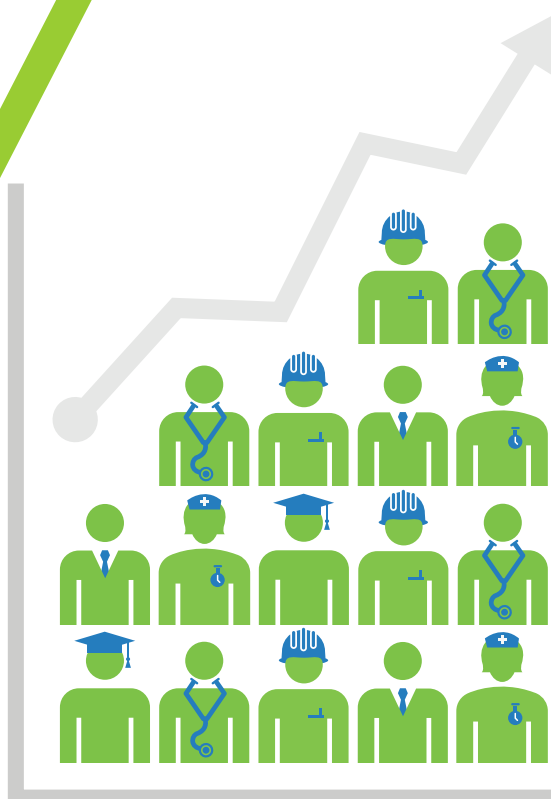


OECD Skills Strategy Diagnostic Report

Norway

2014



**OECD SKILLS STRATEGY
DIAGNOSTIC REPORT:
NORWAY**

OECD SKILLS STRATEGY

Building the right skills can help countries improve economic prosperity and social cohesion



In what way?

By contributing to social outcomes such as health, civil and social engagement.

By supporting improvement in productivity and growth.

By supporting high levels of employment in good quality jobs.



How is this achieved?

By strengthening skills systems

Designing and implementing an evidence-based national skills strategy.

Funding skills through public and private sources and designing effective incentives for employers and individuals.

Providing good information for the public, businesses and policy makers.



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FOREWORD

Skills drive economic growth and influence how those benefits are shared within societies. In countries where large proportions of adults have poor skills, it proves difficult to introduce productivity-enhancing technologies and new ways of working. This, in turn, stalls innovation and improvements in living standards.

Skills affect more than just earnings and employment. New data from the Survey of Adult Skills (PIAAC) show that in all countries adults with lower literacy proficiency are far more likely than those with better literacy skills to report poor health, to perceive themselves as objects rather than actors in political processes, and to have less trust in others. In other words, we cannot develop fair and inclusive policies and engage with all citizens if a lack of proficiency in foundation skills prevents people from fully participating in society.

Yet skills are only valuable when they are supplied to the labour market and used effectively, and some countries are far better than others in making good use of their talent. Overall, OECD analysis and data suggests that countries can – and should – do better in matching the demand and supply of skills.

The OECD Skills Strategy provides a useful framework for countries to build effective and integrated skills policies that develop relevant skills, activate skills supply and make effective use of skills. Countries who are most successful in activating their skills potential share a number of features. They provide high-quality lifelong learning opportunities, both in and outside school and the workplace. They develop education and training programmes that are relevant to students and flexible, both in content and in how they are delivered. They make information about education and career pathways easy to find and understand, and they provide recognition and certification of competencies that encourage learners of all ages to keep learning.

Norway is the first country to undertake a collaborative project with the OECD with the aim of applying the OECD Skills Strategy in practice. This diagnostic report identifies 12 skills challenges for Norway which were distilled from a series of interactive diagnostic workshops held with a range of stakeholders. It marshals a wide array of relevant OECD evidence, including Norway's results from the Survey of Adults Skills (PIAAC), to shed further light on these challenges. Finally, it offers some concrete examples of how other countries are tackling similar skills challenges.

We hope that this report will contribute to Norway's ongoing commitment to setting meaningful goals, measuring progress against the world's leading skills systems, and fostering constructive policy dialogue on skills between governments, employers, trade unions, and people of all ages. As ever, the OECD stands ready to contribute to these efforts to design and implement better skills policies for better jobs and better lives.



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This diagnostic report on Norway's skills system is the first in a series of country projects within the OECD programme of work on "Building effective national and local skills strategies".

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The OECD team also wishes to thank everyone who took part in the diagnostic workshops held in Oslo, Buskerud County and Nordland County in the course of 2013. Their insights and discussions during the workshops have both driven the process and shaped this diagnostic report. We would also like to thank the many people who, during our visits and meetings, gave generously of their time to answer our many questions regarding Norway's skills system.

While the diagnostic report draws upon data and analysis drawn from the OECD, the Norwegian authorities and other published sources, any errors or misinterpretations remain the responsibility of the OECD team.

The Norway skills strategy country project and diagnostic report drew upon the expertise of a broad cross-directorate OECD team, including: Jonathan Barr (LEED Programme), Bert Brys (Centre for Tax Policy), Kristine Langenbucher (Directorate for Employment, Labour and Social Affairs), Pierce O'Reilly (Centre for Tax Policy) and Paul O'Brien (Economics Department). Louise Binns (Directorate for Education and Skills) provided support for project management and the layout of this report. The OECD team was coordinated by Joanne Caddy (Directorate for Education and Skills) and the lead author for this report was Emily Farchy (Directorate for Education and Skills). Deborah Roseveare (Directorate for Education and Skills) provided thought leadership and strategic oversight for the project.

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EXECUTIVE SUMMARY

Skills transform lives and drive economies

Skills matter. Skills have become one of the main drivers of individual well-being and economic success in a global economy and a knowledge-based society. In the future, Norway's competitiveness will depend more upon the skills of its people, than upon the abundance of its natural resources.

Effective national and local skills systems connect skills with jobs and productivity to deliver prosperity and social cohesion. The OECD Skills Strategy provides countries with a framework to analyse their strengths and weaknesses using a three-pillar framework which encompasses: 1) developing relevant skills; 2) activating the supply of skills, and 3) using skills effectively. An effective skills strategy ensures policy coherence across the three pillars while strengthening the enabling conditions which underpin the skills system as a whole.

The OECD is working in collaboration with countries to support more effective skills strategies at the national and local level. Putting the OECD Skills Strategy's integrated paradigm into practice requires whole-of-government collaboration across ministerial portfolios, working with regional and local administrations, as well as co-operation and dialogue among key stakeholders – ranging from education institutions and researchers to employers, trade unions and civil society.

Norway's main skills challenges in a global perspective

Norway is the first country to undertake a collaborative project with the OECD which aims to apply the OECD Skills Strategy in practice. This diagnostic report identifies 12 skills challenges for Norway which were distilled from a series of interactive diagnostic workshops held in the course of 2013 with a wide range of stakeholders in Oslo, Buskerud County and Nordland County.

The 12 skills challenges identified by stakeholders align closely with the OECD's assessments of various aspects of Norway's skills system and available international evidence. This diagnostic report draws upon a wide range of OECD comparative data and analysis to illustrate each skills challenge and offers insights from the experience of other countries in tackling similar skills challenges.

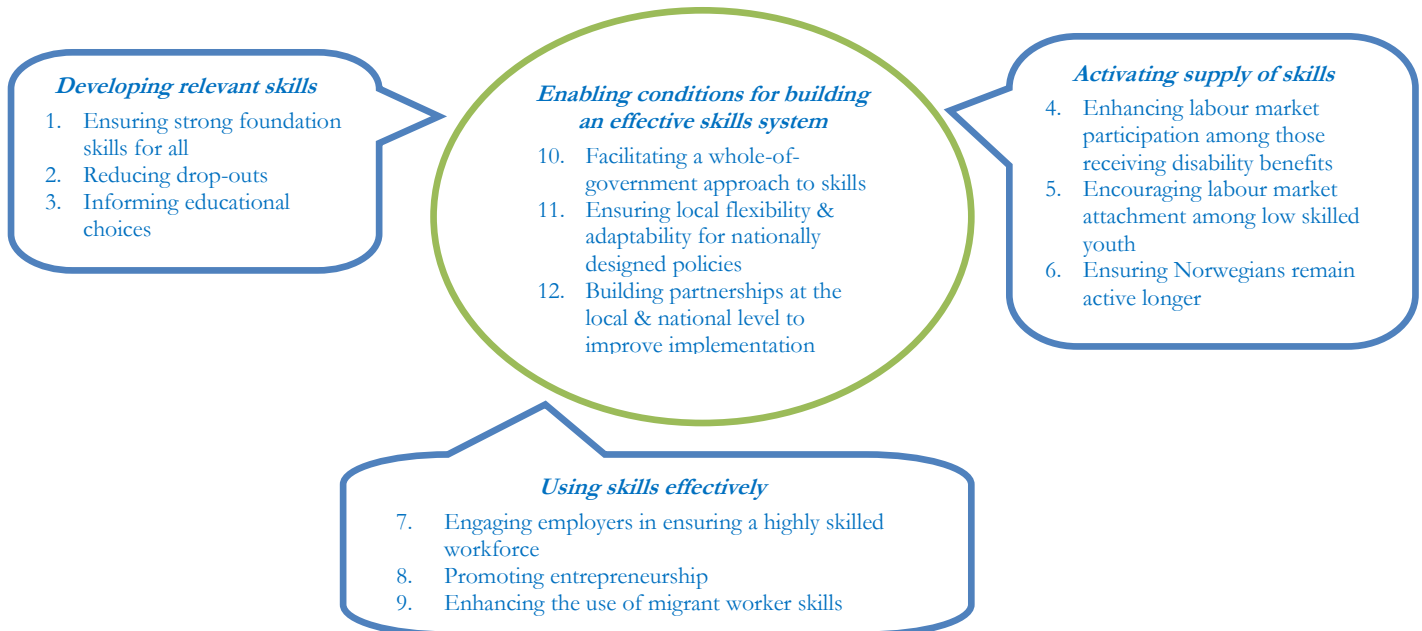
The first 9 skills challenges refer to specific outcomes across the three pillars of developing, activating and using skills and they are presented briefly here.

Developing relevant skills

1. **Ensuring strong foundation skills for all:** while student performance in PISA 2012 is at, or above, the OECD average, the share of low performers in Norway has increased in recent years from 18.2% in 2009 to 22.3% in 2012. New data from the Survey of Adult Skills (PIAAC) shows that on average, adults in Norway are more proficient in literacy, numeracy and problem solving in technology-rich environments than the average across all participating countries. However, a relatively large share of the adult population in Norway has poor foundation skills. Looking to the future, perhaps of greater concern is the finding that Norway's young adults are below average in literacy and are average in numeracy when compared with their peers in other countries.

2. **Reducing drop-out:** over the past decade educational attainment in Norway, as reflected in the proportion of 25-64 year olds holding an upper-secondary education or higher, has fallen from 85% in 2000 to 82% in 2011. A contributing factor has been the large number of students that drop out of upper secondary school. Persistently lower completion rates among students of vocational courses (62% in 2010) compared with students enrolled in more general courses (83%) are also a contributing factor.
3. **Informing educational choices:** across the OECD there are shrinking numbers of jobs in elementary occupations and production, a trend which is also seen in Norway. Better public data on current and projected labour market needs and professional career guidance services for young people in education and for adults seeking to reskill can help people make better choices. Yet to date, only 14 out of 19 counties have opened career centres. Meeting Norway's projected skills shortages in areas such as nursing, care-giving, technical and scientific fields will require renewed efforts to better inform students' educational choices and provide appropriate incentives.

12 skills challenges for Norway



Activating skills supply

4. **Enhancing labour market participation among those receiving disability benefits:** within the OECD area, Norway has by far the highest rates of sickness absence with almost 7% of the workforce on sick leave at any given moment. Over 10% of all working age adults receive permanent or temporary disability allowances, a figure which rises to 14% if people on Work Assessment Allowances are included. At the same time, rejection rates for disability claims are among the lowest in the OECD. Given that the rates of return to full-time employment are low, people on disability represent a lost asset for Norway's stock of available skills.
5. **Encouraging labour market attachment among low skilled youth:** Norway fares well when it comes to youth unemployment rates which in 2012 stood at 8.6%, among the lowest in the OECD where the average was 16.3%. The share of youth who are not in employment, education or training (NEETs) was also low at 7%. However important variations among youth exist – those who do not complete upper secondary school are almost four times more likely to be unemployed than those who had completed tertiary education, underscoring the need for Norway to focus on its low skilled youth.

6. **Ensuring Norwegians remain active longer:** although Norway is better placed to meet its future demographic challenges than many other OECD countries, the proportion of the population aged 65 and over is projected to double from 30% in 2011 to around 60% by 2050. While employment rates among older workers are high in Norway, almost one quarter of people over 55 years old are registered as disabled which is nearly double the OECD average. The Survey of Adult Skills (PIAAC) reveals that older Norwegians have relatively high literacy skills, which means they are an important asset on which to draw.

Using skills effectively

7. **Engaging employers in ensuring a highly skilled workforce:** the Survey of Adult Skills (PIAAC) provides a measure of skills mismatch and results show that around 20% of Norwegian workers consider that they are over-qualified and 15% believe they are under-qualified for their current jobs. The gap in literacy proficiency between workers in elementary occupations, such as labourers and production workers, and those in skilled occupations, such as professionals and technicians, is the largest observed at 55.6 score points. Norway performs well in terms of the prevalence of employer funded training, yet these skills investments often go to high-skilled employees and may not benefit those who need it most – namely workers with low proficiency levels in low-skilled occupations who are most at risk in the event of downsizing or restructuring.
8. **Promoting innovation and entrepreneurship:** among OECD countries, the level of self-employment as a share of total employment in Norway is the second lowest after Luxembourg, while business start-up rates are also among the lowest. Without innovative businesses and skilled entrepreneurs to run them, Norway may struggle to maintain its current levels of prosperity in the future as the contribution of natural resources to the economy declines.
9. **Enhancing the use of migrants' skills:** according to projections from Statistics Norway, by 2040 migrants will comprise close to 20% of the Norwegian population and over 30% in Oslo. The Survey of Adults Skills (PIAAC) shows that over-qualification is relatively widespread among the foreign-born population in Norway – who are two and a half times more likely to be over-qualified for their job than native born Norwegians. This rate is higher than that found in Austria, Sweden and Germany and indicates that migrants offer a significant stock of untapped skills in Norway.

While it may be tempting to think of these 9 “outcome challenges” as a list of discrete skills policy challenges that are the responsibility of single ministries, agencies or social partners – this would be misleading. They are best viewed as an integral set of skills challenges requiring integrated policy responses and coordinated action.

The interlinkages between each of the 9 outcome challenges are clearly identified throughout this diagnostic report. Failure to look beyond policy silos to address them will have practical implications for specific groups of people in Norway. For example, if young people fail to acquire strong foundation skills (Challenge 1) they run an increased risk of dropping-out from school (Challenge 2), relying on social benefits (Challenge 4) and having poor job market outcomes (Challenge 5). Even when they do find a job, their lack of foundation skills may dissuade their employers from investing in their training (Challenge 7).

This example illustrates the need for integrated policy responses and ‘joined-up’ public services to meet the multifaceted needs of specific target groups – including youth, older workers, part-time workers and migrants. In short, no skills challenge exists in isolation – each one is affected by, and impacts upon, others within and across the three pillars.

Strengthening Norway's skills system

The last 3 skills challenges refer to the “enabling” conditions which strengthen the overall skills system. Success in tackling these skills challenges will boost performance within each of the pillars – as well as across the pillars.

10. **Facilitating a “whole-of government approach to skills”:** a responsive and efficient skills system requires effective horizontal co-ordination across ministerial silos and concrete mechanisms to develop and deliver on shared goals. Vertical co-ordination across national, county and municipal levels is rendered particularly complex in Norway where overlapping boundaries of different agencies for education, labour and migrant integration services do not correspond with county limits.
11. **Ensuring local flexibility and adaptability for nationally designed policies:** Norway's geographic diversity is reflected in the unique skills profiles and needs of its 19 counties and 428 municipalities. By way of example, completion of upper secondary education within two years of the expected date ranges from just 55% in Finnmark County to close to 80% in Sogn og Fjordane. Subnational authorities play an important role in implementing national skills policies. To do so successfully, they require adequate information, strong professional capacities and resources to balance the twin requirements of local autonomy and accountability for results.
12. **Building partnerships at the local and national level to improve implementation:** achieving better skills outcomes for Norway's future is not a task which can be left to government alone. Employers, trade unions, education and training institutions, researchers and students can all play a role in tackling Norway's skills challenges. Broad-based partnerships, which develop shared goals while mobilising the respective expertise and experience of each partner, are most likely to develop innovative approaches to addressing Norway's emerging skills challenges.

Moving from diagnosis to action

The OECD Skills Strategy offers a useful “compass” with which to explore the complexity of skills systems and identify the main challenges or obstacles. In 2013, during the diagnostic phase of the OECD-Norway collaborative Skills Strategy project, participants gained new insights on how to design and implement more effective skills policies across such diverse fields as education and training, labour, economy, tax, local economic development, research and innovation.

Norway's longstanding commitment to ensuring equitable access to education and training is reflected in its high levels of spending on education which, at 7.6% of GDP, is one of the highest across OECD countries. Given these levels of public investment, Norway could reasonably expect a higher level of performance from its national skills system than it achieves today. A better-performing skills system is needed to boost Norway's competitiveness and help maintain its high standards of living in the future. Young people and adults will need the opportunities, incentives and drive to improve and apply their skills starting in their earliest school years and throughout their lifetimes.

The responsibility for maximising Norway's skills potential goes well beyond that of government alone – and will require the active contribution of many stakeholders including employers, trade unions, students and teachers.

The next phase of the project in 2014 will focus on developing an action plan to meet Norway's future skill needs and to improve the match between supply and demand for skills. Success in this endeavour will require a shared commitment across government ministries and social partners to deliver better skills outcomes for all Norway's people.

WHY SKILLS MATTER FOR NORWAY

Skills transform lives and drive economies. They have become the key drivers of individual well-being and economic success in the 21st century. Without proper investment in skills, people languish on the margins of society, technological progress does not translate into growth, and countries can no longer compete in an increasingly knowledge-based society.

Norway is a relatively high cost country

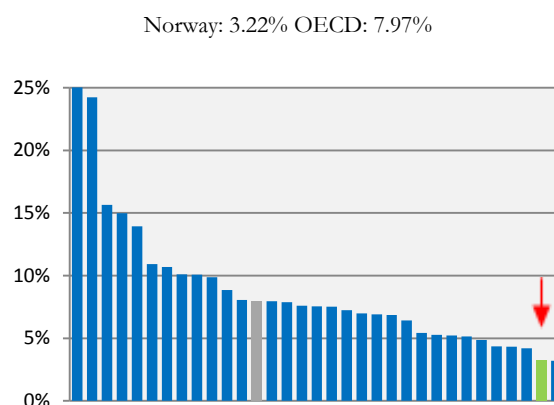
Norway has seen a relatively early recovery from the crisis and with low unemployment, low inequality and low inflation, the economy continues to prosper. However wage costs have been rising steadily and the real cost of labour has been increasing faster than productivity. While prudent management of petroleum profits has led to the accumulation of about 200% of mainland GDP in the Government Pension Fund Global, Norway cannot afford to be complacent in preparing for the future.

High costs of labour stem partially from the high wages prevalent in Norway and partially from low average working hours. The widespread use of part-time work arrangements and the relatively low number of hours in the full-time working week reflect a widespread belief in maintaining a healthy work-life balance and may contribute to Norwegians' high rate of life satisfaction. However, sustaining such a lifestyle requires an efficient and skilled labour force, and a skills system that activates and utilises all available skills.

Unemployment and inactivity are low

The unemployment rate in Norway, at 3.22%, is among the lowest in the OECD while participation rates are among the highest.

Figure 1. Unemployment rate, 2012



Source: OECD (2013a), *OECD Employment Outlook 2013*, OECD Publishing. doi: [10.1787/empl_outlook-2013-en](https://doi.org/10.1787/empl_outlook-2013-en)

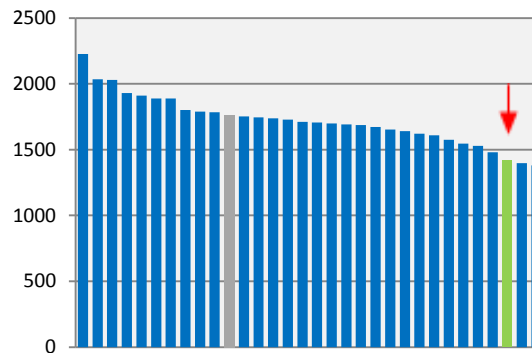
...but average annual hours worked are low

Despite high participation rates, labour supply is constrained by the low number of average hours worked. On average the number of hours worked by employees in Norway is among the lowest in the OECD. This is, in large part, due to voluntary part-time work but high levels of sickness absence also make a substantial contribution.

Strong labour demand combined with limited supply has led to a tight labour market and strong surge in migration. Norway's foreign-born population now account for nearly 11% of the total – and are more educated than the OECD average.

Figure 2. Average annual hours worked, 2012

Norway: 1419 OECD: 1765



Source: OECD (2013a), *OECD Employment Outlook 2013*, OECD Publishing. doi: [10.1787/empl_outlook-2013-en](https://doi.org/10.1787/empl_outlook-2013-en)

Norway invests heavily in education

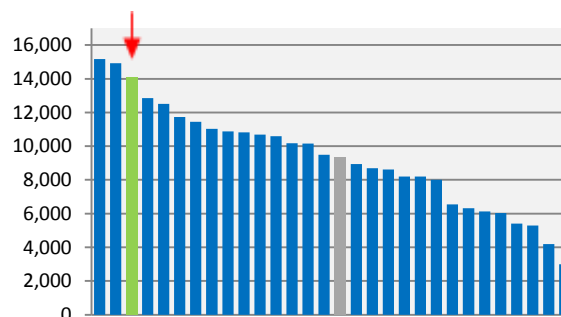
Norway spends an average of 14 081 USD per year on the education of each student from primary through tertiary education. At 50% above the OECD average this is a reflection of the healthy state of public finances as well as the importance Norway attaches to a comprehensive state education system. At the tertiary level 96% of the total spending comes from public sources compared to an average of 68% across OECD countries.

While Norway can afford a relatively expensive public education system, the average performances of 15-year olds on PISA suggest that more could be done to improve efficiency of spending.

Figure 3. Annual expenditure per student (2010)

Primary to tertiary

Norway: 14,081 OECD: 9,313

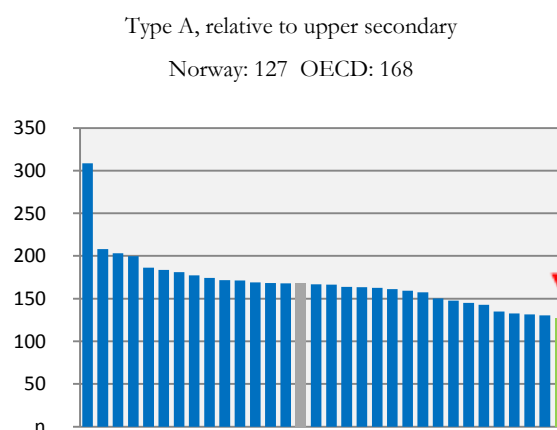


Source: OECD (2013b), *Education at a Glance 2013: OECD Indicators*, OECD Publishing. doi: [10.1787/eag-2013-en](https://doi.org/10.1787/eag-2013-en)

...but the earnings premium associated with tertiary education is the lowest in the OECD

Wage bargaining in Norway, combined with a high marginal tax on labour income, has led to a relatively compressed wage distribution and a lack of wage differentiation across sectors. Not only are average wage levels quite similar across industries but the wage premium associated with an advanced education is the lowest in the OECD.

Figure 4. Earnings Premium from Tertiary Education, 2011



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

Skills are central to international competitiveness

The high cost of living and relatively high wages in Norway result in high costs of production. Norway's ability to be internationally competitive relies, in large part, upon its ability to develop, activate and use a substantial pool of highly skilled workers.

The level of skills embodied in Norway's population is relatively high and Norway's adults are among the strongest performers according to the Survey of Adult Skills (PIAAC). Norway ranks sixth out of 23 countries for tests of both numeracy and literacy and fourth for tests of problem solving in technology rich environments (see Box 5). In contrast, and unlike most of the countries that participated in the survey, Norwegian youth, aged 16 to 24 years old, were the age group whose performance was among the worst. Furthermore, in recently released PISA 2012 data, Norway fell below the average in terms of the share of top performers in mathematics. In the context of high levels of spending on education – representing nearly one and a half times the OECD average per student – such a mediocre performance suggests there is scope for enhancing the efficiency and effectiveness of the education system.

Norway has invested heavily in higher education and tertiary vocational training in recent years. Yet a decade after the introduction of “Quality Reform” in higher education, drop-out rates remain high and many of those that complete do not do so within the expected time frames. At the same time, student choices of education programmes are guided by neither adequate information nor incentives.

Flexibility is necessary to respond to future changes

Skills needs are changing. Globalisation, digitalisation, and technological developments have brought about great changes within business and across society and will continue to do so (see Box 1). Yet skills development does not take place overnight and can take years of investment, giving rise to a skills time lag.

The European Working Condition Survey 2010 found that close to half of all working adults in Norway reported that the introduction of new processes or technologies had affected their work in their current work places during the previous three years. Over 40% reported that their workplace had undergone substantial restructuring or reorganisation. People working in the clerical sector have been particularly affected. Irrespective of their type or origin, changes to the way work is organised contributes to a changing demand for skills and requires people to adapt and learn new things (Caroli and van Reenen 2001).

But it is not just that skills needs are changing in existing jobs. The types of jobs are also changing. Demographic change is increasing the demand for nurses and caregivers while structural change and technological developments are changing demands across industries.

Box 1. Skills for the Digital Economy

Information and communication technologies (ICTs) and the Internet have become key drivers of innovation, growth and labour productivity, brought new business and employment opportunities and have changed the ways our societies communicate, learn and live. People with the high-end skills needed to invent and apply ICTs are in high demand the world over. At the same time, the portfolio of basic skills needed to navigate ICT-rich environments and function effectively in our connected societies has expanded.

By 2010, ICT intensive occupations accounted for more than 20% of all employment in OECD countries and ICT specialists accounted for 6%. According to OECD studies, new ICT employment is expected to rise with the spread of ICT to new areas such as “smart” energy systems, infrastructure, and transport, and with the fruitful market for new ICT start-ups provided by big data management and cloud computing services (OECD 2012).

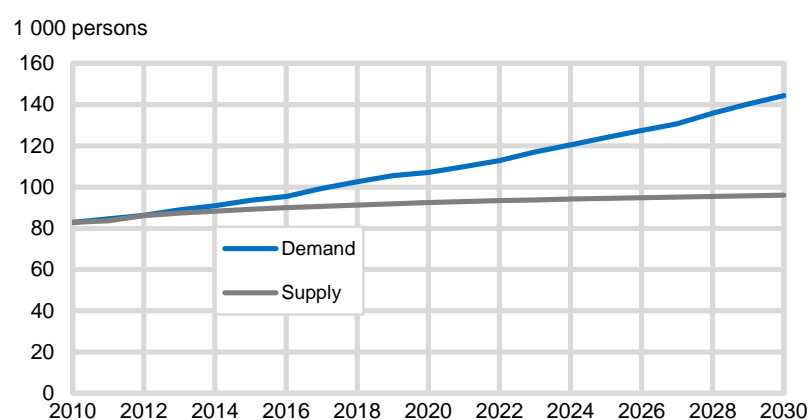
Source: OECD (2012), *OECD Internet Economy Outlook 2012*, OECD Publishing. doi: [10.1787/9789264086463-en](https://doi.org/10.1787/9789264086463-en); Skills Spotlight No.4, “Skills for a Digital Economy”

Building on population projections, expected labour participation rates and macroeconomic models Statistics Norway has developed projections for Norway’s future skills demand and supply up to 2030. These projections have yielded estimates anticipating excess demand for:

- workers with upper secondary vocational education in manufacturing, building and construction;
- teachers and nurses; and
- engineers and people with backgrounds in science.

