cedefop/projects/forecasting-skill-demand-and-supply/index.aspx)
  - [European Centre for the Development of Vocational Training work on Skill needs in sectors \(http://www.cedefop.europa.eu/EN/about-cedefop/projects/identifying-skill-needs-in-sectors-and-enterprises/index.aspx\)](http://www.cedefop.europa.eu/EN/about-cedefop/projects/identifying-skill-needs-in-sectors-and-enterprises/index.aspx)
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OECD  Better Skills, Better Jobs, Better Lives: A Strategic Approach to Skills Policies, OECD Publishing. ( <a href="http://dx.doi.org/10.1787/9789264177338-en">http://dx.doi.org/10.1787/9789264177338-en</a> )	2012
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OECD	2008
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## Glossary

 [OECD Glossary of Statistical Terms](http://stats.oecd.org/glossary/) (<http://stats.oecd.org/glossary/>)

 [Glossary of OECD Education at a Glance](http://www.oecd.org/edu/EAG%20Glossary.pdf) (<http://www.oecd.org/edu/EAG%20Glossary.pdf>)

 [International Standard Classification of Education \(ISCED\)](http://www.uis.unesco.org/Education/Pages/international-standard-classification-of-education.aspx) (<http://www.uis.unesco.org/Education/Pages/international-standard-classification-of-education.aspx>)

## Note

The development of education policies always needs to take into account country-specific traditions and features of respective education systems. Not all policy options are equally relevant for different countries, different contexts give rise to different priorities. In some countries, policy suggestions may already be in place; in others, they may have less relevance owing to specific social, economic and educational structures and traditions. Policy options rather distil potentially useful ideas and lessons from the experiences of countries that have been searching for ways to improve their education system. As policy options are removed from their wider analytical context, it is strongly advised that readers should refer back to the original OECD source for the fuller picture.

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