Figure 5. Nursing and care giving

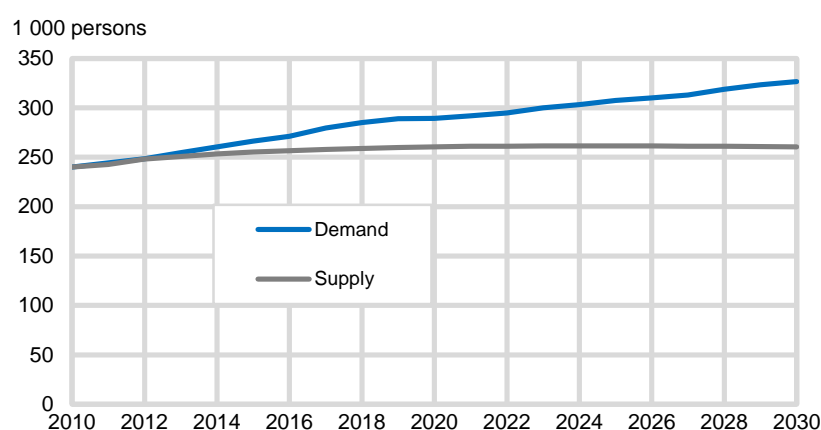
Supply and Demand Projections



Source: Statistics Norway

Figure 6. Electronics, mechanics work and machinery

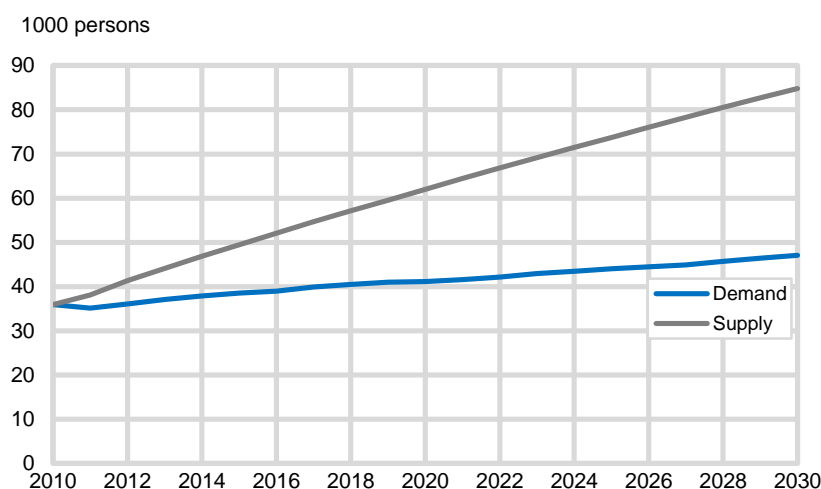
Supply and Demand Projections



Source: Statistics Norway

Over the same period, Statistics Norway estimates there will be an excess supply of workers with a tertiary education in economics, administration; social sciences, law, humanities and the arts.

Figure 7. Economic and administration - Master level
Supply and Demand Projections



Source: Statistics Norway

Whilst we cannot predict exactly how skills needs will change, we know that they will. So it is important that a country's skills system – and the people within it – maximise their capacity to be responsive to these changes as they emerge. This requires adaptability at two levels:

- *Individual level:* this means ensuring people are well-equipped to learn new skills. Foundation skills are a fundamental pre-requisite for lifelong learning and adapting to new skill requirements as they emerge. Indeed the Survey of Adult Skills (PIAAC) shows a strong correlation between literacy/numeracy skills and ability to solve problems in a technology rich environment.
- *Systemic level:* this implies continual learning and smooth transitions between the worlds of learning and work. It requires employees to regularly update their skills and, if needed, undertake retraining to qualify for other professions. But a flexible skills system also requires that good information and clear signals regarding skills needs are provided to young people making their educational choices, to workers making decisions about retraining and employers seeking to recruit.

Effective transitions require valuing skills no matter where or how they were acquired

To be efficient, investments in upskilling and reskilling must build upon the skills that people already have. This means recognising all skills irrespective of whether they have been acquired formally or informally, domestically or overseas. Obliging students and workers to attend education and training to acquire skills they already possess merely for the purpose of ensuring recognition of their prior learning or to start a new programme of study is inefficient both for the individual and for society.

The national qualification framework introduced in Norway is not consistently applied in practice and segments of the Norwegian education system are organised in silos. This can impede flexible transitions from upper secondary level to tertiary vocational training programmes, from academic programmes to more practical tertiary vocational training, and from international to domestic tertiary training programmes. Facilitating these transitions through a skills-based recognition of prior learning is likely to bring significant returns to people of all ages.

HOW THE OECD SKILLS STRATEGY HELPS NORWAY MAXIMISE ITS SKILLS POTENTIAL

The OECD Skills Strategy provides a framework for countries to analyse their strengths and weaknesses and find better ways to develop, activate and use skills to boost employment and growth while promoting social inclusion (See Box 2).

Box 2. OECD Skills Strategy

The OECD Skills Strategy provides countries with a framework to analyse their skills strengths and weaknesses using a three-pillar framework which encompasses:

- developing relevant skills;
- activating skills supply; and
- putting skills to effective use.

An effective skills strategy ensures policy coherence across the three pillars while strengthening the enabling conditions which underpin the skills system as a whole.



The OECD Skills Strategy shifts the focus from traditional proxies of skills, such as years of formal education and training or qualifications/diplomas attained, to a much broader perspective that includes the skills people acquire, use and maintain – and also lose – over the course of a whole lifetime. People need both hard and soft skills that help them to succeed in the labour market and a range of skills that help them to contribute to better social outcomes and build more cohesive and tolerant societies.

The OECD Skills Strategy defines skills (or competences) as the bundle of knowledge, attributes and capacities that can be learned and that enable individuals to successfully and consistently perform an activity or task and can be built upon and extended through learning. The concepts of “skill” and “competence” are used interchangeably in this report. The sum of all skills available to the economy at a given point in time forms the human capital of a country.

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

The main goal for this collaborative project between the OECD and Norway, “Building an effective Skills Strategy for Norway” launched in 2013, is to provide a strategic assessment of the national skills system in Norway and the way skills are acquired and deployed. The first step is to develop a “diagnosis” of the strengths and challenges of Norway’s skills system. A better understanding of the issues at stake is needed to design effective skills policies to meet Norway’s future skill needs and to improve the match between supply and demand for skills, nationally as well as within regions. The results of the diagnostic phase of the project are presented in this report.

Fostering a whole-of-government approach to skills

Maximising a country’s skills potential requires coordinated efforts across ministries and between levels of government. A whole-of-government approach to skills is needed to integrate such diverse fields as education and training, labour, economy, tax, local economic development, research and innovation. Each OECD Skills Strategy project is designed to foster greater interaction and exchange among relevant ministries to forge a common understanding of the skills challenges at stake, as a basis for coordinated action.

In the case of Norway, the national project team is led by the Ministry of Education and Research and includes representatives from: Ministry of Finance, Ministry of Labour, Ministry of Trade and Industry, Ministry of Local Government and Modernisation. Together, this inter-ministerial project team is responsible for setting the strategic direction for the project and ensuring it covers all relevant aspects of Norway's skills system.

Engaging stakeholders in strengthening the skills system

OECD work shows that effective skills policy design and implementation requires a broad and shared understanding of the need to enhance skills, the current strengths and challenges facing a country's skills system and priorities for action. The OECD Skills Strategy underscores the need to look beyond government and build strong partnerships with all actors involved in skills development and deployment – such as employers, trade unions, education and training institutions, researchers, students and other stakeholders.

The design of each OECD Skills Strategy project puts a premium on seeking input from a wide range of stakeholders. This OECD-Norway collaborative project has been designed to ensure stakeholder engagement, ownership and build a shared commitment to concrete action. This is achieved by actively engaging with social partners and other stakeholders at each phase of the project.

In the case of Norway, a total of over 100 participants from social partners and other stakeholder groups took part in three highly interactive workshops:

- a national diagnostic workshop (Oslo, 22-23 May 2013);
- a regional diagnostic workshop (Drammen, Buskerud County, 22-23 September 2013); and
- a regional diagnostic workshop (Mo i Rana, Nordland County, 1 October 2013).

In each case, the workshops consisted mainly of small group discussions among participants speaking in their native language (Norwegian) and a series of highly structured exercises, the results of which are reported here. In this way, workshop participants could fully express their perspectives and insights on Norway's skills system. A summary of the main strengths and challenges of Norway's skills system as expressed by participants in the national diagnostic workshop are provided below (see Figure 8 and Figure 9).

Each of these workshops was designed to gather the views of a highly diverse group of participants, drawn from national ministries, directorates and agencies responsible for a range of relevant policy areas (including education, labour, trade and industry, finance, health and integration) as well as county representatives, employers, trade unions, students and researchers.

Naturally enough, stakeholders held different views about the range of challenges currently facing Norway's skills system. Workshop design aimed to encourage all stakeholders to express their views frankly and to generate a 'long list' of challenges through group discussion.

While many of these challenges are long-standing and well known to all participants, the exercises also generated new insights into how different stakeholders perceived or formulated skills challenges. All agreed that without a clear diagnosis and common understanding of the challenges ahead, it would be hard to achieve concerted and broad-based action to address them.

Based on the OECD Skills Strategy Diagnostic Toolkit, workshop participants were also asked to provide an assessment of how they felt Norway's skills system performed today. The results were then compiled, analysed and key findings are highlighted throughout this diagnostic report. Some challenges which were voted upon at both the national and county level, appeared to resonate strongly with all participants, for example the challenge of drop-out rates and the mismatch between educational choices and labour market needs, while perceptions differed with regard to others.

Box 3. Nordland County stakeholder views of the main regional skills challenges

Nordland County is a remote rural region in the north of Norway, with a population of 238 000 people in an area covering 38 456 km² (SSB). In the past, Nordland County primarily relied on traditional industries and low skilled labour, but the ambition today is to raise skill levels in the region to attract more high-skilled and value-added jobs.

Participants in the Nordland diagnostic workshop identified the following specific challenges for the regional skills system:

- the low status of education in the region;
- raising aspirations among young people;
- retaining highly educated young people;
- better information for young people on job opportunities in the region and the required educational pathways to connect to the labour market;
- strengthening vocational pathways through greater use of apprenticeships opportunities and traineeships;
- providing flexible education and training opportunities to equip people with the right skills for the local economy; and
- connecting national programmes to local labour market needs.

Despite the restructuring of the traditional industries over the last few decades, local stakeholders were optimistic about the opportunities that could be created through entrepreneurship. They also saw scope for public and private partnerships to incubate businesses and create better connections between the education system and the labour market.

Box 4. Making the most of Norway's skills, today and tomorrow: results from an online exercise

To foster broader participation in the discussion of the future skills needs of Norway, the OECD and the Norwegian project team set up an online “ideas marketplace” using All Our Ideas (allourideas.org). The question: “What should be our top priority for making the most of Norway's skills, today and tomorrow?” was posted and voting opened on a set of “seed” ideas, which had been entered beforehand by the team. Participants were able to both vote upon existing ideas and also upload their own ideas – to be voted upon by other users. Indeed, the ideas that received the most attention were mainly those that had been uploaded by the users of the online exercise.

Over the course of 2 weeks in October 2013, close to 1 000 people cast nearly 30 000 votes and uploaded 177 new ideas. While those taking part were widely geographically dispersed across Norway and abroad, one of every three votes was cast from Oslo. The results of this online exercise indicated that the people who participated felt that Norway needed to:

- motivate more people to engage in lifelong learning;
- make sure that all pupils have engaging and relevant learning activities, especially those at risk of dropping out; and
- provide better opportunities for combining learning activities and work.

Through their active participation in the diagnostic workshops, Norway's skills stakeholders have played a central role in identifying the main challenges faced by the national skills system and their input has shaped this diagnostic report.

Mobilising comparative data and international experience

Each country's skills needs and priorities differ, as do their overall economic and social context. So each national project takes a tailor-made, customised approach to fit with the country's own domestic policy agenda while keeping the process anchored in the overall OECD Skills Strategy framework.

Working in close partnership with the national project team, the OECD has mobilised its multidisciplinary expertise, comparative data and policy insights from other countries. These resources include:

- OECD Skills Strategy framework and diagnostic toolkit to structure the analysis and workshops;
- relevant OECD comparative data to highlight how Norway fares in relation to other OECD Member countries on a number of important skills dimensions;
- new data from the Survey of Adult Skills (PIAAC) on the skills of 16 to 65 year olds;
- experience in the design and delivery of interactive workshops that help diverse participants forge a shared understanding of the skills challenges currently facing Norway and that generate concrete written outputs;
- a multidisciplinary team of OECD staff drawing on expertise from across the relevant OECD directorates (education and skills, labour and social policy, local economic development, taxation, economics, science, technology, industry and innovation); and
- an external, independent perspective with which to create a 'level playing field' for all actors in the skills system and foster constructive dialogue aimed at generating solutions.

Box 5. New skills data from the Survey of Adult Skills (PIAAC)

The proxies used in past studies of skills have limitations, as they do not account for skills that were acquired after formal education or training or for the loss of skills. The Survey of Adult Skills (PIAAC) (a product of the Programme for the International Assessment of Adult Competencies, or PIAAC) represents a significant improvement by measuring adults' skills directly. It assesses key information-processing skills (literacy, numeracy, problem solving in technology-rich environments) and the use of skills in the workplace, and collects information on the antecedents, outcomes and context of skills development and use.

The results of the Survey of Adult Skills (PIAAC) were released on 8 October 2013. Norway is one of the 24 countries and economies to have participated in the first round of the survey and this report draws upon those results as part of the OECD's comparative data and analysis.

The Survey of Adult Skills provides new insights into the skills people have in Norway today, how they use them and the impact that a person's background can have on skills development throughout life.

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

Drawing upon diverse sources of information when developing a skills diagnosis

This diagnostic report draws upon three main sources of information: input from workshops with stakeholders, OECD comparative data and relevant country case studies from other OECD countries. Participants in the national diagnostic workshop and two regional workshops helped identify the strengths and challenges of Norway's skills system. Based on the results of participants' discussions and the framework of the OECD Skills Strategy, this report reviews each challenge in turn and provides international comparative data from OECD sources, including the latest data from PISA 2012 and the Survey of Adult Skills (PIAAC) and features a selection of concrete cases of how other OECD countries have tackled these challenges.

Box 6. Three main sources of information for the diagnostic phase



Norway's stakeholders

First, input from a diverse set of stakeholders who participated in the 3 diagnostic workshops (national, Buskerud County, Nordland County). Indeed, the set of skills challenges identified by the stakeholders constitute the 'backbone' of this report.



OECD comparative data and analysis

Second, the wealth of OECD comparative data and analysis is used to shed light on each of the challenges identified by stakeholders, placing Norway's challenges in a broader international context. Each section examines one challenge and provides international comparative data from OECD sources, including PISA 2012 and the new Survey of Adult Skills (PIAAC).



Country case studies

Third, the report features a selection of concrete cases to illustrate how other OECD Member countries have tackled similar challenges in their own contexts. These should not be interpreted as best practice. Indeed policy success is heavily dependent on country context.

Figure 8. National stakeholder views on the strengths of Norway's skills system

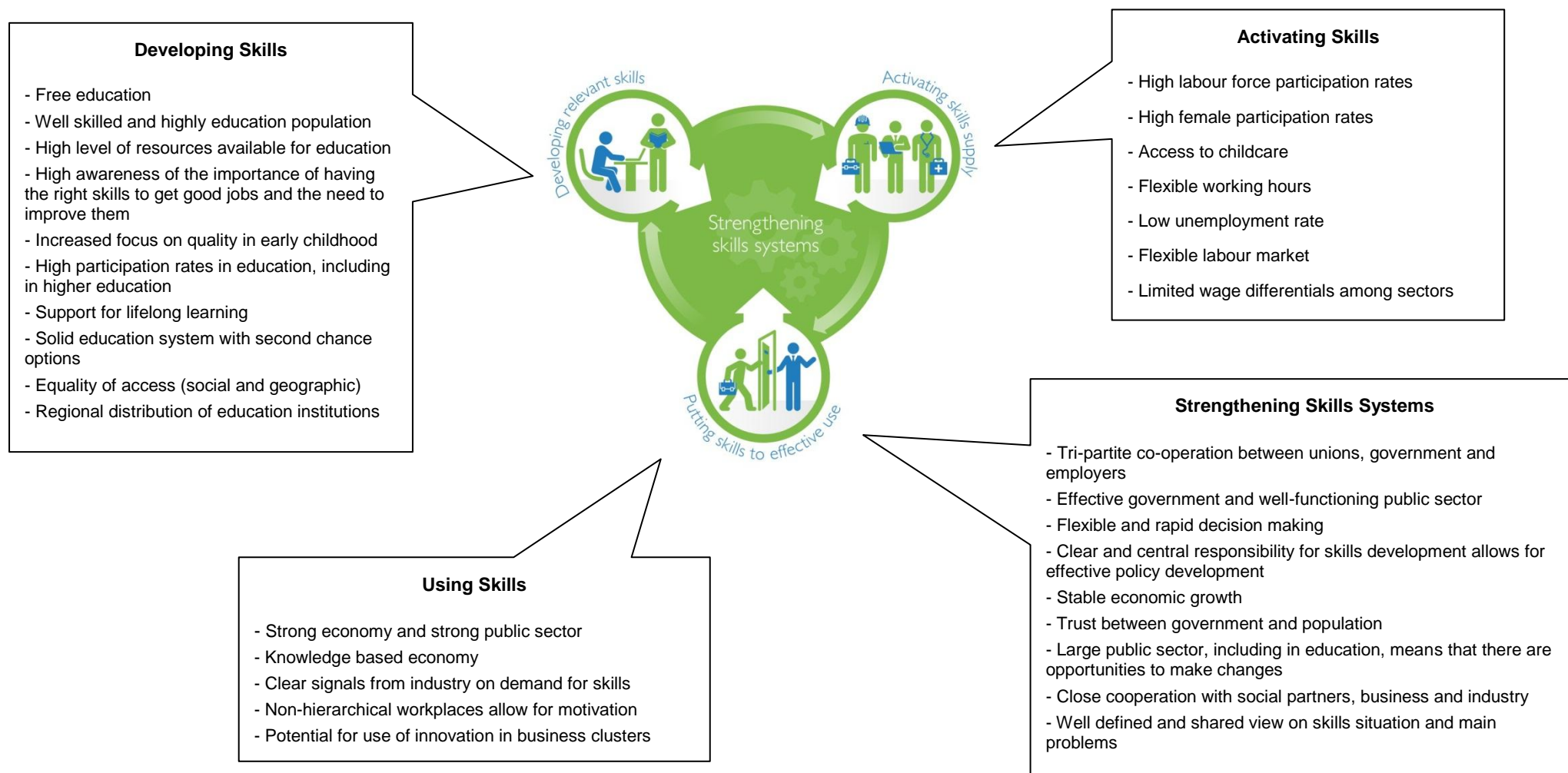
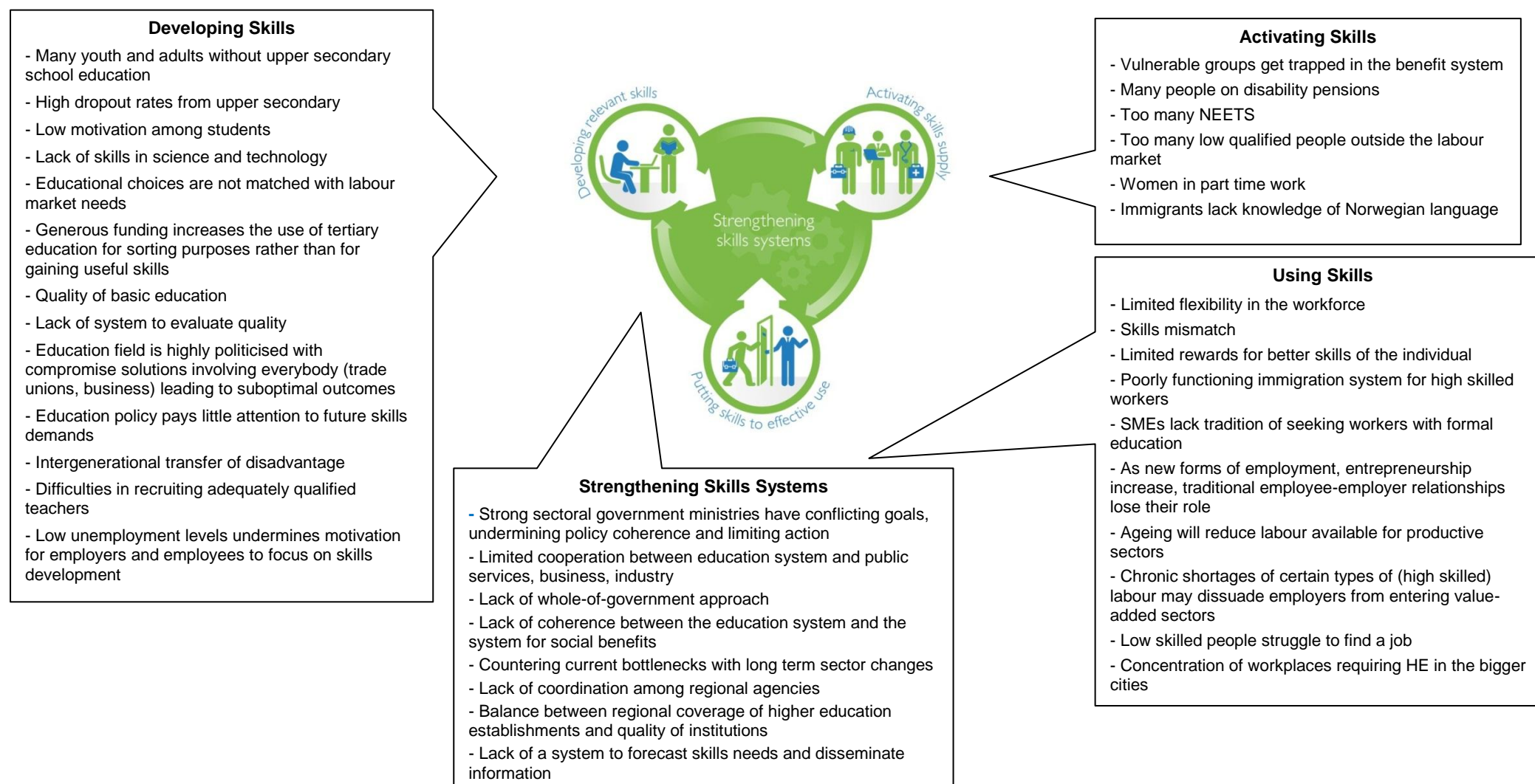


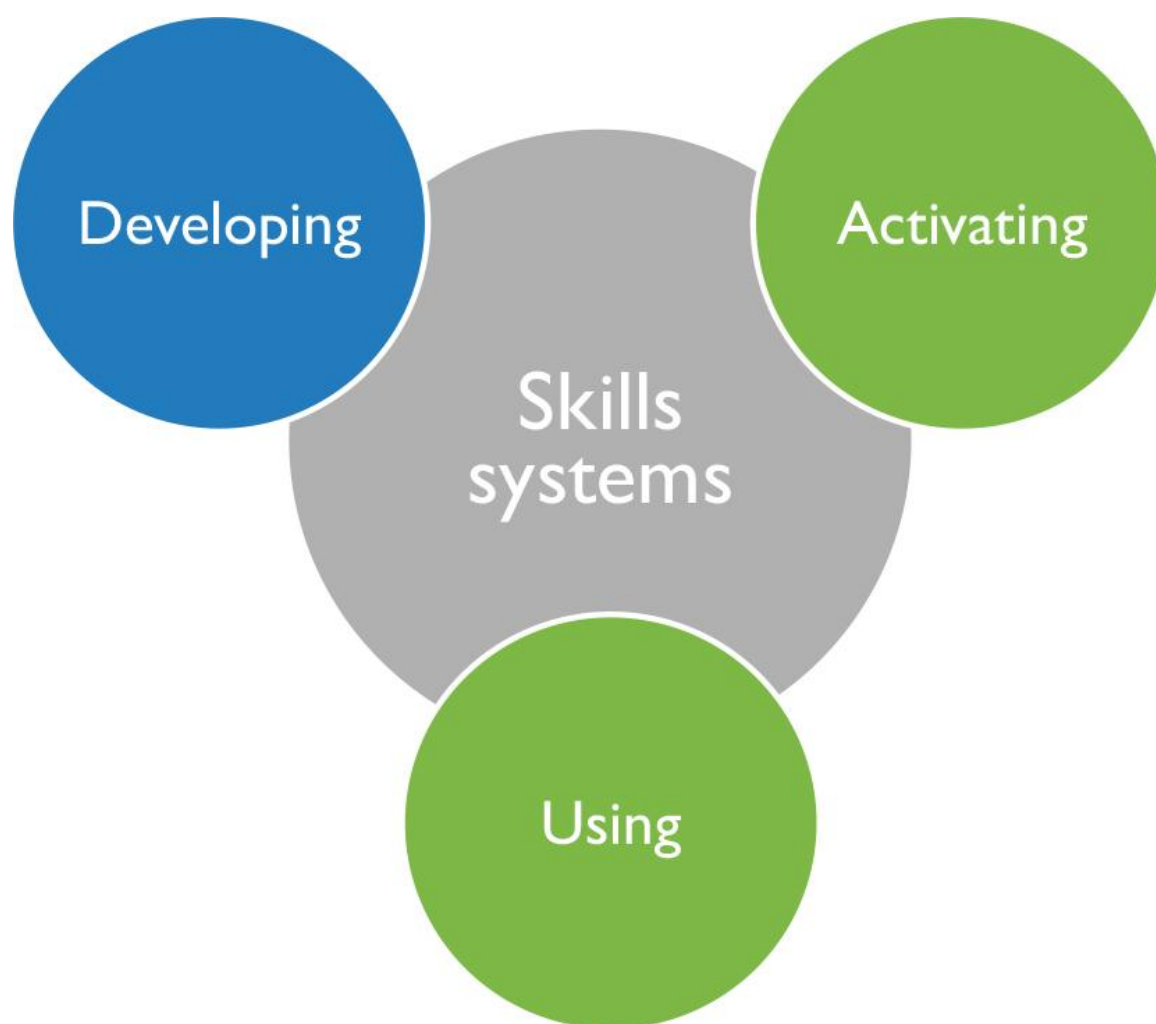
Figure 9. National stakeholder views on the challenges facing Norway's skills system



BIBLIOGRAPHY

- Caroli, E. and Van Reenen, John (2001), "[Skill biased organisational change?: Evidence from British and French Establishments](#)", *Quarterly Journal of Economics*, Vol.4, No.116
- European Working Conditions Survey (2010), <http://www.eurofound.europa.eu/surveys/ewcs/2010/>
- OECD (2012), *Better Skills, Better Jobs, Better Lives: A Strategic Approach to Skills Policies*, OECD Publishing. doi: [10.1787/9789264177338-en](https://doi.org/10.1787/9789264177338-en)
- OECD (2013a), *OECD Employment Outlook 2013*, OECD Publishing. doi: [10.1787/empl_outlook-2013-en](https://doi.org/10.1787/empl_outlook-2013-en)
- OECD (2013b), *Education at a Glance 2013: OECD Indicators*, OECD Publishing. doi: [10.1787/eag-2013-en](https://doi.org/10.1787/eag-2013-en)
- OECD (2013c), *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills*, OECD Publishing. doi: [10.1787/9789264204256-en](https://doi.org/10.1787/9789264204256-en)

DEVELOPING SKILLS



DEVELOPING SKILLS

Norway shows high levels of investment in skills development

Norway devotes 7.6% of GDP to educational expenditure compared to an OECD average of 6.3%. The country spends an average of USD 14 081 per student from primary to tertiary level education – the third largest level of expenditure among OECD countries. Given these expenditure levels, it is not surprising that skills development in Norway is strong.

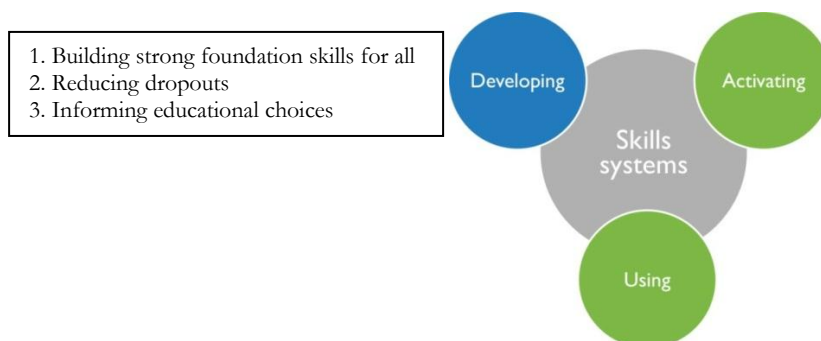
Workshop participants identified many strengths characterising Norway's education and training system including the following:

- provision of education that is free at the point of use;
- equality of access to education;
- social equality;
- regional equality;
- availability of substantial resources to fund the provision of education;
- successful education system which produce a skilled and highly educated population;
- support for lifelong learning and provision of second chance options; and
- strong emphasis on quality in early childhood education.



Yet despite the resources invested and Norway's many strengths, challenges remain. Based on input from workshop participants, this section examines the following three challenges:

1. building strong foundation skills for all;
2. reducing drop-outs; and
3. informing educational choices



CHALLENGE 1: BUILDING STRONG FOUNDATION SKILLS FOR ALL

Among the challenges identified by workshop participants during the diagnostic phase of the Norway skills strategy the following relate to the challenge of ensuring strong foundation skills for all:

“Inadequate quality of basic education”

“Intergenerational transfer of disadvantage”

“Lack of a system to evaluate quality”



Foundation skills can be defined as the skills needed to fully participate both in a modern society and in working life. The OECD has defined these foundation skills in terms of literacy, numeracy and problem solving in technology-rich environments and has measured them directly through the Survey of Adult Skills (PIAAC) undertaken in 24 countries and economies. It is important to note that foundation skills also encompass advanced levels of these skills – so reference to ‘foundation skills’ should not be thought of as synonymous with ‘basic skills’.

Focus on Norway: A snapshot of the Norwegian education system

Decision making in the Norwegian education system is highly decentralised and while the central government sets the goals and framework, responsibility for running primary and secondary schools lies at the municipal and county level. The Norwegian basic education system lasts 13 years overall and public education is free of charge. Most schools are public, with only about 5% of students in private compulsory education or upper secondary schools. Norway's education system is organised as follows:

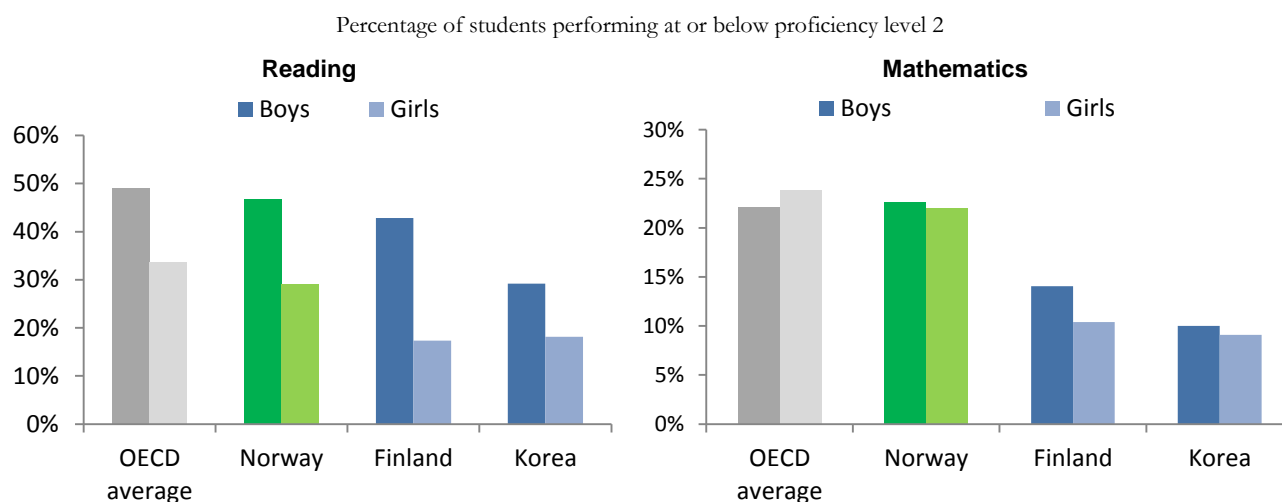
- **Kindergarten** is optional. Parents who decide to keep their children at home between the ages of 1 and 2 years old receive a special allocation from the government while 97% of children between 3 and 5 years old attend kindergarten.
 - **Primary school** (Years 1 to 7) **and lower secondary school** (Years 8 to 10) are compulsory, starting at 6 years old, with a ten-year duration overall.
 - **Upper secondary education** (Years 11 to 13), is considered a right but not an obligation, and caters for a population of 16 to 19-year-olds. Students can choose to follow vocational education, which is comprised of two years of learning at school and followed by either two years in apprenticeships or a third year in school.
 - **Higher education** in Norway is becoming increasingly aligned to the Bachelor-Masters-PhD model fostered by the Bologna process.
 - **Adult learning** is a statutory right. Free primary education is a right for those adults who need it. This includes guidance to assess the individuals needs and a right to adapted education. Adults over the age of 25 who have not already completed their upper secondary education, have the right to complete upper secondary education in accordance with the national curriculum.
 - **Validation of prior learning** is a right for those who have a right to primary or secondary education. The length and scope of adult education and training is then adapted to this prior learning as well as the participants' specific needs.
-

Many students underperform in foundation skills

The Programme for International Student Assessment (PISA) reviews the extent to which students near the end of compulsory education have acquired essential foundation skills – particularly in mathematics, reading and science. In PISA 2012 Norway performs around average in mathematics, above average in reading, but below average in science. Countries such as Korea, Poland and New Zealand achieve stronger results – in reading and mathematics – while devoting significantly fewer resources to education than Norway. Furthermore, given the close relationship between a student's performance and his or her parents' level of education, Norway's mediocre performance is particularly notable given the high educational attainment of Norway's adult populations and the advantage this confers on Norway over other countries where parents have lower levels of education.

While *average* student performance in PISA is at, or above, the OECD average, a sizeable proportion of 15 year olds still perform at a low level; failing to achieve proficiency level 1 (see Figure 10). And the share of low performers has increased in recent years from 18.2% in 2009 to 22.3% in 2012. The number of low performers in science, as in mathematics, has experienced a significant increase (from 15.8% in 2009 to 19.6% in 2012). The share of low performers in reading – those unable to demonstrate the reading competencies that will enable them to participate effectively and productively in life – has not significantly increased.

Figure 10. Students performing poorly in reading and mathematics



Source: OECD (2013a), *PISA 2012 Results: What Students Know and Can Do (Volume I): Student Performance in Mathematics, Reading and Science*, PISA, OECD Publishing. doi: [10.1787/9789264201118-en](https://doi.org/10.1787/9789264201118-en)

Box 7. Aligning incentives to address foundation skills

In the **United Kingdom**, where less than one in four of those leaving school without achieving a grade C in English and Mathematics went on to study the subject afterwards, a recent government reform has attempted to address the incentives to provide these foundation skills through altering institutional funding formulas. Under the recent reform all pupils who fail to achieve a good pass in English or mathematics GCSE by the time they finish secondary school must continue to study the subjects in post-16 education until they get these qualifications. Those who have not achieved a C or better in GCSE maths or English will either study for the qualification or may take other qualifications – including functional skills and free-standing mathematics – as a stepping stone. These new requirements will be built into the funding for colleges from 2014 where, until now, a funding formula linking funding and qualification success has created incentives that encouraged some institutions to enter students for easier qualifications, or less challenging subjects.

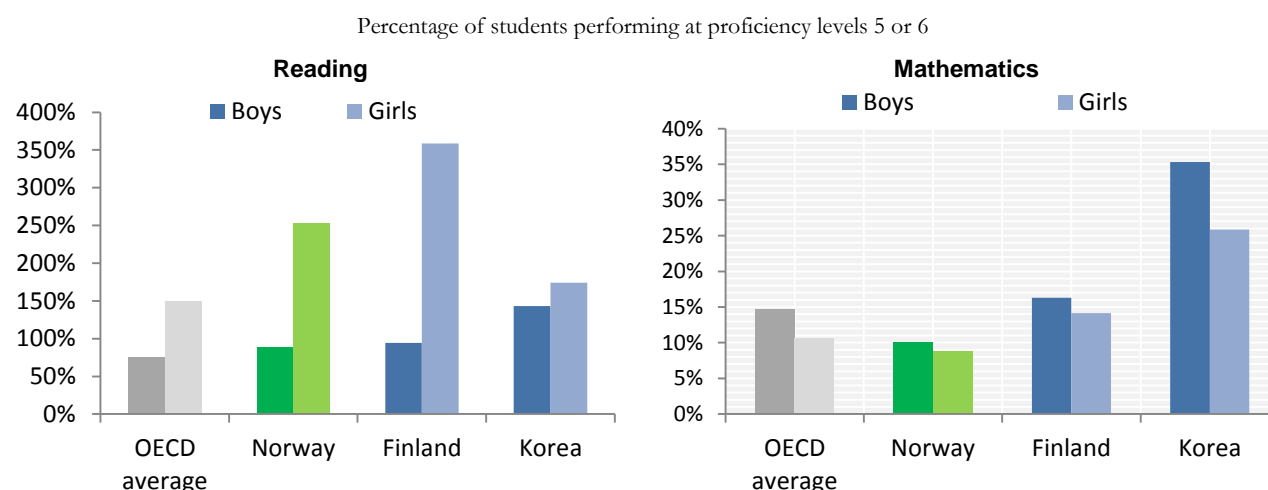


Source : UK delegation to the OECD and www.gov.uk

...and few excel to achieve advanced levels of foundation skills

What about the top performers? In addition to the lacklustre picture that emerges when looking at the average students' performance on PISA, Norway has a relatively small proportion of students that excel – as measured by the numbers achieving proficiency levels 5 or 6. Figure 11 below shows the performance of students on the mathematics component of PISA. Across OECD countries an average of 12.6% of students perform at level 5 or 6 in mathematics. In Switzerland, above 20% of students are at this level and in Korea and Singapore the proportion reaches 30% and 40% respectively. The proportion of high-achievers in Norway, at 9.4%, falls significantly short of those numbers achieved elsewhere.

Figure 11. Students performing well in reading and mathematics



Source: OECD (2013a) *PISA 2012 Results: What Students Know and Can Do (Volume I): Student Performance in Mathematics, Reading and Science*, PISA, OECD Publishing. doi: [10.1787/9789264201118-en](https://doi.org/10.1787/9789264201118-en)

Nurturing the performance of those students with high ability will have a large impact on the future business and innovation environment. The large proportion of top-performers in countries like Korea (which has increased by six percentage points since 2003) shows that improvements in the education system can have substantial impacts on the numbers of students performing at the highest level. Furthermore, improvements at the top need not imply abandoning those that are struggling. Countries like Poland and Portugal, for example, have reduced the share of low-performing students while, at the same time, increasing the share of high achievers – proving that improvements in quality and equity can go hand in hand.

There are few formal schemes for pupils seeking additional challenges in primary and lower secondary school in Norway. The schemes that do exist are used by very few pupils and in a small number of schools. While it is possible for lower-secondary students to take classes at the upper secondary level the scheme is underutilised, with fewer than 1 000 students taking advantage of it between 2011-2012 (Education Mirror 2012).

Adult literacy is high in Norway and low skilled adults have good access to training

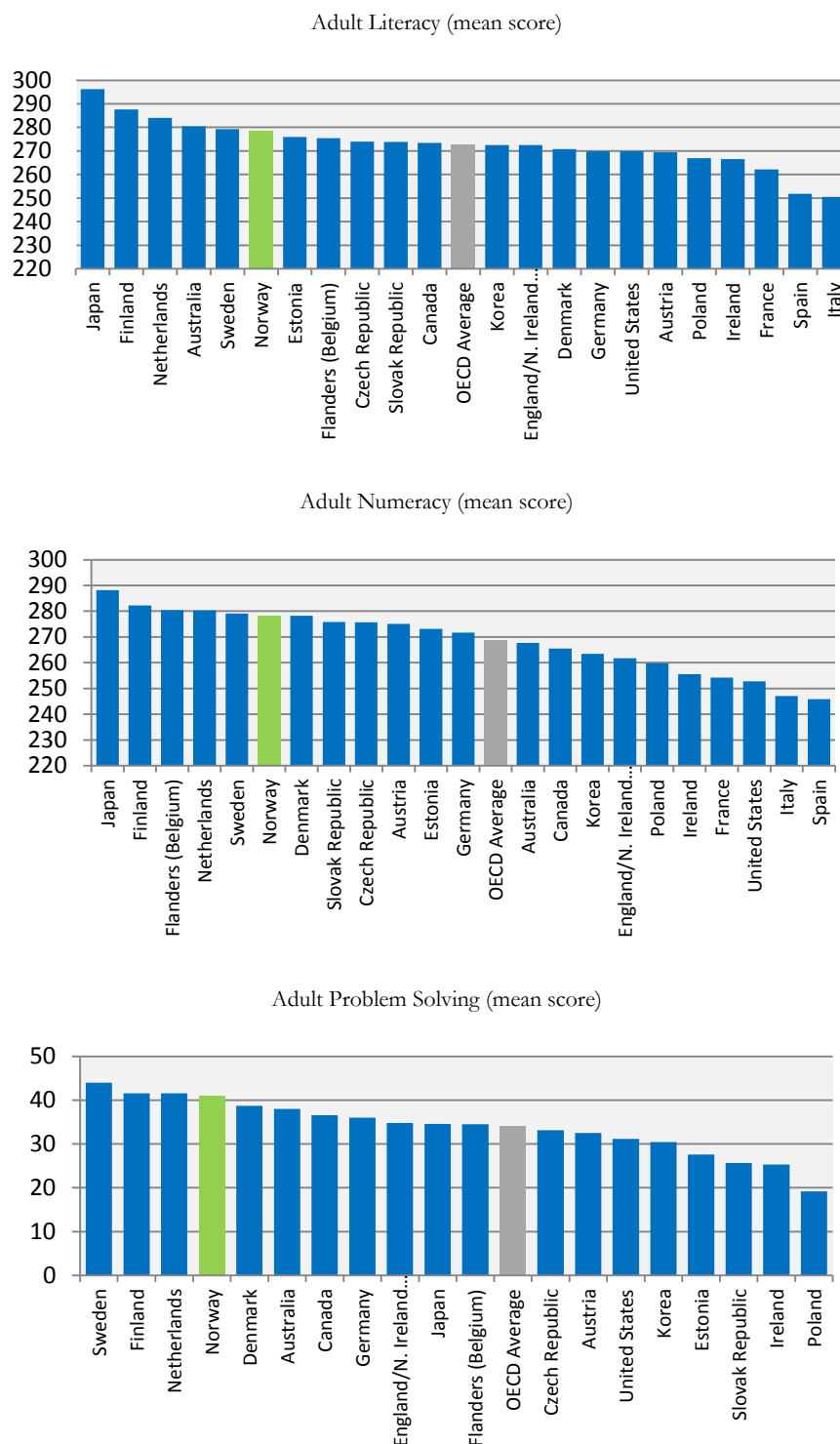
When it comes to adult skills Norway performs well. On the Survey of Adult Skills (PIAAC) individuals between the ages of 16 and 65 years old perform significantly above the OECD average – across tests of literacy, numeracy and problem solving (see Figure 12).

The proportion of adults (aged 16 to 65 years old) attaining the two highest levels of proficiency in literacy (Level 4 or 5), at 13.7%, is above the average of 11.8% across all participating countries. Above this level adults are able, at a minimum, to integrate, interpret and synthesise information from complex or lengthy texts that contain conditional and/or competing information.

17.4% of adults in Norway attain the highest levels of numeracy (Level 4 or 5) as measured by the Survey of Adult Skills (PIAAC). This compares with the average of 12.4% of adults across all participating countries. At Level 4, adults understand a broad range of mathematical information that may be complex, abstract or found in unfamiliar contexts. The difference in numeracy scores between men and women in Norway is one of the largest – in favour of men – among all countries.

Figure 12. Adult Literacy, Numeracy and Problem Solving Skills

Mean score of adults age 16-65 on the literacy and numeracy scales, and the proportion of adults scoring at Level 2 or 3 on the problem solving in technology-rich environments scale



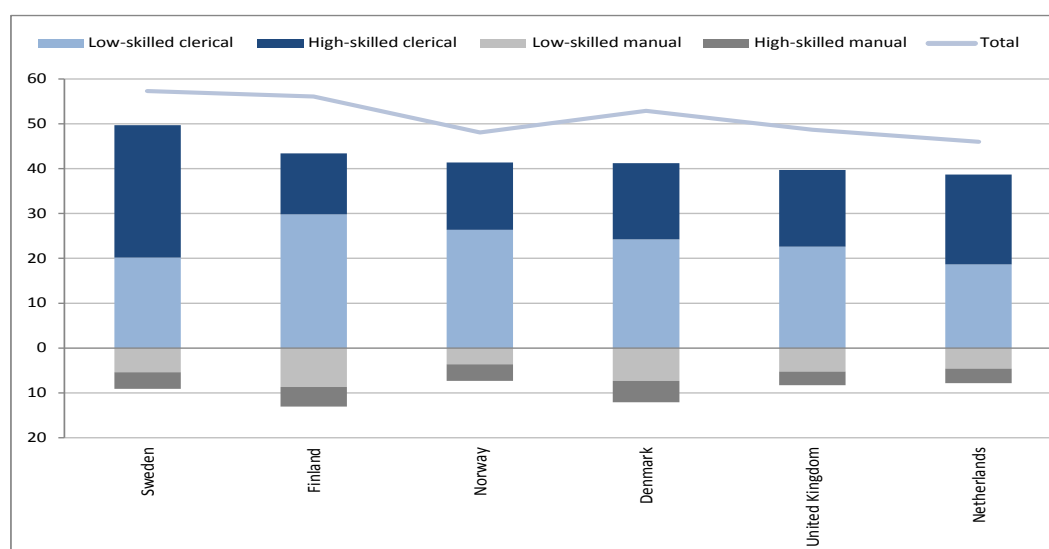
Source: OECD (2013b), *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills*, OECD Publishing.
doi: [10.1787/9789264204256-en](https://doi.org/10.1787/9789264204256-en)

In addition to their strong performance on numeracy and literacy, adults in Norway also perform well when it comes to problem-solving in technology rich environments. Norway is among the best performers on this aspect and only slightly behind Finland, the Netherlands and Sweden.

As ICTs change not just the way services are provided and consumed, but also the occupational structure and type of tasks workers must perform in their jobs, these skills are increasingly central across the OECD. This is particularly the case in Norway where 41% reported seeing substantial restructuring or reorganisation in their current workplace environment in the past three years and 48% reported the introduction of new processes or technologies. This change is particularly stark within the low-skilled clerical sector (see Figure 13). The use of technology is increasingly becoming a foundation upon which other workplace skills are built.

Figure 13. Introduction of new processes or technologies

Percentage of workers who reported changes in their current workplace during the previous three years that affected their work environment

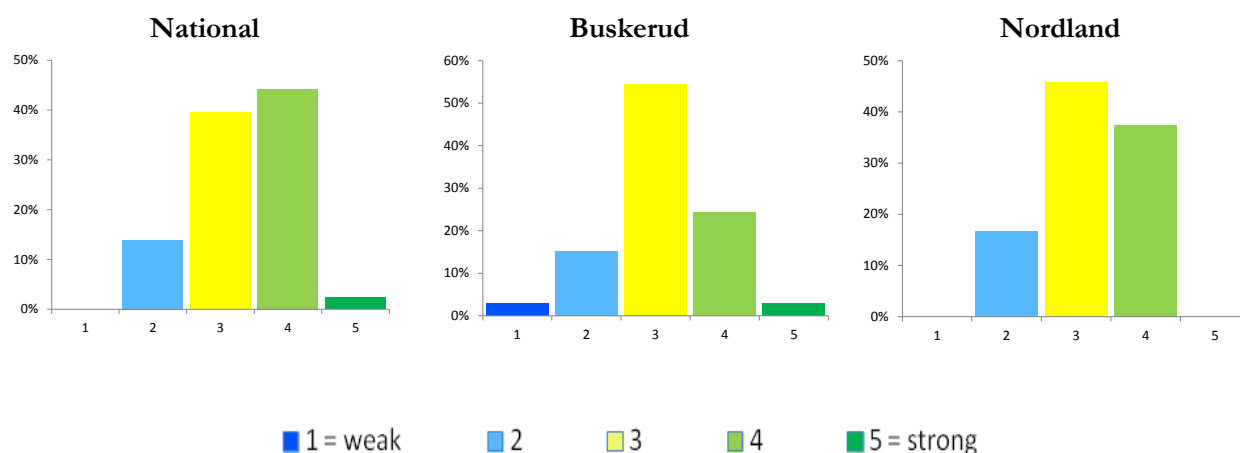


Source: OECD (2013b), *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills*, OECD Publishing.
doi: [10.1787/9789264204256-en](https://doi.org/10.1787/9789264204256-en)

In Norway only 6.9% of respondents to the Survey of Adult Skills indicated that they had no prior experience with computers or lacked very basic computer skills, compared with 14.2% of adults in all participating countries. Despite this, the proportion of adults scoring at or below Level 1 in problem solving in technology-rich environments was, at 43.3%, slightly above the average of participating countries – though similar to those proportions found in Germany, the Netherlands and Sweden. At Level 1, adults can only use widely available and familiar technology applications, such as e-mail software or a web browser, to solve problems involving few steps, simple reasoning and little or no navigation across applications.

Do adults at all skill levels have opportunities to upskill through education and training courses or organized learning at the workplace?

Participants were asked to use the OECD Skills Diagnostic Toolkit to score the performance of Norway's current skills system in delivering a number of critical outcomes. A low score indicates that the current skills system does poorly in delivering the outcome described and a high score indicates a strong performance. The results from workshops held at the national level and in two counties are presented below.



Diagnostic workshop participants across the country recognised the opportunities available for adults to strengthen their skills. Though there was a strong feeling that there was a need for more focus on career pathways, opportunities to upskill, and recognition of informal learning.

Lifelong learning is an important principle in Norwegian education policy

Like other Nordic countries, basic skills training and validation of prior learning play a significant role in adult education policies. And the proportion of adults below proficiency level 1 who receive job-related adult education and training in Norway, at 30%, is the highest in the OECD – and more than double the OECD average (OECD 2013b). This success in the provision of lifelong learning for individuals across the skill spectrum is likely to be an important contributing factor for the strong skills of older adults.

Yet many still miss out. In 2011/2012 only 6 000 adults participated in adult education at the primary/lower secondary level (see “Focus on Norway” above). Furthermore the large majority of participants were foreign-born individuals, whose skills needs may not be addressed by the primary/lower secondary curriculum on offer.

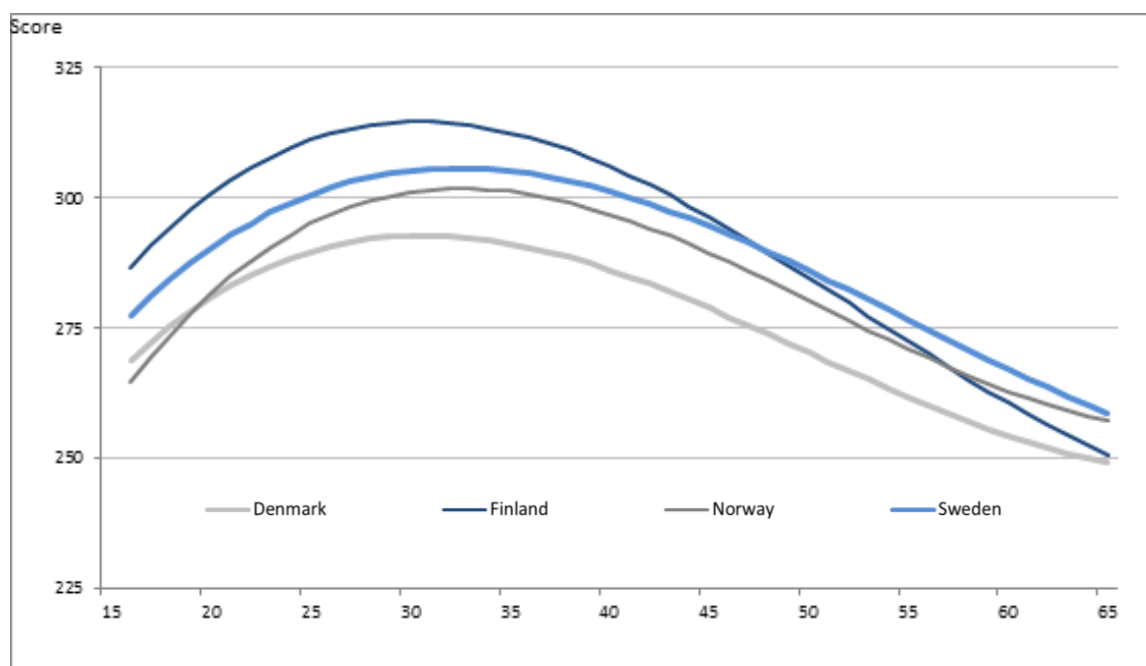
In 2006, the Norwegian government launched the BKA programme with the aim of strengthening basic skills in reading, writing, numeracy and information communication technologies. The programme is administered through the Norwegian Agency for Lifelong Learning, (Vox) and its courses are adapted to the needs of adult learners. In addition activities of the BKA programme are both aligned to the competence goals under their Framework for Basic Skills while at the same time often linked with work and other job-related practices. To date, close to 27 000 adults have participated in the programme.

Disaggregating the results of the Survey of Adult Skills by the age of respondents provides some insight on the effectiveness of the emphasis placed on lifelong learning in Norway. Indeed, as can be seen from Figure 14 below, the mean literacy of young people in Norway initially lags behind the performance of youth in Norway's neighbouring countries, at 16 years old. However literacy levels increase rapidly with age, such that the skills disparity between 35 year olds in Norway and those in Sweden and Finland is substantially less than the disparity among the younger cohort.

Older workers also show a strong performance when compared to other countries in the region. Indeed, 65 year olds in Norway have among the highest literacy skills in the region.

Figure 14. Relationship between literacy proficiency and age

Trend scores^a in literacy, by age, foreign-born adults excluded



a) A cubic specification of the trend curves is found to be most accurate in reflecting the distribution of scores by age in most countries.

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

While Norway performs well in adult literacy and the provision of opportunities for adults to learn and upskill throughout their lives, *relatively* low literacy performance of young people in Norway may represent a problem if it leads to path dependency. If, upon entry into higher education or the labour force, lower skills levels impede the productivity of future learning, late accumulation of skills may have implications for the duration of tertiary studies or the ability to learn on the job.

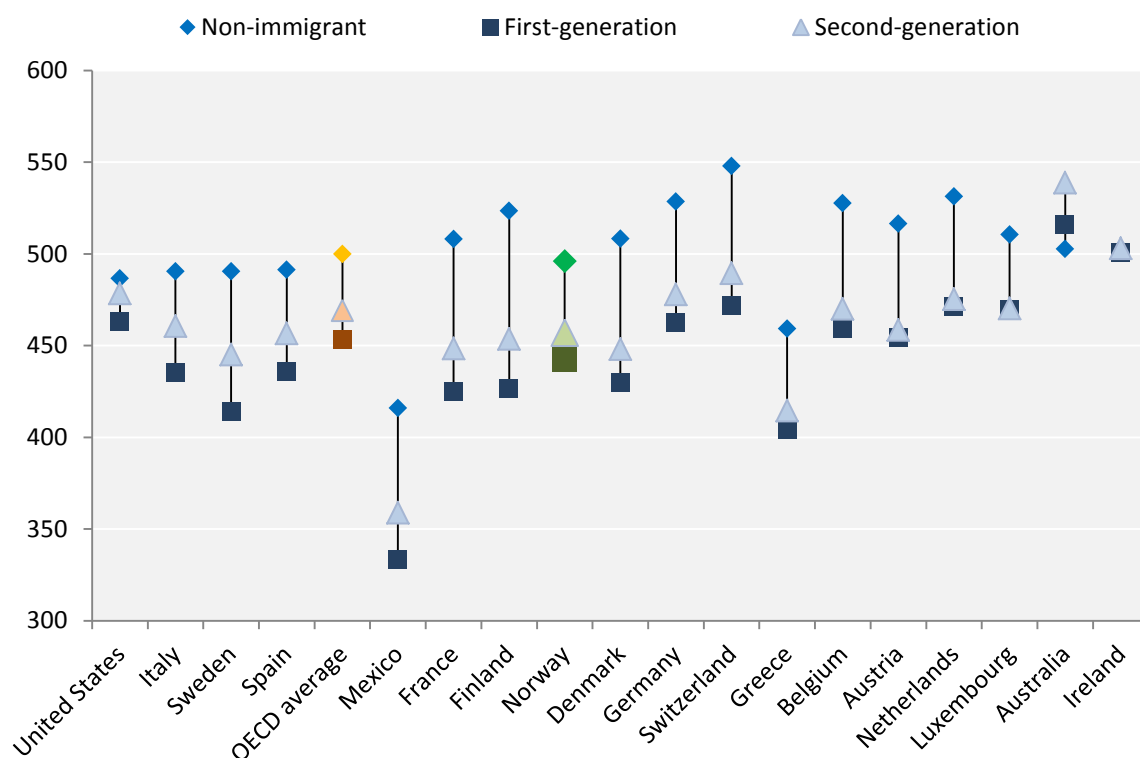
Certain groups are particularly vulnerable when it comes to gaining sound foundation skills

Across the OECD poor foundation skills and low educational attainment pass from one generation to the next. The inter-generational transmission of disadvantage is an indication that the skills system is failing to provide all members of society with equal opportunities to develop, activate and use their skills and is an important indication that the system is not functioning well – both in terms of efficiency and equity.

Some groups are particularly vulnerable when it comes to achieving sound foundation skills. And, while the impact of socio-economic status on foundation skills is relatively low in Norway, some – particularly those from low educational or immigrant backgrounds – are struggling to narrow the gap in attainment from one generation to the next.

While second generation migrants are well represented in the tertiary education system – where they have a higher participation rate than both their parents and Norwegians of a comparable age – many others are still struggling to master basic foundation skills. The disparity in reading proficiency between migrants and their native counterparts may be expected among first-generation migrants who often lack Norwegian language skills. Yet when it comes to second generation migrants Norway continues to perform relatively poorly and falls below the OECD average (see Figure 15).

Figure 15. Difference in mathematics performance between second- and first-generation students



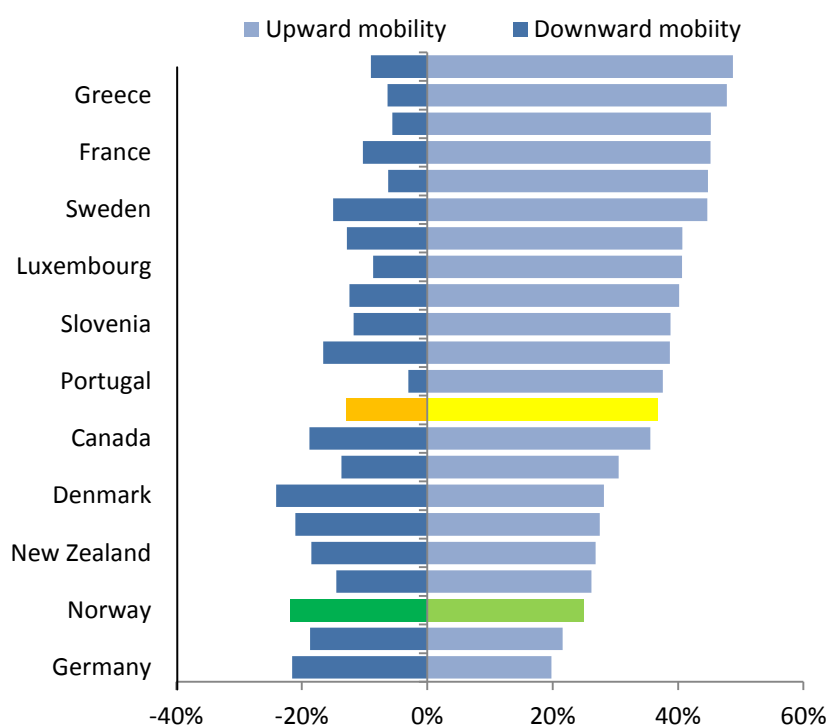
1. Countries ordered in terms of the proportion of the score difference between non-immigrant and first generation migrants that is recovered by second generation migrants.

Source: OECD (2013a) *PISA 2012 Results: What Students Know and Can Do (Volume I): Student Performance in Mathematics, Reading and Science*, PISA, OECD Publishing. doi: [10.1787/9789264201118-en](https://doi.org/10.1787/9789264201118-en)

Individuals from low educational backgrounds are also vulnerable to intergenerational transmission of disadvantage. On average across OECD countries 66% of individuals with at least one highly educated parent succeeded in attaining a tertiary degree while this figure falls to only 20% among individuals whose parents failed to attain an upper-secondary qualification. In Norway this intergenerational transfer is even more pronounced and less than 17% of those whose parents have not attained upper secondary hold a tertiary degree themselves (see Figure 16).

Figure 16. Intergenerational mobility in education

Percentage of 25-34 year old non-students having an educational attainment higher (upward mobility) or lower (downward mobility) than their parents, 2009



Note: The number of students attending higher education is under-reported for Australia, Canada, New Zealand and the United States compared to the other countries, which may understate intergenerational mobility in these countries.

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

Box 8. Overcoming intergenerational transmission of disadvantage

There is no failsafe way in which to raise foundation skills across the board. Education systems throughout the OECD display a variety of features that have been adapted to the needs and context of the country. In addition, to supplement broad educational policies, a number of programmes have been adopted to help strengthen equitable and excellent foundational education for all students – irrespective of their background.

In the **Netherlands** specific initiatives are devoted to parents from migrant groups, who are generally more difficult to reach and less involved in their children's education. A special Ethnic Minority Parents' Platform was created to foster the involvement of migrant parents. Activities to reach ethnic minority parents include: home visits by teachers, the creation of parent information points and a room for parents in the school and, sometimes, the provision of language courses for parents.



Box 8: Overcoming intergenerational transmission of disadvantage (continued)

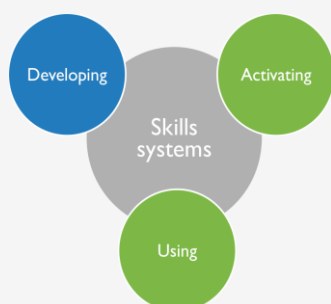
Ireland has a Home/School/Community Liaison Scheme (HSCL), which is a preventive strategy targeted at students whose background puts them at risk of not reaching their potential. The service focuses on those adults playing a prominent role in the educational lives of these children. The HSCL programme aims to establish partnerships and collaborations, organising locally based activities to encourage greater contact between parents, teachers and local voluntary groups to tackle the issues that impinge on learning. Approximately EUR 25 million has been allocated to HSCL for 2011, and 155 000 students attending 545 schools (200 post primary, 345 primary) have access to the service, with some 50 000 of these pupils' families being specifically targeted for the services of home school community liaison coordinators.

In **France**, after being trialed in one school district (Academie de Creteil), the “parents’ toolbox” (“la mallette des parents”) was introduced in 1 300 lower secondary schools in September 2011. Parents receive a DVD at the beginning of the school year with information on their children’s schooling. They are then invited to participate in three meetings at the school during the school year covering topics such as school organisation, helping with homework and sleeping patterns. The scheme aims to increase links between school and parents, and to ensure more continuity in the child’s learning.

Source: Moisan, C. (2011), « Comment en finir avec l’échec scolaire: les mesures efficaces », Projet de rapport national de base de la France; Akkerman, Y., et al. (2011), *Overcoming School Failure: Policies that Work*, Background Report for the Netherlands, Ministry of Education, Culture and Science, Den Haag. ; Irish Ministry of Education and Skills (forthcoming), *Overcoming School Failure: Policies that Work*, National Report Ireland. www.oecd.org/edu/equity. See also OECD (2012), *Equity and Quality in Education: Supporting Disadvantaged Students and Schools*, OECD Publishing. doi: [10.1787/9789264130852-en](https://doi.org/10.1787/9789264130852-en)

Good foundation skills are fundamental to an individual’s education and employment prospects. Individuals with very low literacy and numeracy are severely disadvantaged in the labour market which, in addition to impacting on their own well-being, can have widespread implications for labour market flexibility.

People with high foundation skills contribute to innovation and growth. Lifelong learning is an important policy tool in combatting the disadvantage associated with poor initial foundation skills. Yet it is also important to focus on ensuring everyone has strong foundation skills from an early age – to minimise the emergence of disadvantage in the first place and to maximise the country’s skills potential.



Where do foundation skills fit into the skills system?

Poor foundation skills can lead to risk of **drop-out from school** (Challenge 2) and limit people's capacity and propensity to acquire skills later in life, thereby **reducing their adaptability and flexibility**. Furthermore, low foundation skills are associated with **poor job market outcomes** (Challenge 5) and a higher risk of **falling into disability** (Challenge 4). Given the importance of work based training in contributing to lifelong learning in Norway, those who struggle to enter the labour market due to poor foundations skills may find this initial disadvantage lasts throughout a lifetime. A lack of foundation skills may also prevent employers hiring and training **sufficiently high skilled workers** (Challenge 7) and can **limit the level of entrepreneurship and innovation** (Challenge 8) in Norway's skill system.

CHALLENGE 2: REDUCING DROP-OUT

Participants in the workshops identified several issues in relation to students who drop out from education and training programmes:

“Low motivation among students”

“Many youth and adults leave school without upper-secondary education”

“High dropout rates from every level of education”



There is a strong association between foundation skills and dropout from upper secondary driven by two processes. In the first place, students with a strong educational performance tend to be those with solid competencies. These good foundation skills ensure that they are better prepared for upper secondary education. In the second place, foundation skills are strongly influenced by social background, gender, minority language, parents' education and connection to labour market. Thus social background has an indirect effect on school completion through educational performance.

Tackling the high levels of drop-out in Norway has, for some time, been recognized as a priority and there is a political goal to raise completion rates for upper secondary from where they currently stand at 72% to reach 90% (OECD 2012). Yet the challenge of drop-out cannot be treated in isolation. As such it requires a holistic solution; one that builds upon a sound understanding of the interactions between the full range of challenges facing the Norwegian skills system.

Early identification of those who are struggling remains weak

The relationship between skills and drop-outs is complex and runs in both directions. Those who are struggling in their skills development are more likely to drop-out while, at the same time, those that drop-out will have fewer opportunities to develop their skills. Working with young people who are struggling in school is a challenge, working with them when they have dropped out can be even more challenging. It is important, therefore, that those who are struggling are identified early and given the necessary support to prevent them from falling in to a downward skills spiral.

Box 9. Recognising risk factors and using predictive data

Many young people who end up dropping out of education share common traits and experiences and face similar challenges. Many struggle with, or disengage from, school for a number of years before they drop-out. As a result, most drop-outs are identifiable, predictable and preventable.



In the **Netherlands** a Personal Identification Number (PGN) – or education number -- has been issued to every child in the country over the age of 3½ years. Similar to a social insurance number, the PGN follows students from school to school as they progress through the education system enabling the system to monitor pupils' school careers, school attendance or dropout risk. The PGN offers complete and reliable figures on rates nationally, regionally and at municipal and district levels and all schools in secondary education are expected to register absenteeism, disengagement and dropout. A monthly report is available to municipalities and schools to allow them to give priority to those at risk. In addition, these data are linked to socio-economic data (including demographics, native Dutch citizens, ethnic minorities, unemployment, people entitled to benefits, etc.) by region, city and district, providing a wealth of information for implementing and adjusting policy. This monitoring of results enables the authorities to assess what works and what does not, and therefore to disseminate good practices.

Source: Akkerman, Y., *et al.* (2011), *Overcoming School Failure: Policies that Work*, Background Report for the Netherlands, Ministry of Education, Culture and Science, Den Haag. www.oecd.org/edu/equity

In Norway, in contrast to Finland (see Box 10 below), many pupils must wait a long time before they are identified as being 'at risk' and offered special needs education. The percentage of pupils eligible for special needs education increases during primary school and throughout lower secondary school. In the autumn of 2011, 4.4% of the pupils in Year 1 had individual decisions on special needs education, by Year 10 the percentage had increased to 11.6%.

This increase in identification over the school years may be a reflection that those in need of further support in early years remain unidentified – and their needs unaddressed – it may also partially reflect the fact that when pupils have first received a decision on special needs education in Norway, they tend to continue with it throughout the rest of primary and lower secondary school. Either way it gives an indication that the Norwegian skills system is failing to identify and address early needs in an efficient way.

Box 10. Effective support at the first signs of learning difficulties

A challenging and flexible curriculum can help to maintain students' interest in their schooling and it is fundamental that the curriculum is relevant to the challenges awaiting early adolescents as they continue their education or enter the labour market.



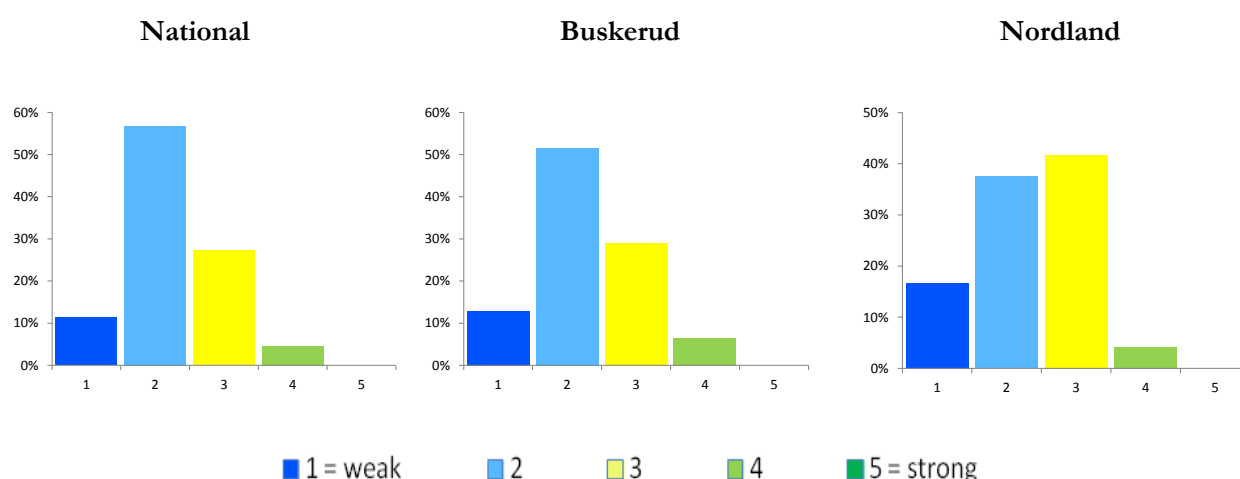
In **Finland**, where PISA scores are among the highest in the OECD, and completion rates of upper-secondary, at 80%, are significantly above those in Norway, rather than tracking or streaming students into ability groups, individualised learning and differentiated instruction are the basic principles in organising schooling. Students' characteristics, including personality, abilities and orientations, are taken into account in crafting learning environments and choosing pedagogical methods in schools. Every child has the right to individualised support provided by trained professionals as part of normal schooling. While Norway's strong commitment to the principle of individualised learning is similar to that of Finland, it differs in its implementation.

In Finland, a relatively high proportion of pupils receive special needs education in their early years and schools intervene at the first signs of learning difficulties. Special needs education is mostly given for a short period of time -- just a few lessons or a few weeks -- and is often given by specialized teachers. The proportion of pupils who receive this specialised education decreases as their needs are addressed and they progress in primary and secondary education.

Source: Välijärvi, J. and P. Sahlberg, (2008), "Should 'Failing' Students Repeat a Grade? Retrospective Response from Finland", *Journal of Educational Change*, Vol. 9 No. 4; OECD (2013c); *Education at a Glance 2013: OECD Indicators*, OECD Publishing. doi: [10.1787/eag-2013-en](https://doi.org/10.1787/eag-2013-en) and Education Mirror (2012)

Are youth at risk identified early and effectively supported to strengthen their cognitive and non-cognitive skill sets?

Participants were asked to use the OECD Skills Diagnostic Toolkit to score the performance of Norway's current skills system in delivering a number of critical outcomes. A low score indicates that the current skills system does poorly in delivering the outcome described and a high score indicates a strong performance. The results from workshops held in the capital and 2 counties are presented below.

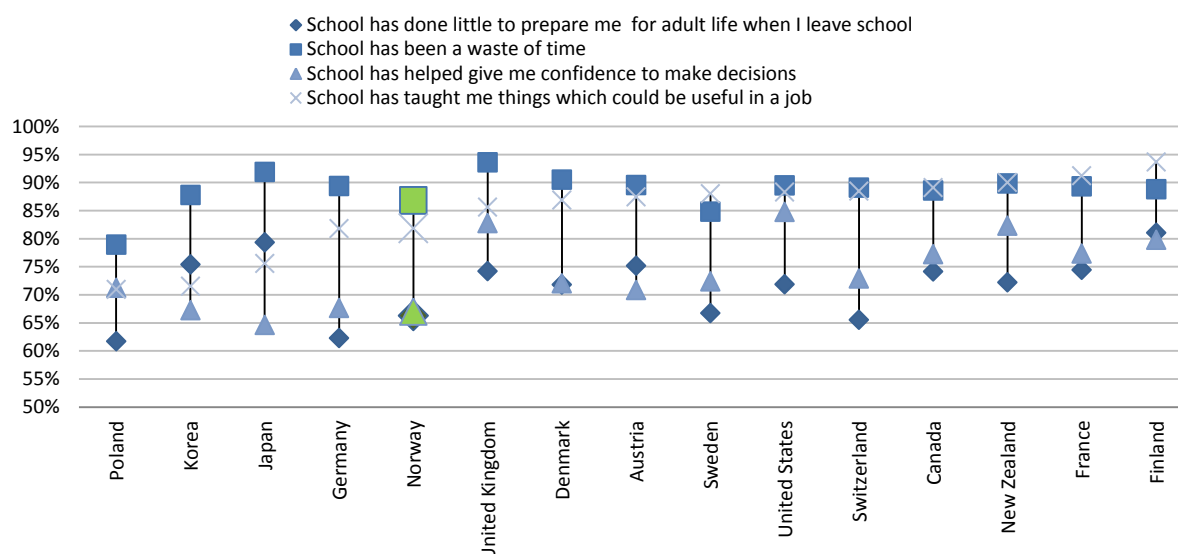


There was clear agreement among participants in both the national workshop in Oslo and in Buskerud County that the Norwegian skills system is underperforming in terms of early identification and support of youth at risk. In Nordland County, participants were less negative in their assessments. It should be noted that the area in Norway with the highest percentage of pupils identified as requiring special needs education is in fact Nordland. This may contribute to explaining why early identification was viewed as a less significant weakness of the system among people from this area.

Student motivation and classroom discipline is low in Norway

Drop-out can have a myriad of causes and, while many may drop out from education because they are struggling with the curriculum, many more will do so because they are not engaged by it. Low levels of student engagement can be found in many OECD countries but Norway is one of the countries in which student belief in the relevance of their education is the lowest – only 66% of students agreed with the statement that feel that school has taught them things that could be useful on the job, and close to 87% feel that school has been a waste of time (see Figure 17). Furthermore, there is a large gap in literacy scores between those that felt school was a waste of time and those that did not. The size of this gap in Norway is second only to that observed in France.

Figure 17. Do students think school is useful?



Source: OECD (2013a), *PISA 2012 Results: What Students Know and Can Do (Volume I): Student Performance in Mathematics, Reading and Science*, PISA, OECD Publishing. doi: [10.1787/9789264201118-en](https://doi.org/10.1787/9789264201118-en)

Students' attitudes towards schooling can be influenced by their teachers, their peers or the atmosphere in school. According to the OECD Teaching and Learning International Survey (TALIS), teachers report a high degree of self-efficacy and motivation in Norway. However at the same time, despite positive perceptions of teacher-student relations, the classroom disciplinary environment in Norwegian schools is viewed rather negatively by teachers.

Box 11. Providing engaging and challenging activities that are relevant to their futures

Providing stimulating activities with a clear link to future careers can help to highlight the relevance of education and maintain the interest of students.

In the **United States** university preparatory programmes such as Advancement via Individual Determination (AVID) use acceleration instead of remediation as a tactic to improve students' performance. In addition to being enrolled in advanced classes, the students receive an hour a day coaching lesson from student peers or teachers to help them with study skills and critical thinking (www.avid.org). In California, AVID schools witnessed a 34% decline in dropout rates compared to a 14% drop in non-AVID schools (American Youth Policy Forum, www.aypf.org). AVID also involves a set of extra-curricular activities and engages the family at a variety of levels. Evaluation of the measure showed that all programme components were necessary to obtain a successful outcome.



Source: Lyche, C. (2010), "Taking on the Completion Challenge: A Literature Review on Policies to Prevent Dropout and Early School Leaving", *OECD Education Working Papers*, No. 53, OECD Publishing. doi: [10.1787/5km4m2t59cmr-en](https://doi.org/10.1787/5km4m2t59cmr-en)

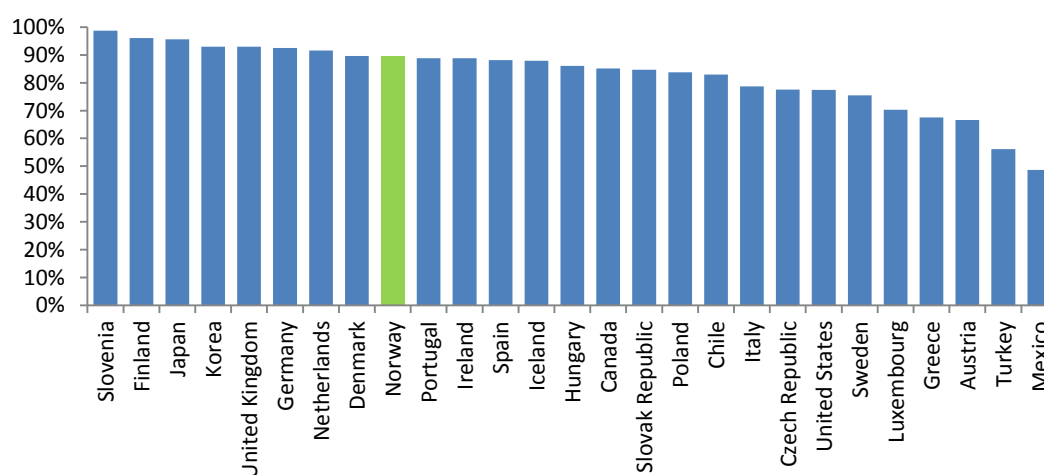
Despite high aggregate attainment, upper-secondary completion rates are low

Educational attainment in Norway is high by international standards: 82% of the adult population has at least an upper secondary education (OECD average: 75%), and 38% a tertiary degree (OECD average: 32%). However, this strong performance is, in large part, due to the high attainment levels of

older Norwegians, among whom the proportion of 55-64 year-olds with at least an upper secondary education is similar to that among youth, indicating that there has been little progress on this front in recent years. This impression is confirmed when looking at trends in educational attainment where Norway appears to be making little progress. Between 2000 and 2011, the proportion of 25 to 64 year olds holding an upper-secondary education or above, fell from 85% to 82% (OECD 2013c).

Upper secondary graduation rates in Norway in 2011, at 90%, are above the OECD average (83%) but fall far short of those in Korea, Germany, Sweden, Finland, Japan, the Netherlands and the United Kingdom (Figure 18). Upper-secondary graduation rates measure the proportion of the cohort that will complete an upper-secondary qualification within their lifetime – graduation rates therefore include those that have completed upper-secondary education through second chance programmes.

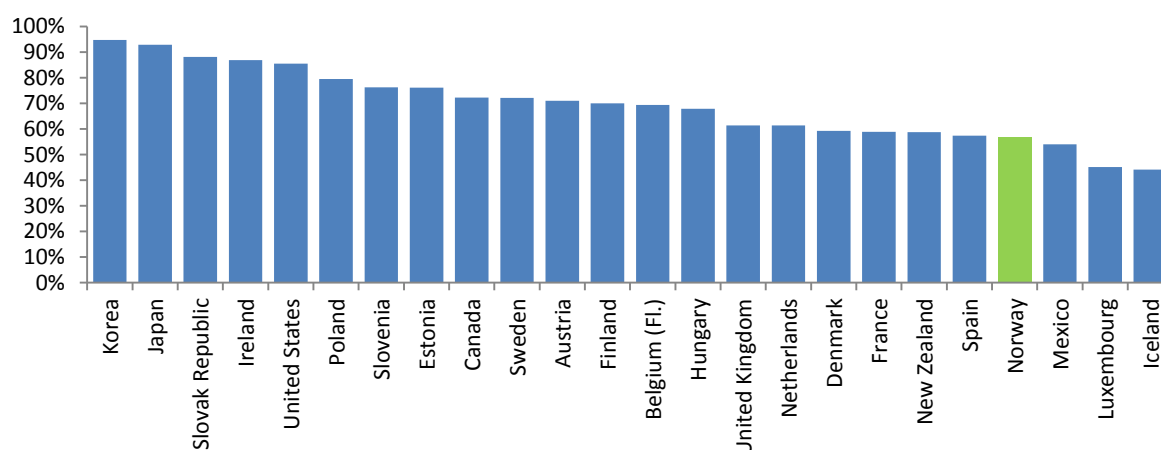
Figure 18. Upper secondary graduation rates, 2011



a) Only first-time graduates are reported

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

Figure 19. Upper secondary on time completion rates



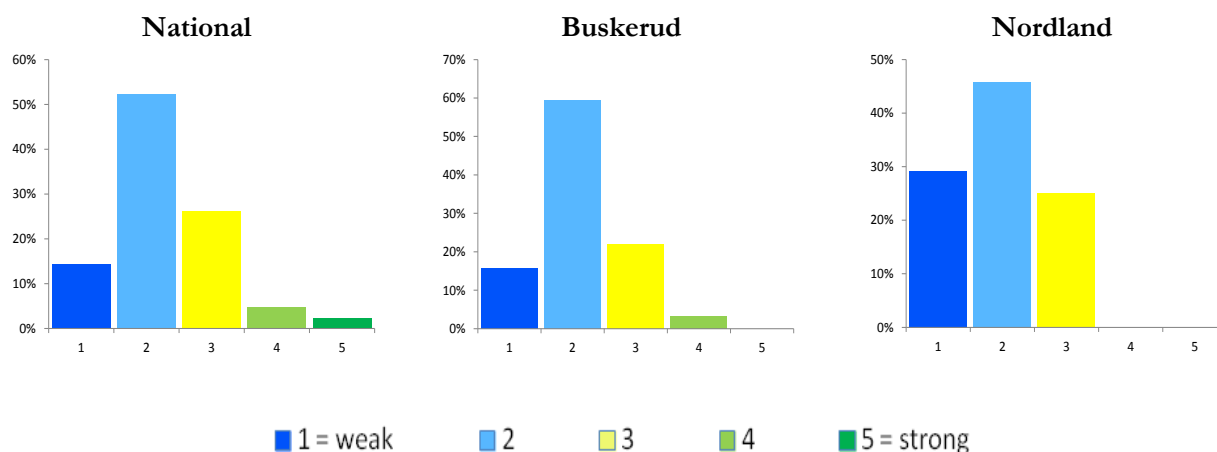
a) Duration of programme is country specific, ranging from 2 to 4 years. Year used for new entrants is dependent on duration

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

On time completion rates on the other hand, which measure the proportion of students enrolled in upper-secondary who will leave with a qualification within the expected duration of the course, fall below 57% (Figure 19). This suggests that, of those enrolled at any time, many will drop-out or fail to complete in the time expected. Completion rates within 2 years of the expected graduation date, at 72% are somewhat higher but, with an average age of 22, Norwegian graduates are among the oldest in the OECD.

Is Norway reducing the number of young people who drop out before completing upper secondary education?

Participants were asked to use the OECD Skills Diagnostic Toolkit to score the performance of Norway's current skills system in delivering a number of critical outcomes. A low score indicates that the current skills system does poorly in delivering the outcome described and a high score indicates a strong performance. The results from workshops at the national level and in 2 counties are presented below.



The number of young people dropping out of education is recognised as a significant concern across the country. The percentage who complete and pass within 2 years of their expected completion date varies greatly among the counties. While 74.5% of those pursuing general or vocational courses complete in Oslo within 2 years of the stipulated period, in Buskerud County the rate is 69.6% and in Nordland County just 67% (Education Mirror 2012).

One of the factors behind these stagnant educational attainment rates in Norway is the high number of students that drop out from upper secondary school – numbers which are even higher among vocational students. In 2010, completion rates for students of vocational courses, at 62%, were significantly below those rates among students of more general courses (83%) (OECD 2012). This has the effect of exacerbating the unmet demand for qualified workers that characterises the Norwegian labour market. Behind these low vocational completion rates lie a number of factors that characterise the circumstances of those who choose to undertake vocational studies – both their skill level and their location.

Recent data from the Survey of Adult Skills shows that, in most participating countries including Norway, young adults aged 16 to 29 years old whose highest educational attainment is general (academically oriented) upper secondary education, tend to have higher literacy scores than those with a vocationally oriented upper secondary education. Given the strong relation between educational performance and dropout (Lyche 2010), this may be a contributing factor for the higher drop-out rate among vocational students. Another related factor is the location of those choosing vocational courses – the proportion of students enrolled in vocational courses is significantly larger in more rural counties such as Finnmark (where the completion rate is the lowest) than in Oslo.

Box 12. Skills Obstacle Course: Kari

Profile: Kari is 17 years old and grew up in Grorud, an eastern district of Oslo. She lives with her mother, who is unemployed, and her younger brother. Kari was enrolled in a vocational education and training programme in health and social care until she dropped out 5 months ago.

Task: Workshop participants were asked to put themselves in the shoes of Kari to help her navigate Norway's skills system.

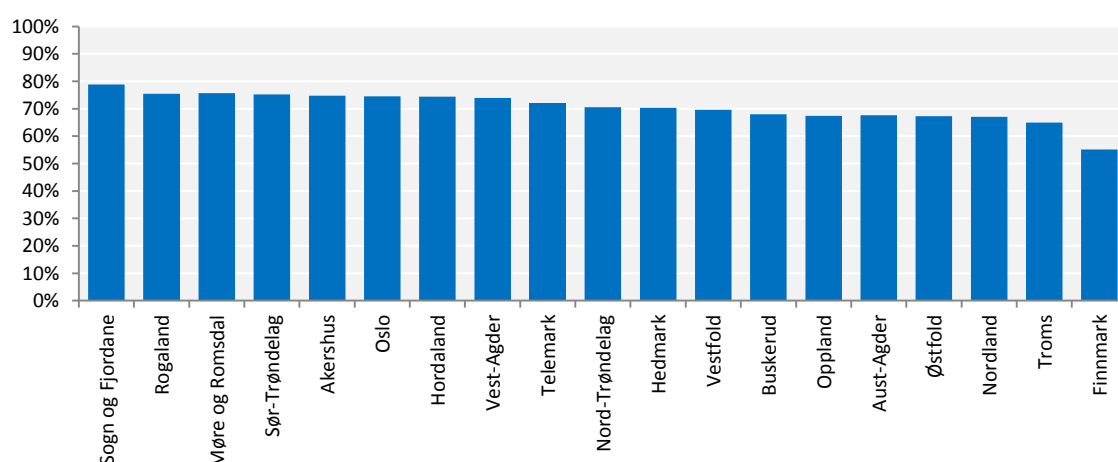
Goal: To get a job as fast as possible and leave home.

- Obstacles:**
- Lack of qualifications
 - Difficulty demonstrating skills
 - Lack of motivation
- Options:**
- Guidance at school
 - Youth Guarantee
 - New Possibilities (Ny Giv)
 - Guidance from Public Employment Service



On time completion rates of upper-secondary students differ quite substantially across the country; ranging from just 55.1% in Finnmark to 78.8% on Sogn og Fjordane (see Figure 20 below). This may, in part, be a reflection of the differing characteristics of students from county to county, for example, the parents of those in more rural areas tend to have lower educational attainment – a factor that is associated with educational difficulties. The disparate completion rates may also reflect the influence of local labour markets on the type of educational courses that students choose and the incentives they may have to drop out early.

Figure 20. Completion of upper secondary within two years of expected time, by county
2004 age cohort



Note: Consistency with national figures may be compromised due to different source

Source: Statistics Norway

The high dropout rate from upper secondary education has been stable for many years in Norway. The result of this is that close to 650 000 adults still do not hold an upper secondary education. In the context of increasing demand for high skilled labour and heavy competition for those jobs that do not require a high school diploma, tackling drop-out and its lifetime consequences has become an urgent issue.

Norway in Focus: Partnerships to tackle drop-out: New Possibilities (Ny Giv)

In response to this high and continued drop-out rate in Norway a national programme “New Possibilities” (*Ny Giv*) has been introduced with the aim of encouraging more young people to complete and pass upper secondary education.

An important component of *Ny Giv* is the emphasis it places on fostering improved cooperation between different levels of government and the centrality of the belief that tackling dropout can only be achieved through a lasting partnership between the state, counties and municipalities.

The three year project, launched in autumn 2010, has taken the following measures:

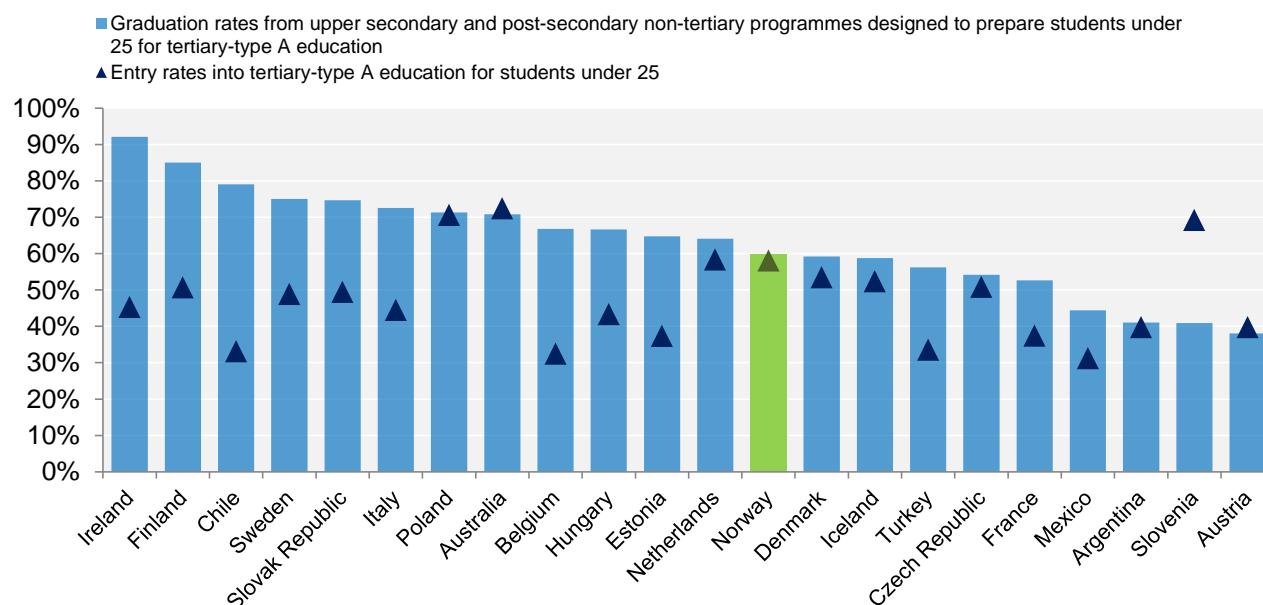
- **Early identification:**
 - *Ny Giv* has intensified follow-up of those pupils with the poorest results in the Year 10 and in upper secondary education and training
 - Pupils in danger of dropping out are offered summer jobs or summer school to smooth the break between different levels of schooling and thereby to facilitate transitions.
- **Teacher development:**
 - The programme has funded courses in how to develop pupils’ basic skills in reading, writing and numeracy for teachers across the country
 - Teacher networks have been created to orient teachers’ classroom practice for the common core subjects of Norwegian, English and Maths
- **Information collection:**
 - A common set of indicators has been established to offer credible statistics based on information from all municipalities
- **Relevant and flexible learning:**
 - A new 2 year VET education programme (The Certificate of Practice) has been developed to offer a lower level craft certificate.
 - A new individually adapted education and training scheme based on a reduced package of competence objectives has been developed (The Training Candidature). This offers both work place and school based training.
- **Partnerships:**
 - Collaboration has been enhanced between the “Follow-Up Service” and the Norwegian Labour and Welfare Administration (NAV) in order to help young people between the ages of 16 and 21 years of age who are neither in school nor at work, to return to school or find an apprenticeship
 - Extensive dialogue has been instigated with social partners with the aim of obtaining more apprenticeships both in the private and the public sector

Source : Norwegian Ministry of Education and Research

Smooth transitions to tertiary are undermined by low tertiary completion

Despite the relatively high drop-out rates for young people, the transition from upper secondary education or post-secondary non-tertiary programmes into tertiary education are strong. Figure 21 shows that Norway is among those countries in which a large proportion of those graduating from programmes designed as preparation for entry into tertiary education do indeed enter tertiary education.

Figure 21. Access to tertiary-type A education for upper secondary and post-secondary non-tertiary graduates under 25 (2011)



1. Data for post-secondary non tertiary graduates are missing

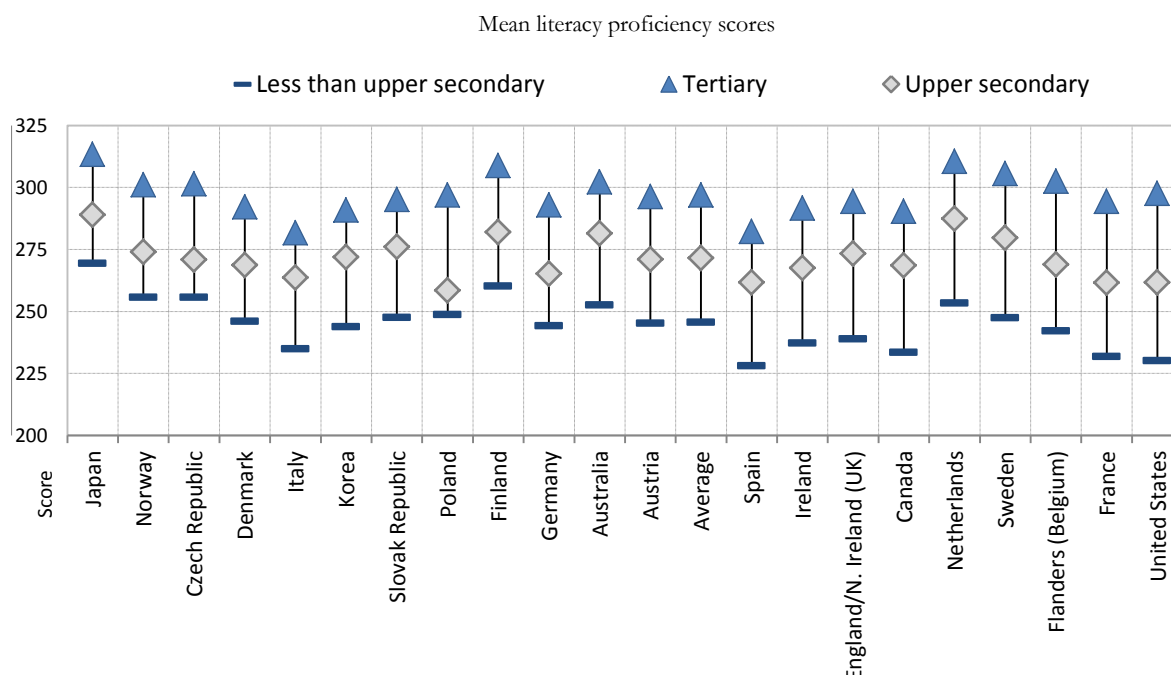
Source: OECD (2013c), *Education at a Glance 2013: OECD Indicators*, OECD Publishing. doi: [10.1787/eag-2013-en](https://doi.org/10.1787/eag-2013-en)

Yet after these relatively smooth transitions, completion rates at the tertiary level are not high. With 59% completion rates in tertiary education, Norway falls behind the OECD average of 68%, and substantially behind countries such as Denmark, Finland, France and Japan who all achieve tertiary completion rates above 75% (OECD 2013c).

Tackling poor skills later in life is more costly

Unsurprisingly, as elsewhere in the OECD, those with a tertiary degree in Norway exhibit the highest literacy levels. That said, the difference in literacy proficiency between those with tertiary and those without upper-secondary is among the lowest of those surveyed in the Survey of Adults Skills (see Figure 22). Other things being equal, the average proficiency of adults who have not attained secondary education would be expected to decline as the size of this group shrinks relative to the total population (due to the self-selection of more able individuals into further education). Thus, given the high attainment of adults at the secondary level (Figure 22) the relatively strong proficiency among those who have not attained an upper secondary education is particularly marked.

Figure 22. Differences in literacy proficiency by educational attainment



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

It is likely that the emphasis placed on adult-learning systems, Norway's strong performance in targeting training to those who are less qualified, and the high participation rate, all play a role in explaining the relatively solid performance of adults with a low level of educational attainment. However, addressing skills disparities later in life, while important, is likely to be more costly than targeting the causes of these disparities before they arise.

Despite solid literacy rates among adults who have not attained an upper secondary qualification, employment rates among these young adults are significantly lower than those of their more qualified counterparts. This suggests that poor qualifications are leading to an underutilisation of skills. Furthermore where the proportion of tertiary-educated 15-29 year olds in employment has *increased* by 8 percentage points since the beginning of the financial crisis (from 63% in 2008 to 71% in 2011) the proportion of those without an upper-secondary qualification in employment has decreased by five percentage points (from 33% to 28%) over the same period (OECD 2013c).

Failure to complete school, and delayed completion, carry substantial costs. On average those who drop out of education will have a lower income and a higher probability of falling into unemployment. Investments in identifying, targeting and addressing the needs of those vulnerable to dropping out are likely to yield substantial returns – both for the individual and for society.

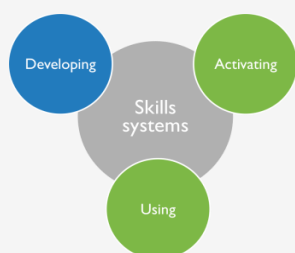
Box 13. Re-engaging drop-outs

Working with young people before they drop out of school is a challenge; working with young people when they have already left the education system can be significantly more challenging and costly. Nevertheless, providing second chances so that early educational decisions do not impede people's entire working life can have profound implications – both for the individual and the economy.



Youthreach is a national programme in **Ireland** for young people who have already dropped out of school and with poor qualifications. Aimed at 15 to 20 year olds, Youthreach is provided in out-of-school settings largely in VET managed-centres or independently managed Community Training Centres. It is designed for learners who have had poor experiences of school and present high levels of personal and educational needs and generally offers the same curriculum as mainstream schools but with smaller classes, and a greater focus on mentoring and social and personal support. Youthreach has four phases which are not specifically time bound and are organised to allow learners at various levels to progress through the programme: Induction/Engagement; Foundation; Progression; and, Transition. To secure a place a young person and their family usually go directly to a centre, although in some cases a school will transfer an individual before they drop out. A young person may also be referred by another local agency, the police service, a care service or charity. However referral pathways are often disjointed and there can be a considerable delay between someone leaving school and attending a Youthreach centre. Reviews of learner outcomes from the model have shown that over 75% of participants progress to the labour market or to further education and training.

Source: OECD (2014, forthcoming), Local Youth Employment Strategies Ireland, OECD Local Economic and Employment Development (LEED) Working Papers, OECD Publishing, Paris.



Where do drop-out numbers fit into the skills system?

Young people who drop out of the education system are often those with **weak foundation skills** (Challenge 1). Drop-out before completion can have profound implications for future labour market prospects through **difficulties in finding initial employment** (Challenge 5) and a greater likelihood of **relying on social benefits later in life** (Challenge 4).

CHALLENGE 3: INFORMING EDUCATIONAL CHOICES

Workshop participants referred to a common phenomenon of mismatch between what students choose to study and the skills employers are looking for:

“Education choices are not matched with labour market needs”

“Generous funding increases the use of tertiary education for sorting purposes rather than skills development”

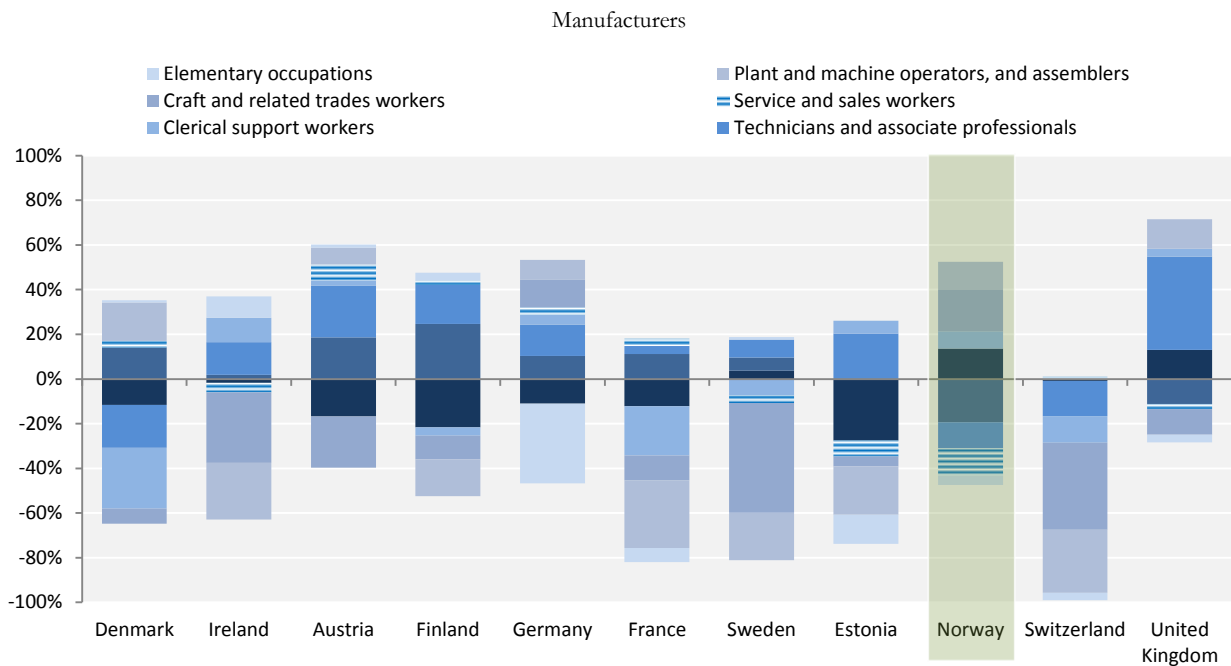
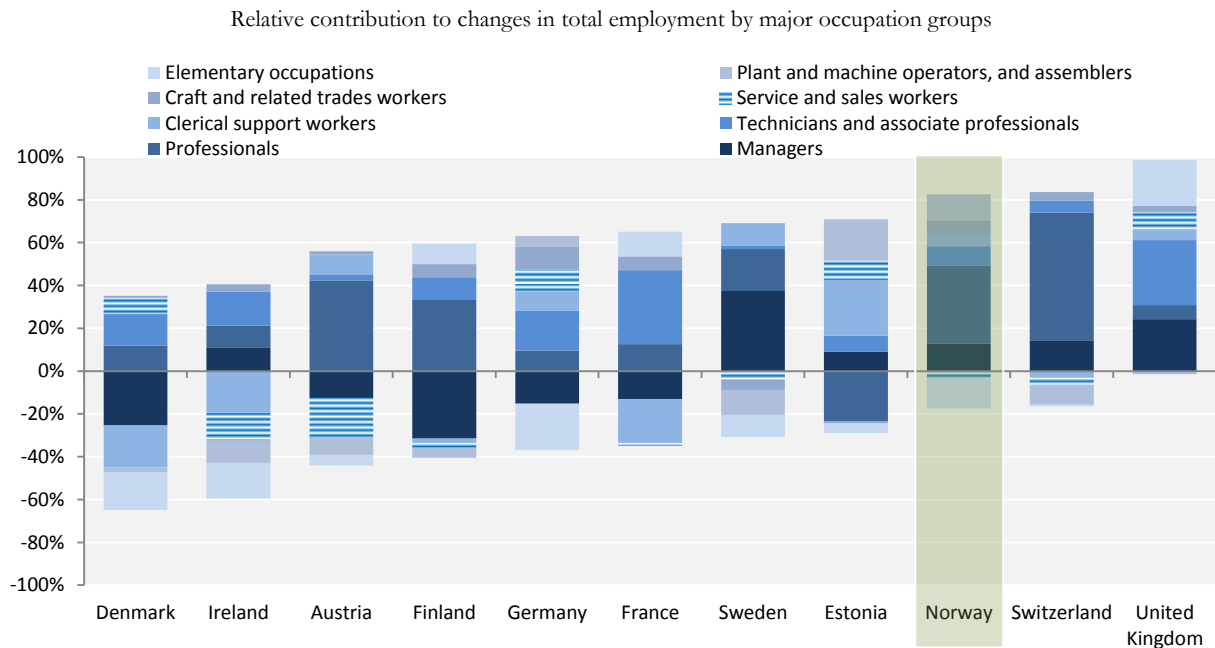


Skills needs are changing rapidly

Across the OECD countries are seeing many of the same trends shape the demand for skills in their workforce including demographic change, technology change and trade, as well as organisational change and the casualisation of employment. Routine tasks are increasingly being offshored or automated while technological change is enhancing the productivity of highly skilled workers and those that are able to solve problems in a technology-rich environment. At the same time the ability to communicate and collaborate effectively is growing in importance and workers working together in the close proximity of urban areas are seeing their productivity and wages rise (Ahrend, R., *et al.* 2014, forthcoming).

In Norway, over the last two decades, the share of professionals, technicians, and associate professionals has grown rapidly from just over 25% of the labour force in 1995 to a projected 45% by 2015 (Handel 2012). This trend is seen across the OECD but has been particularly pronounced in Norway. At the same time, the share of those working in production-related occupations has fallen by five percentage points to just over 20%. Managerial, service sectors and sales are similarly expected to decline in their occupational share. Similar patterns are observed on even shorter time horizons. Between 2011 and 2012, Norway's occupational structure changed as the number of workers in elementary occupations and service and sales workers has shrunk while growth in professionals and managers contributed to Norway's strong employment growth in business services (Figure 23).

Skills demands are constantly evolving. If the supply of skills embodied in the Norwegian economy is to keep pace, adequate information and appropriate incentives must focus the choices of students and courses offered by educational institutions on those skills that the workplace demands.

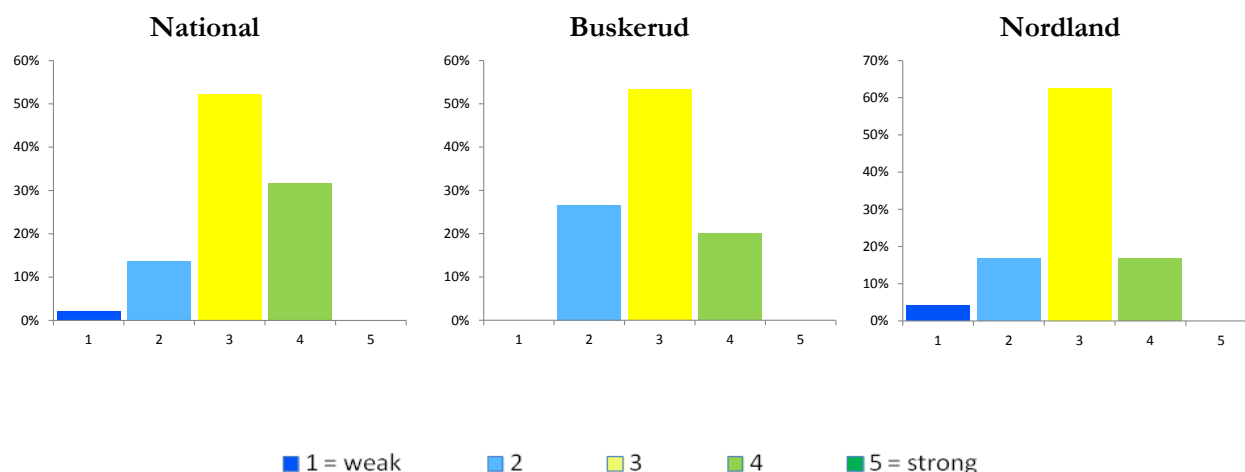
Figure 23. Short-term trends in occupation shares, services and manufacturing, 2011-12

Note: For each country, the figure expresses the changes by occupation group as a percentage of the sum of the absolute changes. Occupations are defined according to International Standard Classification of Occupations 2008 (ISCO-08). Craft and related trades workers includes ISCO-08 major groups 6; Skilled agricultural, forestry and fishery workers, which are reported by a few countries under manufacturing and business-sector services. Manufacturing corresponds to ISIC Rev. 4 (NACE Rev. 2) Divisions 10-33 (Section C) while business sector services cover Divisions 45-82 (G-N).

Source: OECD (2013d) *OECD Science, Technology and Industry Scoreboard 2013: Innovation for Growth*, OECD Publishing. doi: [10.1787/sti_scoreboard-2013-en](https://doi.org/10.1787/sti_scoreboard-2013-en), based on Eurostat, European Labour Force Surveys, June 2013.

Do people develop skills demanded by Norway's labour market?

Participants were asked to use the OECD Skills Diagnostic Toolkit to score the performance of Norway's current skills system in delivering a number of critical outcomes. A low score indicates that the current skills system does poorly in delivering the outcome described and a high score indicates a strong performance. The results from workshops held at the national level and in 2 counties are presented below.



Participants in the diagnostic workshops across the country felt that education system was not successfully developing the skills demanded by the labour market. This view was particularly pronounced among participants in the county workshops where few thought the system was performing well on this outcome.

Box 14. Nothing in Common, UK

A recent study conducted by the Education and Employers Taskforce, and based on a survey of 11 000 young people between 13 and 16 years old, attempts to map the job ambitions of teenagers against the employment market up to 2020. The study has found a "massive mismatch" between young people's career expectations and the reality of the jobs available. It shows teenagers have a weak grasp of the availability of jobs - and that large numbers will be aiming for jobs that are in short supply. There are 10 times as many people aiming for jobs in the culture, media and sports sector than there are jobs likely to be available. Even though almost a quarter of jobs are in the distribution, hotels and restaurant category, only about one in 40 young people are considering careers in these industries. Fewer than one in 30 young people are considering jobs in banking and finance, even though one in five jobs are expected to be in this sector. The study also indicates teenagers have a very weak understanding of potential earnings for different career choices.



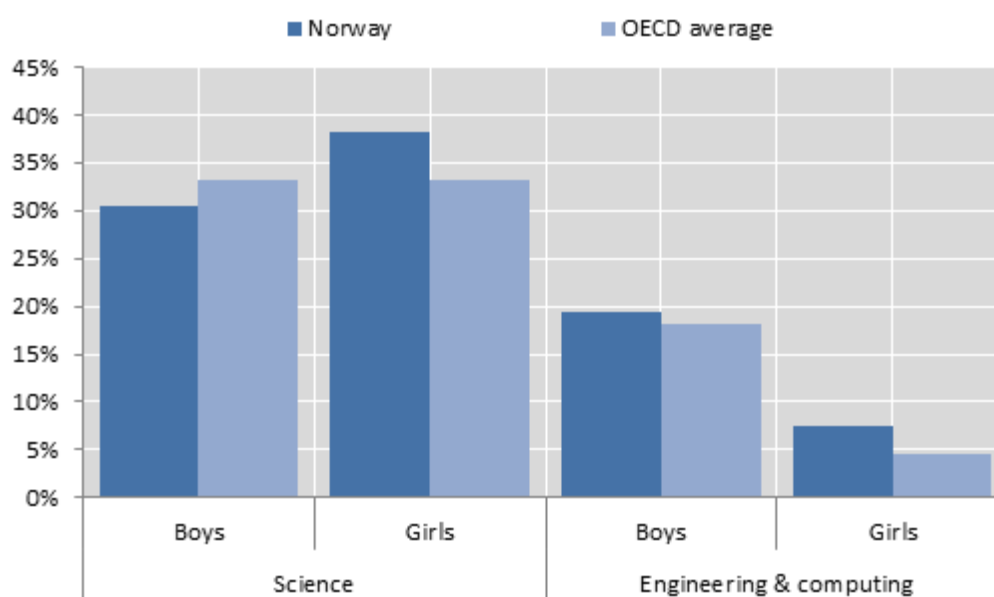
Source: Mann, A., *et al.* (2013), "Nothing in common: The career aspirations of young Britons mapped against projected labour market demand (2010-2020)", http://www.inspiringthefuture.org/media/8087/press_release_nothing_in_common_final_11_march.pdf

And critical skills are in short supply...

Obtaining a tertiary type A degree has a large impact on employment prospects in Norway. The disparity between employment rates of tertiary educated adults and those with only lower secondary education, at over 90%, is the highest in the OECD (OECD 2013c). There are two potential drivers for this large impact. The first is that the quality of tertiary education raises the productivity of these workers and hence the market demand, the second relates to the signal to employers that is implied by the lack of a tertiary education in the context of the high public subsidy and low private costs. The small disparities between the literacy of high- and low-educated worker's imply that educational attainment may indeed be playing a signalling role.

Despite this strong employment performance there remains concern in Norway that students are not aspiring to develop the skills that are in strong demand in the Norwegian labour market. Just 34% of students aspire to a science related career at age 15. While this is marginally above the OECD average (33%), it falls significantly below that seen in many OECD countries, such as the US, Canada, Mexico and Chile, where well above 40% of students aspire to a career in this field. Furthermore just over 1% of 25-34 year olds in employment hold a qualification in a science related field. This falls short of the OECD average of nearly 2% and lags well behind OECD leaders such as Finland (3.05%) and Korea (3.44%) (Figure 25).

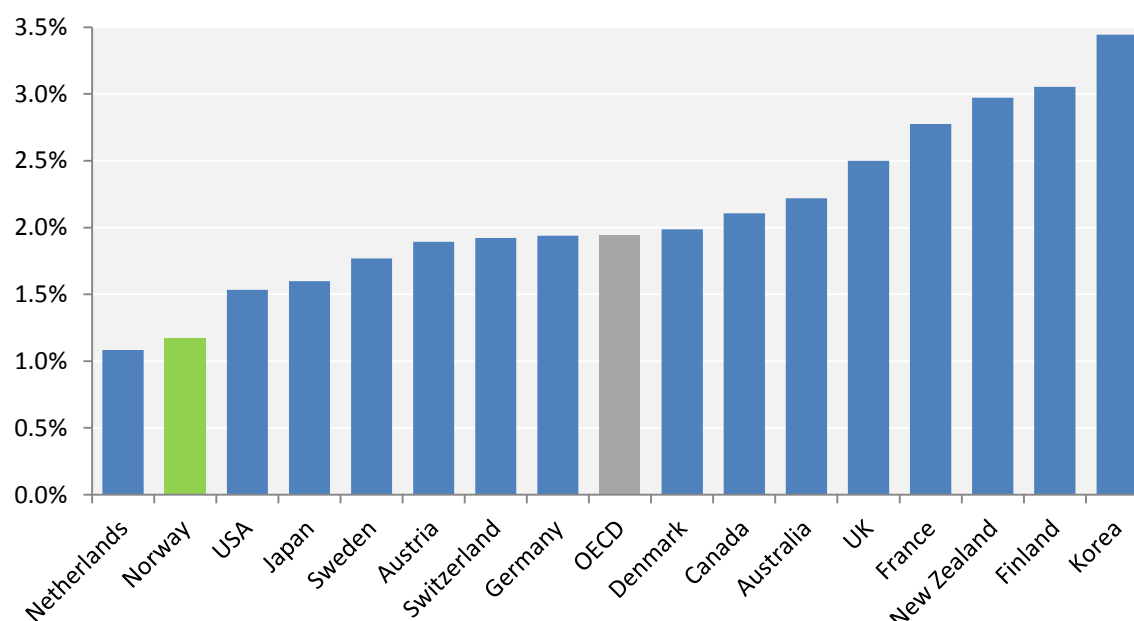
Figure 24. Students aspiring to pursue careers in science or engineering and computing at age 15



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

Figure 25. The share of STEM graduates is low

Share of total employment of persons aged 25-34, 2010



1. Scientific fields include life sciences; physical sciences, mathematics and statistics, computing; engineering and engineering trades, manufacturing and processing, architecture and building
2. For Australia, Canada and France data refer to the year 2009

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

Box 15. Skills Obstacle Course: Petter

Profile: Petter is 21 years old and will finish his undergraduate degree in marine biology this spring at the University of Tromsø. He has excellent grades and has the opportunity to continue his graduate studies – either in fish stock management or in biotechnology. But he also has a job offer from a small insurance agency in his home town of Trondheim, which offers an attractive starting salary.



Task: Workshop participants were asked to put themselves in the shoes of Petter to help him navigate Norway's skills system

Goal: To make the right career choices after his degree: should he start work or enroll in further study?

Obstacles: ○ Poor guidance ○ Short-term costs ○ Insecurity about opportunities in research

Options: ○ Guidance at school ○ Potentially high paid work ○ Information from employers

Young people need appropriate incentives to make the right educational choices

In Norway, debate around changing skills needs has focused largely on the ability of the education system to provide the skills that will meet the needs of the labour force. Yet this overlooks another issue which arises “upstream”, namely the fact that students are not choosing to enrol in programmes that provide the skills most in demand.

To address shortages of high-skilled workers, many OECD governments have attempted to increase tertiary education enrolment rates. However, while governments have a role to play in encouraging tertiary enrolments (e.g. through guidance and financial-support schemes) young people also need to make an informed assessment of the costs involved in skill acquisition and the returns these skills are likely to yield when making educational choices.

On average across OECD countries 68% of total expenditure on tertiary education comes from public sources, in Norway this figure is 96%. This raises the question as to whether the Norwegian system of education provision (high levels of public provision as opposed to private provision) and financing (largely through public funds or low-interest student debt as opposed to savings or earnings) obscures market incentives for students and leads to inefficient educational choices. Simply put, students that need to contribute their own funds to their degree have sharper incentives to choose courses which will raise their future employability after graduation.

Norway has a comparatively generous system of education provision, where direct costs to the individual are very low due to the extensive public provision and funding of education. Notably:

- all public education is tuition-free, regardless of age;
- student grants are offered to many of those below a generous income threshold, which keeps non-tuition costs low; and
- student loans are available to all students, regardless of the income level of the students or their parents. These loans are interest-free while in education.

Students in Norway do end up with loans to repay, but the challenge of paying these loans may seem distant when making educational choices. The most significant cost associated with time spent in education is the opportunity cost of forgone earnings. This is not always fully accounted for by students when they make choices regarding their educational pathways.

Norway in Focus: Ensuring that the tax code supports broader skills policy requires a systemic approach to skills

Though the returns to skill in Norway are low in comparison to some similar OECD countries, the tax code is relatively “skills friendly”. This is in part due to relatively high levels of public financing as well as generous deductions and exemptions from taxation. The modest progressivity of the Norwegian tax system plays an important role here. While marginal tax rates at most income levels are higher in Norway than the OECD average, they do not rise sharply with income. In countries where tax rates do rise sharply with income, the extra returns to marginal skill investments are increasingly taxed away. So Norway’s comparatively modest level of progressivity keeps the effective tax rate on skills investment low. In other words, while Norway’s overall level of tax of labour is high, the rate at which the tax rates rises with income is comparatively low. Indeed, the tax code is regressive over some parts of the wage distribution which further incentivises skills development.

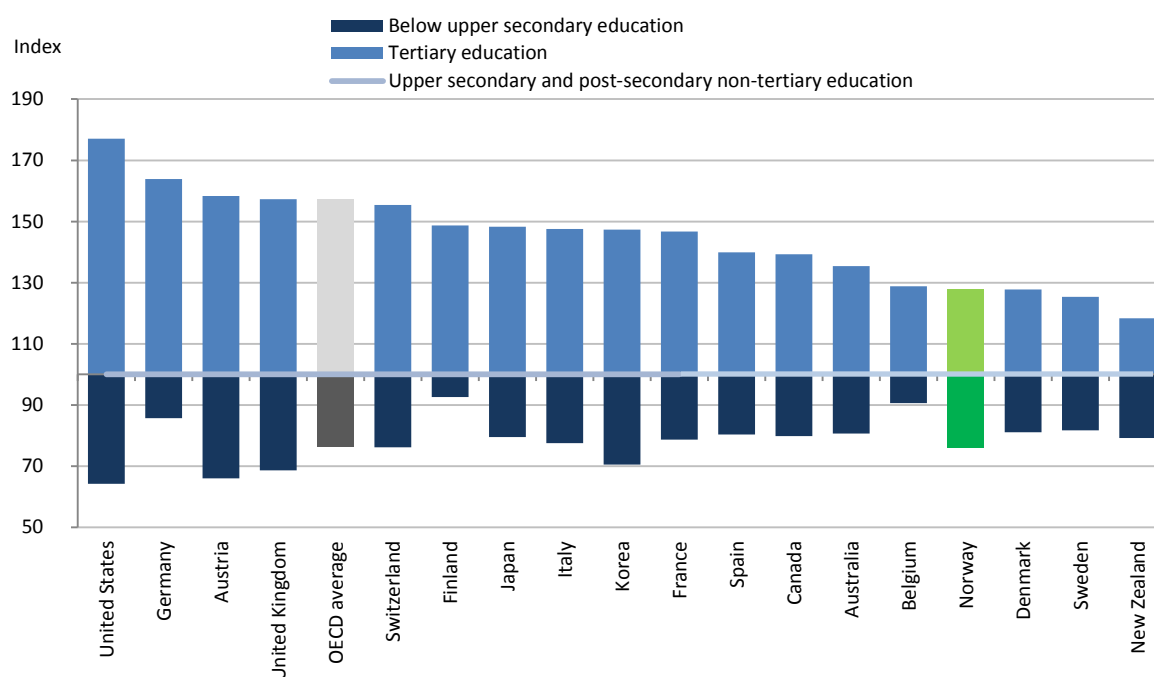
Tax policy should, broadly speaking, endeavor to be neutral and avoid altering individuals’ and firms’ decisions to invest in skills, where other aspects of skills policy are achieving necessary policy goals. However, in instances where externalities, market frictions or market failures mean there is reason to suspect that there is inefficient underinvestment in skills, it may be desirable to use the tax code to encourage skills investment – either independently or in concert with other non-tax-policy approaches.

Designing an effective tax policy which is also “skills friendly” requires a systemic approach – one which examines the tax system as it relates to other aspects of employment, education and labour market policy.

Market signals can provide an important source of information and shape the incentives that drive students' educational choices. To a certain extent this appears to be happening in Norway, given that between 2005 and 2013 the number of students applying to study science has increased by 47% and technology by 68% (Norwegian Ministry of Education and Research).

Yet low unemployment rates and a narrow wage distribution, dampen these signals in Norway. As Figure 26 shows, in all OECD countries tertiary-educated adults earn more than adults with lower levels of education. On average in the OECD a person with a tertiary education can expect to earn over 50% more than a person with an upper secondary or postsecondary qualification. The equivalent earnings premium in Norway is below 30%. This low tertiary wage premium, combined with the small variance in wages across sectors (Figure 27), is likely to be, in part, both a cause and a consequence of untargeted educational choices. If subjects chosen do not match labour market needs then employers are unlikely to pay a wage premium. At the same time, if the skills in high demand are not rewarded through higher wages, then wages cannot direct student choice. This is particularly true in a tight labour market – such as that of Norway – where employment outcomes are less sensitive to field of study.

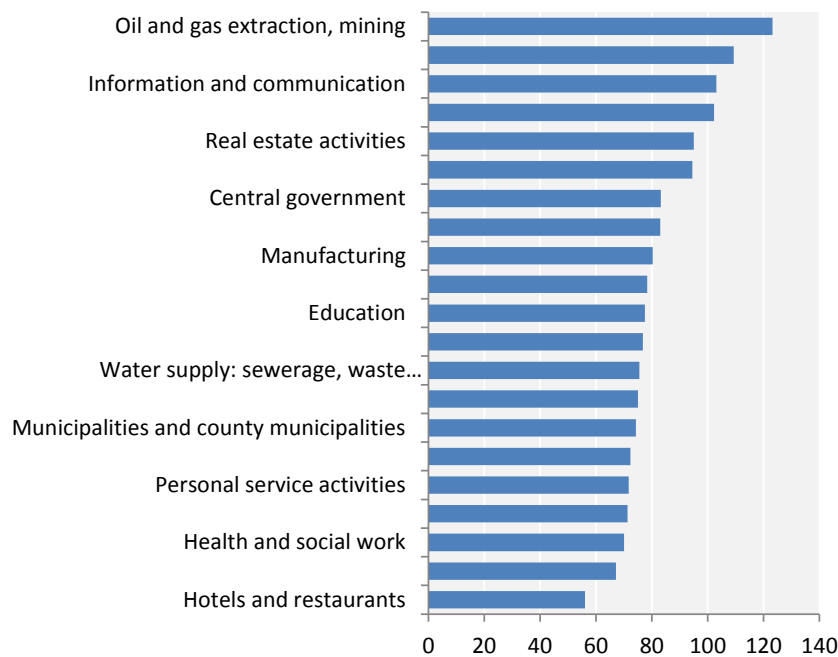
Figure 26. Relative earnings of 25-64 year-old workers, by educational attainment (2011, or most recent)



1. Earnings net of income tax.

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

Figure 27. Estimated annual earnings by sector (1000 USD)



3. Exchange rates as of 10/10/13

Source: Statistics Norway

Where market signals do not fully reflect the existence of skill shortages, alternative measures are needed to ensure that students are fully informed about the implications of their educational choices. Norwegian authorities have introduced schemes in the State Educational Loan Fund to give people incentives to develop those skills they judge are most needed, and to attract specific skills to parts of the country where recruitment is difficult. For example, workers who relocate to certain regions in the northern part of Norway and doctors who work in specific municipalities may be entitled to loan write-offs. In 2009, a further loan write-off scheme was introduced for students graduating from teacher education with a specialisation in science, foreign languages, or education in the Sami languages. These schemes, however, are relatively blunt instruments; they can create distortions, and can be slow to respond to changing labour market needs.

Direct flows of information between labour markets, students and skills-formation institutions are needed to ensure that the skills developed are the ones needed by the economy and can be employed efficiently.

Information on local and national job opportunities can help ensure skill supply responds to demand

In order to ensure that young people make appropriate educational choices they must be able to access adequate information upon which to base these choices. This will include up-to-date information on regional and national employment opportunities, potential returns of investment in education (expected earnings and potential career paths), current skills shortages and the qualifications necessary to demonstrate skills in their chosen field. Yet it is not just young people who require information. Better information is needed by all actors in Norway's skills system:

- students who choose careers and seek employers requiring the skills they possess;
- workers who want to upgrade their skills to boost their careers and make the most of their talents;
- unemployed people who want to get back into the labour market;
- firms looking for the right skills; and
- government ministries and directorates that design education programmes and make investment choices.

To address this information gap an initiative recently launched by the Ministry of Education and Research aims to establish a new system for the analysis, interpretation and dissemination of future skills needs with the dual aims of:

- improving the match between the supply of skills and the skills demanded on the labour market by informing the educational and career choices of young people; and
- providing a basis for the design and implementation of educational policies by informing educational institutions, school owners and NAV.

However, the form this dissemination tool will take has not yet been finalised and several questions remain to be resolved including:

- to what extent the project conducts independent analysis or act primarily as a convenor of information?
- should the service focus on trends in supply and demand of education, of qualifications, of skills or of occupations?
- should quantitative projections be conducted at the national or regional level, disaggregated by sector, and cover in the short, medium or long-term?

Although in its early stages, this initiative represents a promising first step towards filling the skills information gap.

Box 16. Offer credible, accessible and relevant sources of information

When people are thinking about and planning their careers, they often ask themselves many of the same questions: "How many people do that job?" "How much do they get paid?" and "What skills do I need?" The information necessary to answer these questions is often available in the large amounts of high quality labour market information available from national statistics. Yet these sources can be difficult to locate and, because they are highly technical, they can be difficult for non-experts to use.



In the **United Kingdom**, to ensure all this data is accessible to those that need it the UK Commission for Employment and Skills has developed an online data portal. "LMI for All", aims to bring together existing sources of Labour Market Information (LMI) that can inform people's decisions about their careers. Rather than creating a new website for individuals to access. The portal will make the data freely available for open use by developers so that new applications and websites can bring the data to life, presenting it in an engaging way shaped to specific audiences. To ensure that the data provided can be used without compromising quality or confidentiality, "LMI for All" includes guidance for developers about what the different data sources mean and how they can be used.

Sweden's "Occupational Compass" is an attempt to provide information to guide student career choice in an easily accessible format online. A number of national websites provide information and guidance for youth and adults. The portal Utbildningsinfo.se includes search tools for educational paths and providers, mainly in upper secondary school and municipal adult education. It also provides information about possible vocational outcomes, the situation on the labour market in the area, funding and other material of importance when choosing a study path. In addition to providing clear descriptions of different professions and possible education paths, the portal administered by the Swedish Public Employment Service "Occupational Compass" (*Yrkeskompassen*) provides information on the current labour market situation in about 200 professions as well as forecasts of future prospects over 1, 5 and 10 year periods and includes one year forecasts at the regional level.

Similarly, in **Spain** Barcelona Activa's "Porta22" web portal seeks to "foster the transformation of Barcelona through entrepreneurship, business growth, innovation, human capital, professional opportunities and quality employment". As part of this process, the agency aims to improve the skills demand and supply match in the city. To assist with this, Barcelona Activa has recently created a unique online service for professional guidance – Porta22. Porta22 is a web portal that contains tools for all types of users who want help defining and putting into practice their own professional paths, as well as for professional guidance counsellors. It is divided into three main sections (Person, Tools and the Market) and provides functions that allow users to explore the local labour market and learn more about job opportunities. One of its tools is a bank of almost 1 000 professional profile descriptions that gives information on all aspects of a given career, and profile descriptions are linked to a search engine that has over 7 000 job offers. A professional interest test allows users to identify their work interests and match their own profile with job profiles. The key skills dictionary allows users to better understand the importance of key competencies in the current labour market.

Source: taken from www.ukces.org; <http://www.arbetsformedlingen.se>; OECD LEED Local Skills Strategies, www.oecd.org/document/57/0,3746,en_2649_34417_48956153_1_1_1_1,00.html; Clark, G., J. Huxley and D. Mountford (2010), *Organising Local Economic Development: The Role of Development Agencies and Companies*, Local Economic and Employment Development (LEED), OECD Publishing.

Another potential source of information is provided by the model-based projections of the demand for and supply of labour regularly produced by Statistics Norway. Such projections have the potential to provide students, employers, and the authorities with useful information regarding probable evolutions in the labour market. However, if they are to inform student choices these projections, and the assumptions upon which they are based, must be accessible and comprehensible. Box 16 outlines some ways in which labour market information has been disseminated in other OECD countries. Projections, however, remain uncertain and should not displace other information sources such as information on current labour market outcomes and input from employers (Box 17).

Box 17. Promote employer engagement at the local and national level

Providing clear, up-to-date information on local employment sectors and the skills required to enter these, enables job-seekers to assess which career paths are open to them and enhances transparency in career pathways. However it will be impossible to gain an appropriate and up to date picture of the trends and patterns in demand for skills and qualification without ensuring that employers are at the heart of education, training and career advice.



Also in **Barcelona**, 'Barcelona Global' is a new programme in collaboration with the Department of Education to bring the world of business to upper-secondary students. The aim of the project is to create a conversation between business and students in which high level business managers describe their own experience in business and explain which skills are needed on the job. The project has the dual objectives of inspiring young people to work in the business world while at the same time informing them of the skills such a career requires. During the 2011-2012 academic year sixty speakers have reached over 10 000 students during the course of 200 dialogues.

Speakers for Schools, a similar project launched by Inspiring the Future in the **United Kingdom**, encourages people from different professions to visit state schools and talk about their jobs. Among the most prominent Speakers for Schools was software billionaire Bill Gates, who visited a secondary school in south London.

Source : See <http://www.barcelonaglobal.com/projects/detail/49/school-business>

Better labour market information can be supported by career guidance services. However, while those students already in the education system have access to career guidance in Norway, those who have fallen out of the system struggle to access a comprehensive careers advice service. The Norwegian government has highlighted the need for a comprehensive career guidance system as a priority and has devoted substantial funds towards the establishment of career centres directed towards adults who do not have access to other guidance provision.

Provision is targeted at the county level so as to be accessible to vulnerable groups, yet thus far, only 14 of the 19 counties have opened such centres. Improving the evidence base in the field of career guidance is a priority for the Norwegian Agency for Lifelong Learning (Vox). A recent survey found that users of the centres, largely adults with limited education or people in transitory unemployment, report satisfaction with the guidance received and many report entering education or work as a result.

Box 18. Integrate career advice with practical experience in the workplace

The best way to gain knowledge of the workplace is to experience it firsthand. Work experience can provide young people not only with information regarding the type of job that would match their skills but it can also strengthen their knowledge of the skills required in the workplace and the relevance of the skills they learn in school.

In the **United Kingdom** several social enterprises have sprung up in order to smooth the path into non-traditional and creative careers that can appear particularly inaccessible to people with disadvantaged socio-economic backgrounds who have little:

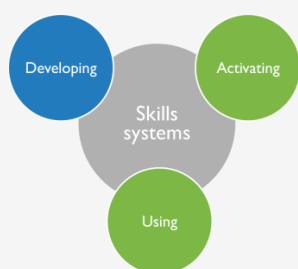
- information on available opportunities;
- limited economic resources; and
- few networks.

Dalston Open Studios (DOS) is an initiative set-up in the Borough of Hackney in East London, an area suffering from particularly high NEET levels. DOS attempts to overcome these challenges through:

- creating awareness among young people – both in and out of education – about the creative economy in Hackney, and informing them about possible pathways into creative careers;
- fostering links between local schools, local business and community organisations;
- helping young people develop the skills they need to launch them into creative careers; and
- encouraging and facilitating small to medium creative industries to engage with local young people.

DOS works with all schools in the Borough of Hackney and takes particular care to engage with schools with a higher percentage of students from the lowest 30% of the Income Deprivation affecting Children Index (IDACI) and/or less than 25% success rates in A*-C GCSE examination results including English and Maths.

Source : <http://www.bootstrapcompany.co.uk/>



Where do education choices fit into the skills system?

A poor understanding of career opportunities can lead to drop-out (Challenge 2) as students do not fully understand the benefits of investing in their skills. Poorly informed educational choices can also lead to an under-supply of certain skills to the labour market which means employers may struggle to find appropriately skilled labour in fields of high demand (Challenge 7).

BIBLIOGRAPHY

- Ahrend, R., *et al.* (2014, forthcoming), "What Makes Cities More Productive? Evidence on the Role of Urban Governance from 5 OECD Countries". OECD Regional Development Working Paper .
- Akkerman, Y., *et al.* (2011), *Overcoming School Failure: Policies that Work*, Background Report for the Netherlands, Ministry of Education, Culture and Science, Den Haag.
- Clark, G., J. Huxley and D. Mountford (2010), *Organising Local Economic Development: The Role of Development Agencies and Companies*, Local Economic and Employment Development (LEED), OECD Publishing doi: [10.1787/9789264083530-en](https://doi.org/10.1787/9789264083530-en)
- OECD (2009), *Creating Effective Teaching and Learning Environments: First Results from TALIS*, OECD Publishing. doi: [10.1787/9789264068780-en](https://doi.org/10.1787/9789264068780-en)
- Education Mirror (2012), http://www.udir.no/Upload/Rapporter/2012/US2012_ENG_netversion.pdf
- Lyche, C. (2010), "Taking on the Completion Challenge: A Literature Review on Policies to Prevent Dropout and Early School Leaving", *OECD Education Working Papers*, No. 53, OECD Publishing. doi: [10.1787/5km4m2t59cmr-en](https://doi.org/10.1787/5km4m2t59cmr-en)
- Mann, A., *et al.* (2013), "Nothing in common: The career aspirations of young Britons mapped against projected labour market demand (2010-2020)", http://www.inspiringthefuture.org/media/8087/press_release_nothing_in_common_final_11_march.pdf
- Moisan, C. (2011), « Comment en finir avec l'échec scolaire: les mesures efficaces », *Projet de rapport national de base de la France*; <http://www.oecd.org/fr/education/innovation-education/49528429.pdf>
- OECD (2012), *Equity and Quality in Education: Supporting Disadvantaged Students and Schools*, OECD Publishing. doi: [10.1787/9789264130852-en](https://doi.org/10.1787/9789264130852-en)
- OECD (2013a), *PISA 2012 Results: What Students Know and Can Do (Volume I): Student Performance in Mathematics, Reading and Science*, PISA, OECD Publishing. doi: [10.1787/9789264201118-en](https://doi.org/10.1787/9789264201118-en)
- OECD (2013b), *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills*, OECD Publishing. doi: [10.1787/9789264204256-en](https://doi.org/10.1787/9789264204256-en)
- OECD (2013c), *Education at a Glance 2013: OECD Indicators*, OECD Publishing. doi: [10.1787/eag-2013-en](https://doi.org/10.1787/eag-2013-en)
- OECD (2013d), *OECD Science, Technology and Industry Scoreboard 2013: Innovation for Growth*, OECD Publishing. doi: [10.1787/sti_scoreboard-2013-en](https://doi.org/10.1787/sti_scoreboard-2013-en)
- OECD (2014, forthcoming), *Local Youth Employment Strategies Ireland, OECD Local Economic and Employment Development (LEED) Working Papers*, OECD Publishing.
- OECD LEED Local Skills Strategies, <http://www.oecd.org/cfe/leed/localskillsstrategies.htm>
- Välijärvi, J. and P. Sahlberg, (2008), "Should 'Failing' Students Repeat a Grade? Retrospective Response from Finland", *Journal of Educational Change*, Vol. 9 No. 4

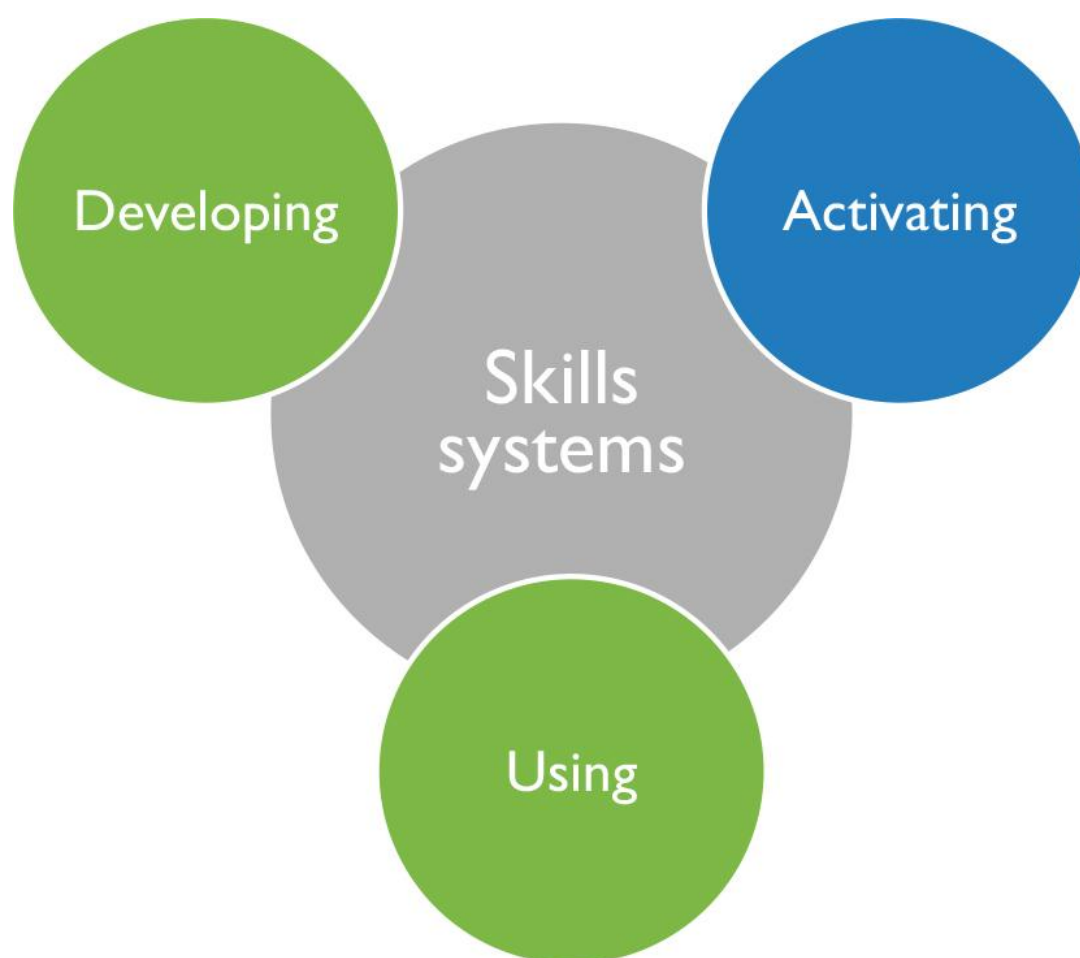
<http://www.arbetsformedlingen.se>

<http://www.barcelonaglobal.com/projects/detail/49/school-business>

<http://www.bootstrapcompany.co.uk/>

www.ukces.org

ACTIVATING SKILLS



ACTIVATING SKILLS

Norway benefits from low levels of unemployment and high participation rates

Labour market participation rates are high in Norway and, in marked contrast to trends observed elsewhere in the OECD, both the unemployment rate and the long-term unemployment rate, which were already low, have been decreasing since the economic downturn of 2008-2009.

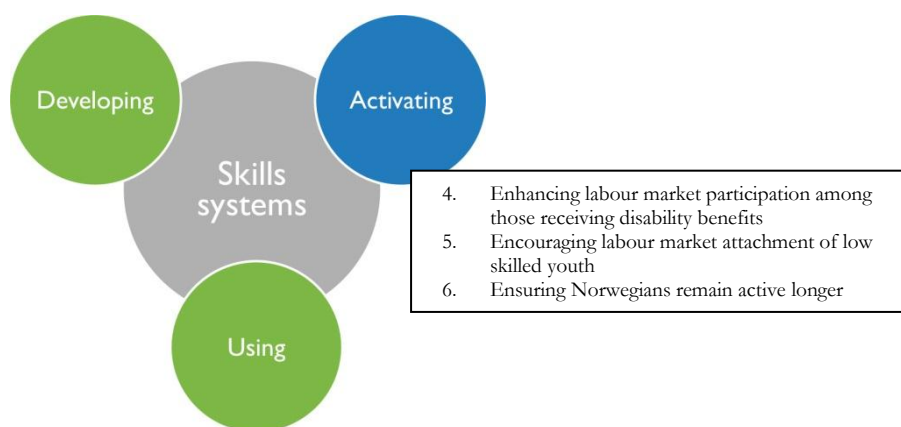
Yet labour utilisation in Norway, measured in terms of hours worked per working-age person, is not high by international standards. High levels of voluntary part-time work and absence due to sickness are contributing factors in this case. High participation rates but short working hours may contribute to Norway's high rating on subjective assessments of work-life balance (OECD 2012). Yet this also underscores the need to ensure widespread activation and efficient use of skills in Norway.

Participants in the national diagnostic workshop saw high labour market participation rates – particularly among women – as one of the strengths of Norway's skills system.

Yet workshop participants also recognised that labour market participation levels are not equally high for all groups in society. They identified several challenges in terms of: school to work transitions; labour market entry for some groups in the population; and disincentives engendered by the benefits system.

This section will address the challenges involved in labour market activation and engagement among those groups whose participation levels are below average in Norway, namely:

4. enhancing labour market participation among those receiving disability benefits;
5. encouraging labour market attachment among low-skilled youth; and
6. ensuring Norwegians remain active longer



CHALLENGE 4: ENHANCING LABOUR MARKET PARTICIPATION AMONG THOSE RECEIVING DISABILITY BENEFITS

Among the challenges identified by workshop participants during the diagnostic phase of the Norway skills strategy the following relate to the challenge of enhancing labour market participation among people receiving disability benefits:

“Many people are on disability pensions”

“Vulnerable groups get trapped in the benefit system”



Labour force participation rates in Norway are among the highest in the OECD. However, as elsewhere in the OECD some socio-demographic groups such as people with disabilities or chronic health problems are more likely to show lower participation rates than others, particularly when they are poorly skilled. In Norway where labour markets are tight and skills shortages exist, higher participation rates among workers with disabilities could play a significant role in increasing the future labour supply.

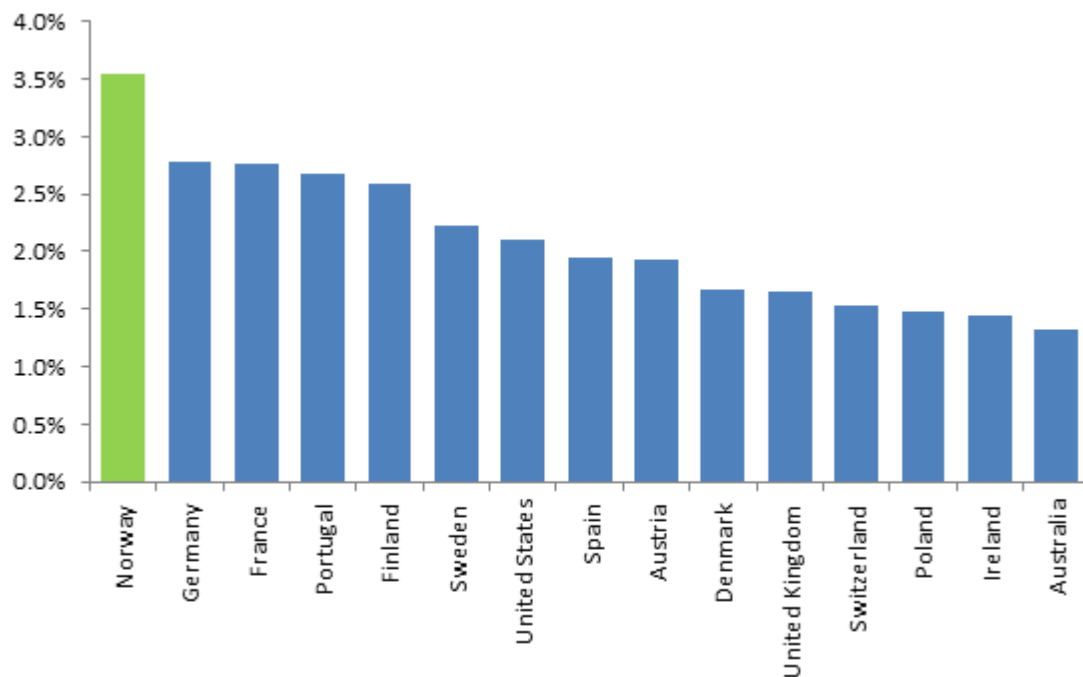
Sickness absence rates are very high

Norway has by far the highest rate of work absences of full-time employees in the whole OECD area, with almost 7% of the workforce being on sick leave at any given moment. This is almost twice the rate of other Nordic countries, which also have high absence rates relative to other countries.

Such high rates of sickness absence represent a heavy leakage on the skills system in the short-run. Over the longer run, extended sick leave is an important precursor to exclusion from the labour market and receipt of a disability benefit. Around one in four persons who have spent eight weeks on sick leave are granted a disability benefit within five years (Gjesdal, S., P. Ringdal, K. Haug (2004)).

An increasing share of sick leave is caused by mental illness, although within that category it is above all the milder mental health conditions which have increased. Nevertheless, musculoskeletal conditions still account for around 40% of the share of people on sick leave.

Figure 28. Incidence of sickness absence of full-time employees in selected OECD countries, 2012



2004 for Australia, 2008 for the United States and 2009 for Ireland.

The incidence of work absence due to sickness is defined as the share of full-time employees absent from work due to sickness and temporary disability (either one or all days of the work week). Data are annual averages of quarterly estimates. Estimates for Australia are for fullweek absences only.

Source: OECD Absence Database, based on the European Union labour force survey and national labour force surveys for Australia, Canada and the United States and OECD (2013a), *Mental Health and Work: Norway*, Mental Health and Work, OECD Publishing doi: [10.1787/9789264178984-en](https://doi.org/10.1787/9789264178984-en)

Numbers receiving disability benefits are high...

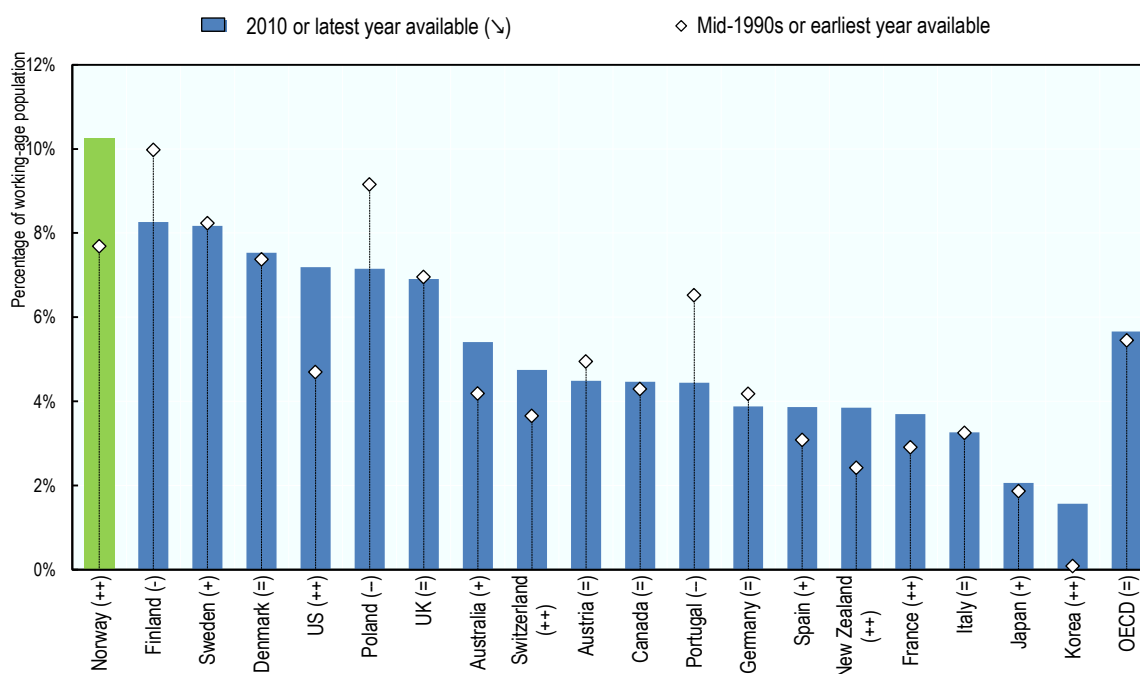
Norway also has a high share of working age adults receiving disability benefits. More than 10% of working age adults receives a permanent or temporary disability benefit and if people receiving a Work Assessment Allowance were also included, this share would be almost 14% (OECD, 2013a). This is by far the highest share of the working age population on disability benefits in the OECD. At the same time, very few people move from a disability benefit back into the world of work.

Disability benefit (*uføretrygd*) is usually granted after an extended period on “Work Assessment Allowance” during which time active labour market measures must be tried or seriously considered (see Box 19). Disability benefit is then granted for those with a low likelihood of returning to work. Norway has one of the lowest disability benefit claim rejection rates, with only around one in five claims rejected, in contrast to nearly 70% in Italy and the United States.

New disability claims for permanent benefits for mental disorders have been rising and have now reached around 25% of all new benefit claims. These increases in annual inflow for mental disorders are particularly significant for younger age groups, those between 18 and 34 years old.

Figure 29. Disability benefit recipient rates are high in Norway and have been increasing

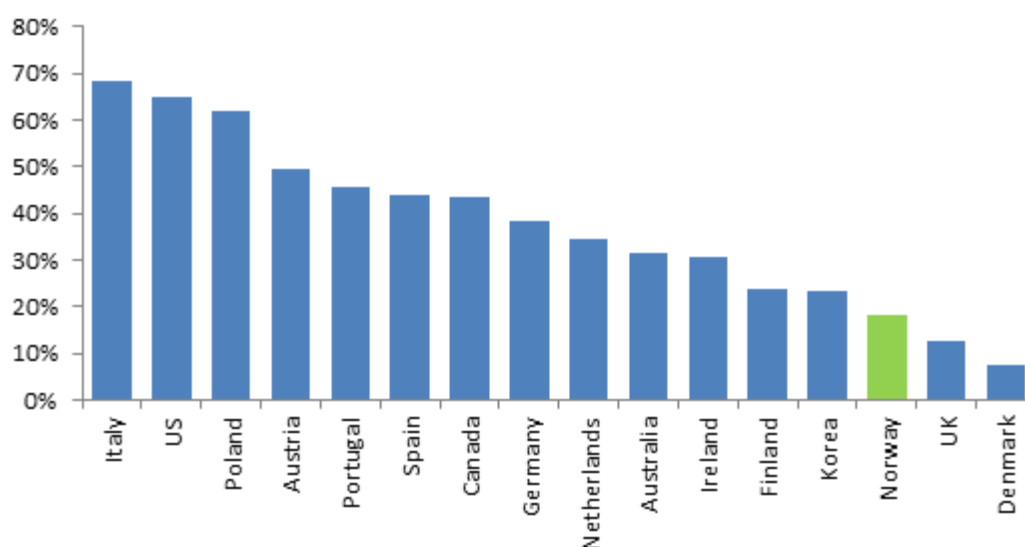
Disability benefit recipients as a percentage of the population aged 20-64



Source: OECD (2010), OECD (2010), *Sickness, Disability and Work: Breaking the Barriers: A Synthesis of Findings across OECD Countries*, OECD Publishing doi: [10.1787/9789264088856-en](https://doi.org/10.1787/9789264088856-en)

Figure 30. Norway has very low disability benefit claim rejection rates

Share of rejected benefit claims among total applications, latest year available



Source: OECD (2013a), *Mental Health and Work: Norway*, Mental Health and Work, OECD Publishing doi: [10.1787/9789264178984-en](https://doi.org/10.1787/9789264178984-en)

Box 19. The Norwegian sickness and disability benefit schemes and the new Work Assessment Allowance

Sickness benefits

Daily cash benefits are available to all persons who are unable to work due to sickness. These benefits are paid from the first day of absence for a period of 260 working days (i.e. 52 weeks) at a level of 100% of the last wage. In the first 16 days, the employer is responsible for the payment, thereafter it is the National Insurance Scheme.

Disability benefits

Insured persons aged 18 to 67 years whose work capacity is permanently reduced by at least 50% due to an illness, injury or disability are entitled to a disability benefit. The benefit consists of a basic, flat-rate element and an additional income-related element or a special supplement.

The benefit levels are based on the reduction of the earnings capacity. A full benefit (worth, for most incomes, around 66% of the previous income) is granted for an earnings-capacity reduction of 100%, while partial benefits are granted in 5% intervals for earnings-capacity reductions of 50-95%, with a proportional benefit payment. The disability benefit is granted on a permanent basis.

The health condition of a claimant is assessed by a physician, and reviewed by an officer of the Norwegian Labour and Welfare Administration (NAV), sometimes together with a physician contracted by NAV. The NAV assessment comprises the application of a work-ability assessment tool, which also considers the medical information. There are treatment requirements as well, i.e. claimants must have made an effort to try adequate medical and vocational measures.

The Work Assessment Allowance

In 2010, three different benefits (vocational and medical rehabilitation benefit and temporary disability benefit) were combined into one, the Work Assessment Allowance (WAA). Under the WAA, a range of medical and vocational measures offered to persons who have a confirmed medical diagnosis and a reduction of work capacity of at least 50%, but still have the potential to be employed or remain at the workplace. The benefit rate is 66% of the last income, or the average of the last three years.

During receipt of the WAA the insured person must be “occupied” 37.5 hours a week, initiate treatment if needed and participate in an individual action plan and a rehabilitation and treatment plan. The rehabilitation plan is based on medical information supplied by the physician, discussions with the client, and often a work capacity assessment. WAA can be paid for up to four years (or even longer if necessary). If measures provided under WAA do not improve the work functioning, i.e. work incapacity is still less than 50% and supposed to be permanent, a disability benefit can be granted.

Source: OECD (2013a), *Mental Health and Work: Norway*, Mental Health and Work, OECD Publishing
doi: [10.1787/9789264178984-en](https://doi.org/10.1787/9789264178984-en).

Box 20. Skills Obstacle Course: Lars

Profile: Lars is 46 years old and lives in Bergen where he has worked as a mechanic at the Kollsnes gas processing plant since leaving school. Over the years, he has taken many training courses offered at work but has never found the time to complete his upper-secondary diploma. He has been on disability allowances since his accident 2 years ago, which left him with chronic back pain.



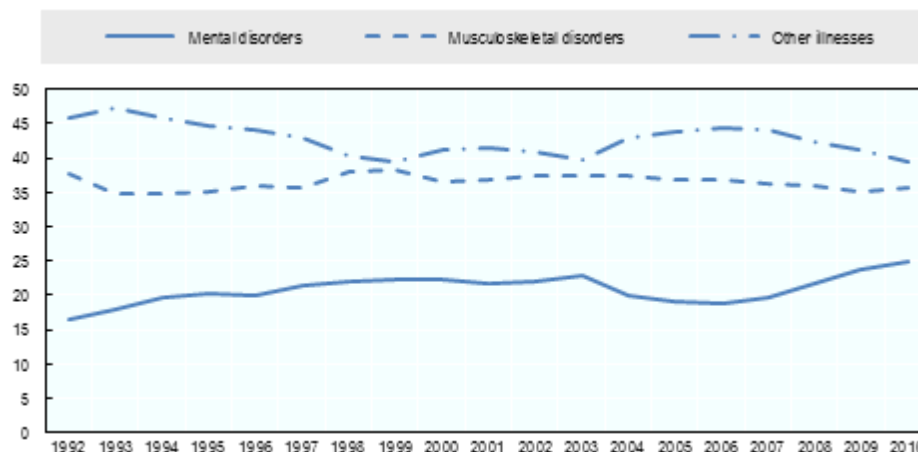
Task: Workshop participants were asked to put themselves in the shoes of Lars to help him navigate Norway's skills system

Goal: To manage his health condition. If he does return to work, it has to be worth it financially – and he would prefer an office job

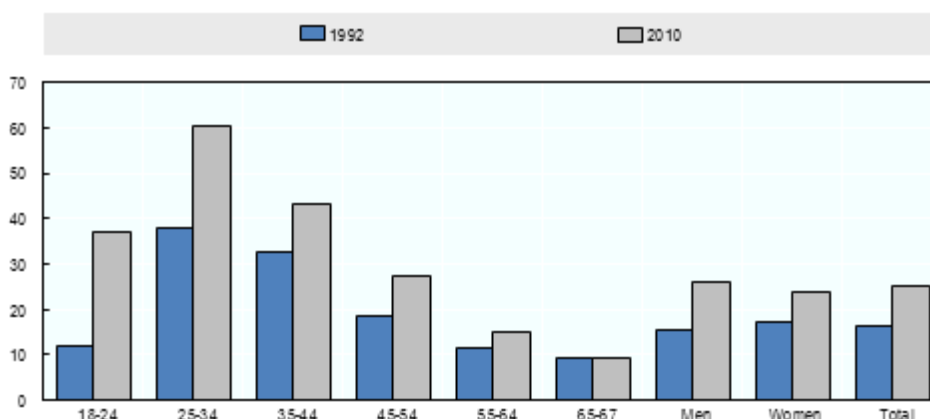
- | | | | |
|-------------------|---|-----------------------------------|------------------------|
| Obstacles: | o Lack of qualifications | o Difficulty demonstrating skills | o Lack of motivation |
| Options: | o Training course | o Work Assessment Allowance | o Trial period in firm |
| | o Guidance from Public Employment Service | | o Incentives |

Figure 31. New disability benefit claims

New disability claims for permanent benefits by health condition (as percentage of all claims)



Annual inflow rates for persons with a mental disorder, by age and gender



Source: OECD (2013a), *Mental Health and Work: Norway*, Mental Health and Work, OECD Publishing
doi: [10.1787/9789264178984-en](https://doi.org/10.1787/9789264178984-en)

... and return to work is low

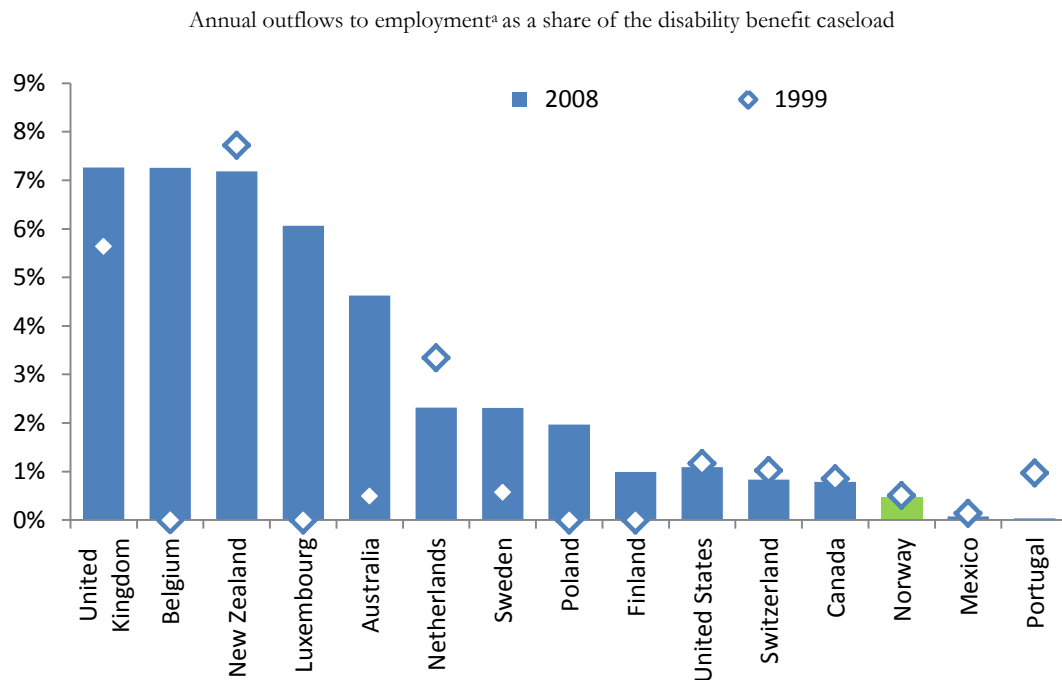
An established finding from the literature on the dynamics of welfare benefit receipt is that persistence in benefit receipt is high while entry rates are typically low.

Heckman (1978, 1981) distinguishes two sources of persistence in people's labour market histories. First, individuals differ in terms of their personal characteristics. If these characteristics affect the probability of benefit receipt, persistence of 'unfavourable' labour market characteristics – for instance low education or health problems – will also result in continued benefit receipt.

Secondly, there may also exist a direct impact of past benefit receipt upon the probability of receiving benefits today. For example, if receipt of welfare payments induces a loss of motivation to reach self-sufficiency among welfare recipients or welfare receipt is perceived as a sign of low productivity by potential employers. People with a history of previous welfare receipt might therefore be more likely to also receive such benefits in the future (Bhuller, Brinch and Königs 2013).

Return to work in Norway is very low due to the lack of reassessments of disability benefit entitlements (Figure 32). Although the pathway onto disability benefit is long and participation in rehabilitative measures a precondition, there are no systematic assessments once a disability benefit has been awarded (OECD 2013a). The introduction in Norway of a temporary disability benefit in 2003 did little in this regard, because in practice these temporary entitlements were typically transformed into permanent ones at a later stage (OECD 2010).

Figure 32. Outflow from disability benefits into employment is close to zero



a) Outflows include moves into employment and into other inactivity as well as loss of eligibility, but exclude deaths and transfers into old-age pension.

Source: OECD (2013a) *Mental Health and Work: Norway*, Mental Health and Work, OECD Publishing
doi: [10.1787/9789264178984-en](https://doi.org/10.1787/9789264178984-en)

Benefit claimants normally have to pass through three stages of review:

1. a certificate from their doctor;
2. an assessment of their work capacity filled out by the claimants themselves; and
3. an interview with a NAV officer.

While research has shown that employment and labour market inclusion is a predominant wish of jobless people, the methodology to assess working problems and potential, and to plan vocational rehabilitation processes is a specialist and multidisciplinary task calling for a co-ordinated approach bringing together the physician, the NAV physician, the NAV employment specialist and the former employer (OECD 2013a).

Box 21. Employer incentives to tackle sickness absences

In the Netherlands in the 1990s, several measures were taken to increase the incentives facing employers, employees and implementing bodies to reduce disability claimants (OECD, 2007). These included:

- financial incentives and disincentives to increase the financial consequences of sickness and incapacity for employers (e.g. by introducing employer liability for an initial period of sick pay and contribution differentiation);
- enhanced responsibility for job retention and reintegration;
- toughening the eligibility conditions for benefits;
- reassessing those on disability benefit under the age of 50; and
- creating the possibility of “privatisation” of the disability risk.

Since 1 January 2014, large employers pay a contribution to incapacity benefits, the amount of which will depend on the employer's total salary bill.

Source : OECD (2008), *Sickness, Disability and Work: Breaking the Barriers (Vol. 3): Denmark, Finland, Ireland and the Netherlands*, OECD Publishing. doi: [10.1787/9789264049826-en](https://doi.org/10.1787/9789264049826-en)



Box 22. Worker incentives to leave disability benefits and return to work

By making work pay:

Many OECD countries have used partial disability benefits to encourage people to remain in work. One way is to transform an out-of-work-payment into an in-work benefit.

In **Denmark** the partial benefit was replaced in 2003 by a generous wage subsidy scheme, which covers the full difference between previous and post-disability earnings. It requires people to have a permanent problem limiting their work capacity, to be unable to work under normal conditions and to have exhausted all rehabilitation possibilities.

In **Luxembourg** those moving from disability benefit into employment can get a permanent payment to compensate for lower earnings than they had previously.

The Netherlands introduced a new disability benefit system in 2006, in which workers with assessed earnings incapacity of 35%-79% receive a wage supplement. They must be using at least half of their remaining work capacity. People who are not working, or working less than the minimum, receive a flat-rate benefit. Its value is considerably less than the former disability benefit.

By incentivising job search:

An approach taken in **Australia** has been to shift more people from disability to unemployment benefits. In 2006, Australians with significant work capacity – able to work 15-29 hours a week – were no longer entitled to disability benefits but treated as the regular unemployed. They are obliged to seek appropriate part-time work and supported in their efforts to do so.

In **Luxembourg** a similar approach has shifted people with some work capacity from sickness benefits onto job-search support. If people cannot find a job, they receive a payment of the same value as disability benefit but are subject to the same test of availability for work as other unemployed people.

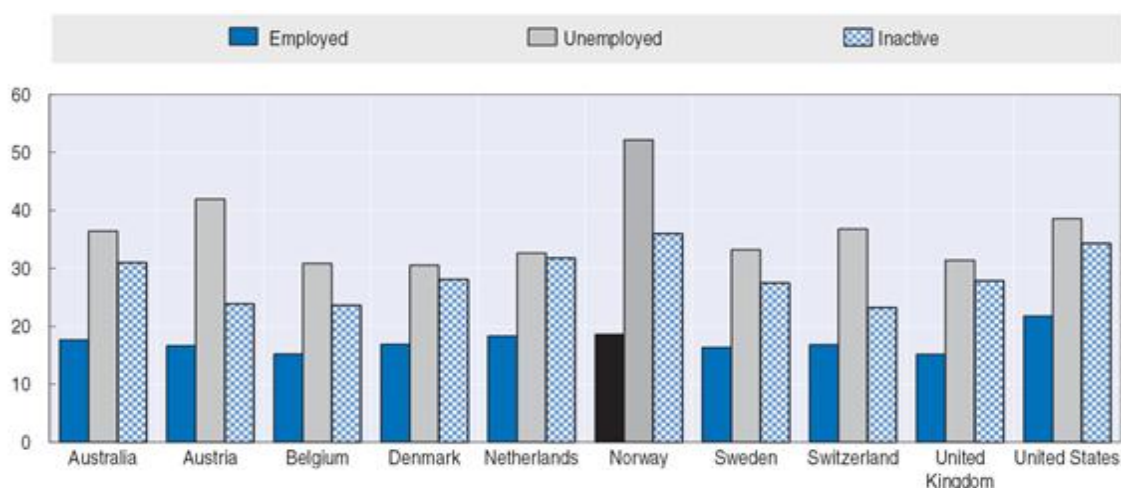
Source : OECD (2010), *Sickness, Disability and Work: Breaking the Barriers: A Synthesis of Findings across OECD Countries*, OECD Publishing doi: [10.1787/9789264088856-en](https://doi.org/10.1787/9789264088856-en)



There is a complex relationship between skills, employment and disability

While unemployment is relatively low in Norway, the share of unemployed persons suffering from a mental disorder is striking. More than every second unemployed Norwegian has a severe or moderate mental disorder. Whether labour market exclusion causes or worsens mental health problems or whether pre-existing mental disorders cause unemployment and inactivity is unclear – both are likely.

Figure 33. Mental health disorders are particularly prevalent among the unemployed



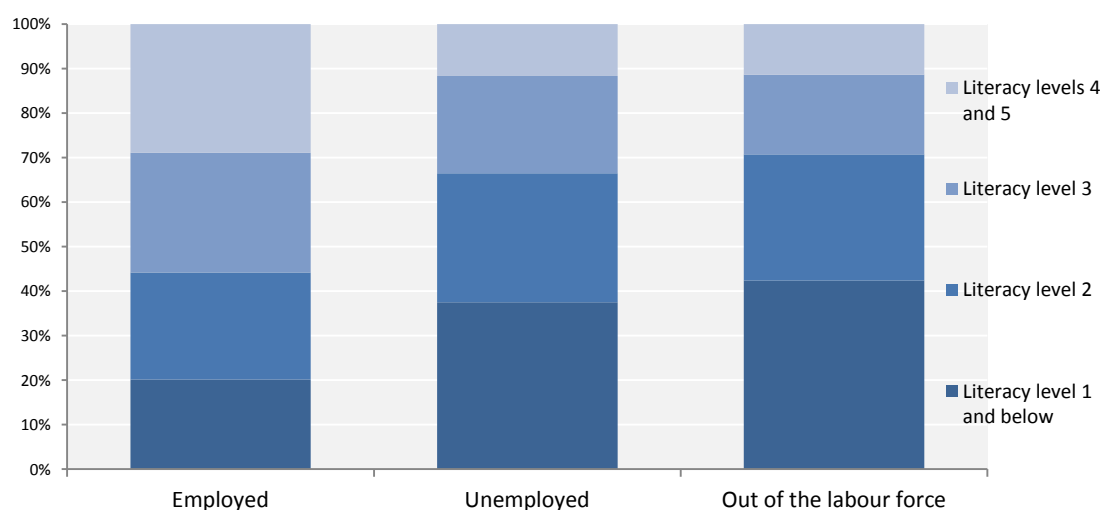
Source: OECD (2013a), *Mental Health and Work: Norway*, Mental Health and Work, OECD Publishing
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The causal relationship between skills, employment and disability is likely to flow in multiple directions. The skills of people who have stayed inactive for an extended period of time can atrophy or become obsolete. So the skills of people who remain outside the labour force on disability benefits may suffer as a result. At the same time low societal expectations can impact upon the educational aspirations of disabled young people meaning that they are particularly susceptible to dropping out of education early.

The Survey of Adult Skills (PIAAC) shows that around one in three of adults with low literacy skills are not participating in the labour market, while only 9% of those with high literacy skills are not participating. While not all of these adults will be on disability benefits, a majority of them are likely to be, since the Survey reports only 17.5% of working age adults overall are not in the labour force. At the same time, in Norway the likelihood of adults reporting poor health in the Survey is less affected by literacy skill level than in most countries.

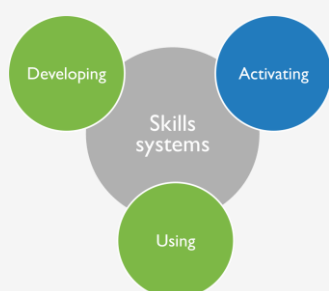
Figure 34. Labour market status and literacy levels

Labour market status for adults at each literacy skill, 2012, %



Note: Skill levels range from level 1 and below (lowest skills) to level 5 (highest skills).

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



Where do benefit recipients fit into the skills system?

Young people facing mental health difficulties are among those most likely to drop-out of school before the completion of their studies (Challenge 2). They can often find themselves with poor foundation skills (Challenge 1) and may grow increasingly distant from the labour market (Challenge 5). When people leave the labour force to become disability claimants at the scale observed in Norway, it depletes the skills stocks that remain in the workforce. This may, in turn, have implications for the ability of employers to find high skilled workers (Challenge 7).

CHALLENGE 5: ENCOURAGING LABOUR MARKET ATTACHMENT AMONG LOW SKILLED YOUTH

Workshop participants often underscored the difficulty of ensuring people with low skills remain active:

“Too many young people are not in employment or education and training”
“Too many low qualified people are outside the labour market”



Youth unemployment is low overall but much higher for those who don't complete upper secondary

Norway has one of the lowest youth unemployment rates in the OECD, at 8.6% in 2012, compared to an OECD average of 16.3% over the same period. Yet the overall youth unemployment rate provides only a partial picture. Young people in Norway who do not complete upper secondary school are almost four times more likely to be unemployed than those who have completed tertiary education.

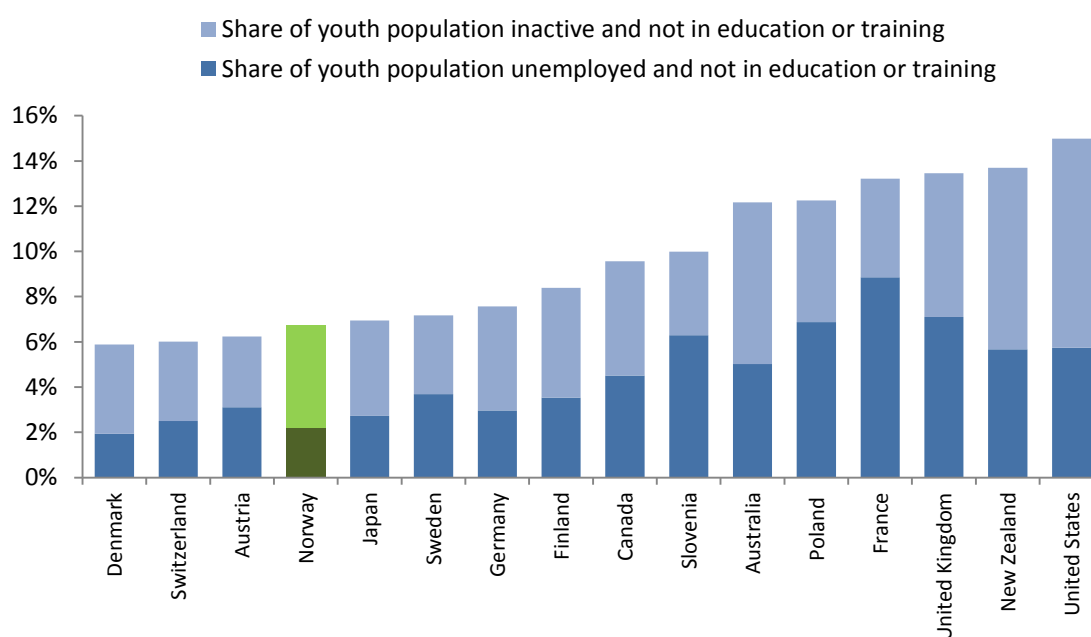
Yet more than half the 16-24 year olds assessed in the Survey of Adult Skills had not completed upper secondary school and a further 16% of 25-34 year olds had not achieved this education level either.

And many young people are not in employment or in education and training

The unemployment rate represents an important, but incomplete, measure of the difficulties faced by young people in the labour market. An important and growing number of youth who have exited the education system are not (or are no longer) looking for work. As a result they are not included in the official unemployment statistics.

An indicator that captures both exclusion from employment, but also from the labour market and education system altogether, is the share of youth neither in employment nor in education and training – the so-called “NEET rate”.

Figure 35. NEET rates among youth – Percentage of population aged 15/16-24
2012 Q4, or nearest available

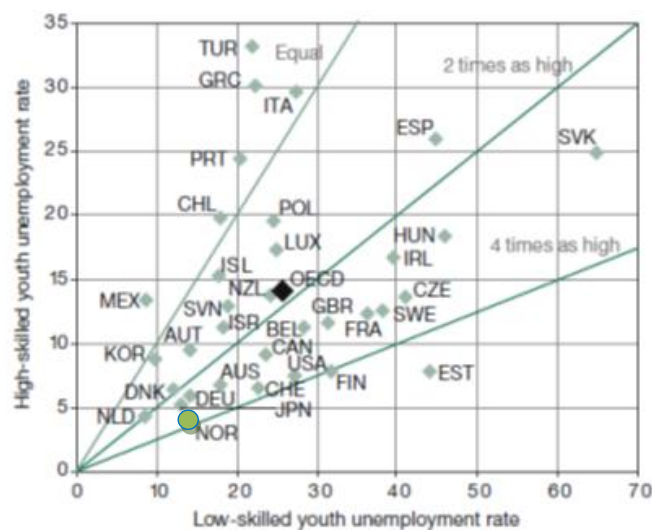


Source: OECD estimates based on national labour force surveys.

Norway has a relatively small share of the youth who are not in employment education or training – less than 7% at the end on 2012. However, of these 44 000 youths, only 14 000 were still looking for a job, while the remaining 30 000 were inactive, having withdrawn from the labour market entirely.

Among unemployed youth, those with low skills are generally more likely to be unemployed than their higher skilled peers. Indeed, as can be seen in Figure 36, where Norway is close to the bottom left hand corner of the figure, while the youth unemployment rate is relatively low in Norway the unemployment rate among the lower skilled youth is close to four times the rate of their higher skilled peers. In contrast, young people in Korea face similar unemployment rates irrespective of their skill level. In the Netherlands high skilled youth face low unemployment rates, just as in Norway, but there the unemployment rate among lower skilled youth is only twice that of higher skilled peers. The disparity between the unemployment rates facing low and high skilled youth is far smaller in the Netherlands than it is in Norway (see Figure 36).

Figure 36. Youth (15/16-24) employment rates by educational attainment level as a percentage of the labour force

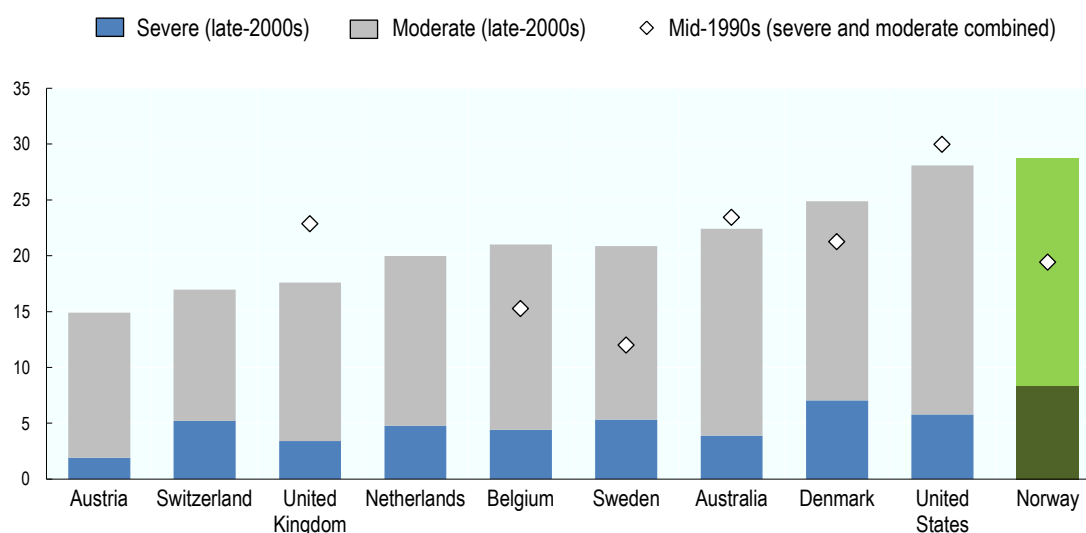


Note: "Low-skilled" refers to lower than upper secondary education and "high-skilled" to tertiary education. For Japan, "low-skilled" refers to less than upper secondary education as well as upper secondary education.

Source: Scarpetta, S. and A. Sonnet (2012), "Investing in Skills to Foster Youth Employability – What are the Key Policy Challenges?", www.oecd.org/els/emp/49567835.pdf

Among the group of Norwegian youth who have withdrawn from the labour market entirely and are no longer seeking employment there is a high rate of inflows to disability benefits. Norway has a high and rising share of young people with mental disorders.

Figure 37. Share of young people (15- 24 years) with a mental disorder



Source: OECD (2013a), *Mental Health and Work: Norway*, Mental Health and Work, OECD Publishing
doi: [10.1787/9789264178984-en](https://doi.org/10.1787/9789264178984-en)

Box 23. Youth Guarantees can facilitate transitions between school and work

Education policies play a key role in equipping youth with appropriate skills and thereby facilitating the transition from school to work (see section on Developing Skills). At the same time employment policies can play an important role in ensuring that all young people successfully manage the transition between school and work, thereby preventing the risk of long-term unemployment. Many countries, have now introduced so called “Youth Guarantees” and Norway was one of the first.



Youth guarantees usually refer to an entitlement to a job, training or education for a defined group of young people and the obligation for a public authority (usually the Public Employment Services - PES) to provide the services and/or implement the programmes within a given period of time. In contrast to other active labour market policies, youth guarantees provide an entitlement to certain measures for all young people who meet the criteria.

As pioneers in the activation approach to labour market policies, the Nordic countries have attempted to implement such schemes for many years. In 1984, Sweden introduced the first genuine youth guarantee, followed by Norway in 1993 and Denmark and Finland in 1996. More recently, other countries have embarked on similar youth employment programmes, including Austria, Germany, the Netherlands and Poland.

What are the main features of youth guarantees?

Youth guarantees in most countries share two main objectives: ensuring a smooth transition from school to work; and preventing long-term unemployment. There are, however, fundamental differences with respect to the design of national programmes with regard to the types of measures, eligibility criteria, duration and compensation.

1) Measures can fall into three main categories:

- education and training;
- employment services and programmes; and
- other active labour market measures (public works, community services and business start-up programmes).

2) Eligibility is usually defined in terms of:

- age – all youth guarantees and similar youth employment programmes define eligibility according to age. In addition, eligibility may depend on:
- time spent in unemployment, and
- educational attainment.

3) Duration and compensation varies substantially across programmes.

Are youth guarantees effective?

Evidence on the impact and effectiveness of youth guarantees is rather limited. An evaluation of the youth guarantee in **Sweden** found that unemployed young people aged 24 years old who participated in the programme in 2008 were able to find a job faster than a control group of participants in other PES measures. However, participants in the guarantee were as likely to be unemployed as their peers belonging to the control group within one year upon completion of the intervention. Also, the positive effect on the job search period tended to diminish in 2009, indicating that the policy might be less effective during economic crisis.

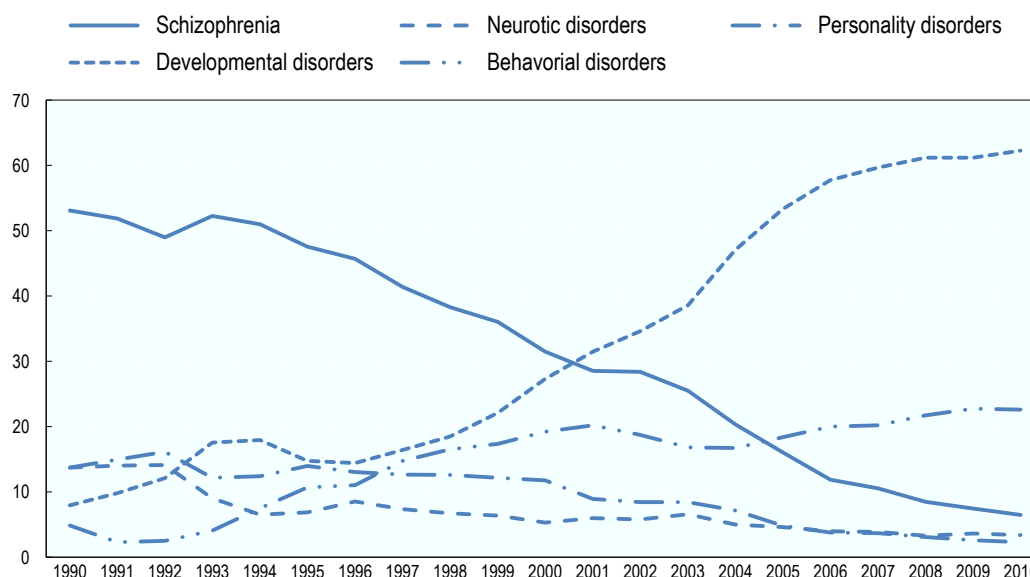
In **Finland** statistical evidence has shown that the Finnish youth guarantee resulted in a reduction in unemployment through either direct employment assistance or further training leading to a job. In **Austria**, despite the high dropout rates experienced by young participants in the guarantee, about 58% and 63% of young people who participated in the apprenticeship in 2010 were integrated into the labour market after 3 and 12 months, respectively.

These findings suggest that youth guarantees can be effective in achieving the primary objective of ensuring a smooth transition of low-skilled young people into the labour market. They can play an important role in keeping young people connected to the labour market or in education, thereby preventing the scarring effects arising from long-term unemployment, including those related to negative wage effects. The success of youth guarantees crucially depends upon the strength of underlying institutions (like the public employment service and the apprenticeship system) and coordination mechanisms between the various stakeholders. In countries where such institutions and mechanisms are not yet well-developed, the success of youth guarantees is likely to be limited.

Source: ILO (2012); Eurofund (2012).

Figure 38. Changing composition of mental disorders in young people

Share of different mental disorders for disability benefit recipients with a mental disorder, aged 18-24 years



Source: OECD (2013a), *Mental Health and Work: Norway*, Mental Health and Work, OECD Publishing
doi: [10.1787/9789264178984-en](https://doi.org/10.1787/9789264178984-en)

In all OECD countries there is a core group of youth facing various combinations of high and persistent unemployment, poor quality jobs when they do find work and a high risk of social exclusion. Tackling youth unemployment and inactivity requires a comprehensive policy strategy that removes the different barriers in order to help young people gain a strong start in their working lives and secure productive and rewarding jobs.

Box 24. Local employment initiatives for low-skilled youth

Employment opportunities can differ widely between regions. Low skilled workers are often the least mobile and can benefit from initiatives that bring them into local opportunities and offer them the chance to upskill.



In the **Netherlands** the Port of Rotterdam Authority, the Shipping and Transport College and DAAD (regional employers' service desk) have joined forces to create The New Inflow into New Jobs Harbour Project. In place since 2008 the project aims to help young people without any qualifications into a regular job. The city of Rotterdam's port employs approximately 90,000 people with a workforce profile of mainly male, white and older workers. Due to economic growth and an ageing workforce in the port, demand for new personnel is rising and employers are willing to invest in the project as they foresee a significant problem in recruiting young people in coming years.

In the course of this 40 week programme, the selected candidates work four days a week with an employer, and spend one day a week attending the Shipping and Transport College. The programme includes continuous learning, dual programmes and supports exchange with the main institutional bodies. The skills learned are transferable, particularly soft skills such as showing up on time, and having respect for colleagues. Upon completion, candidates are offered a contract for at least 12 months. The project has resulted in over almost 500 young people being employed in the Rotterdam port in 2010 and 2011.

Source: Travkina, E. (forthcoming), "Local Strategies for Youth Employment: Lessons from Case Studies", OECD LEED Forum Learning Manual for Practitioners.

Box 25. Public employment service initiatives

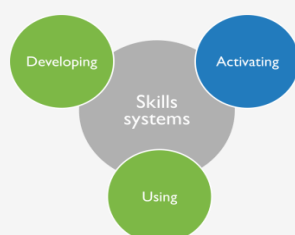
Many public employment services (PES) in the OECD are offering websites or web pages and other media campaigns particularly tailored for young people. Many aim to use modern media (e.g. SMS services or Apps for Smart Phones) and “speak the language” of young people.



In **Sweden** the PES has launched a Facebook account to represent the organisation at the national level and to reach out to young people. This initiative was launched in January 2011 with an aim to create a forum for people to meet and discuss issues related to employment and job search. It is maintained by two PES experts who initiate discussions, answer questions, and mediate debates, but who are not supposed to engage in individual counselling (if requested they refer clients to their local PES). Postings typically pass on a links to news and information but can also be just a question to stimulate discussion (e.g. the most popular one so far has asked: “what is your dream profession?”).

In **Austria**, co-operation with schools, especially with lower secondary schools, has always been a cornerstone of the PES's youth-related activities. PES local offices invite school classes into one of the 64 career information centres (*BerufsInfoZentren* – BIZ). Good preparation by the schools themselves is a crucial part of the success of these visits. Preparatory work is done by specially trained teachers who closely co-operate with PES counselors working in the BIZ. The visits include a presentation of PES services for young people, including an emphasis on the importance of starting to think about career choices early on.

Source: Scharle, Á. and T. Weber (2011): “Youth guarantees: PES approaches and measures for low-skilled young people”, The European Commission Mutual Learning Programme for Public Employment Services, available at: <http://ec.europa.eu/social/keyDocuments.jsp?pager.offset=10&langId=en&mode=advancedSubmit&advSearchKey=pesyouthintegration&orderBy=docOrder>



Where do low skilled youth fit into the skills system?

In Norway, low skilled youth with limited foundation skills (Challenge 1) are frequently those that dropped-out of education before completion (Challenge 2). Opportunities for second chance education and flexible education pathways are needed. Given that Norwegian employers often complain of significant problems in recruiting young people (Challenge 7), it is important that all of Norway's skills potential is being developed, activated and used.

CHALLENGE 6: ENSURING NORWEGIANS REMAIN ACTIVE LONGER

During the workshops, participants were keenly aware of the demographic challenges facing Norway:

“Ageing will reduce labour available for productive sectors”



It is sometimes argued that the consequences of ageing could be offset by policies to encourage greater immigration, higher fertility or faster productivity growth. While such measures can help, they need to go hand in hand with attempts to mobilise available labour reserves to sustain economic growth. Thus, given Norway's demographic prospects there is real pressure to further boost the employability of older people.

High employment rates suggest the skills of older workers are demanded in the labour market

Older peoples' opportunities for remaining in the labour force are determined, among other things, by employers and their perceptions of the benefits and costs of employing older workers relative to the benefits and costs of employing younger workers. The benefits of employing older workers will depend upon their skills and their adaptability. The costs will depend upon a comparison of their wages with those of younger workers. Employers' hiring decisions are also affected by employment protection legislation and other labour laws.

According to the Survey of Adult Skills (PIAAC) older adults, on average across countries, score lower on numeracy and literacy than any other age group. These lower scores are driven not only by the process of biological ageing, but also by differences in education and labour-market structures that facilitate the development and maintenance of skills throughout life. In contrast, in Norway (as noted under Challenge 1), older adults score highly and the average scores do not lag substantially behind those scores attained by adults aged 25-34 (Figure 39).

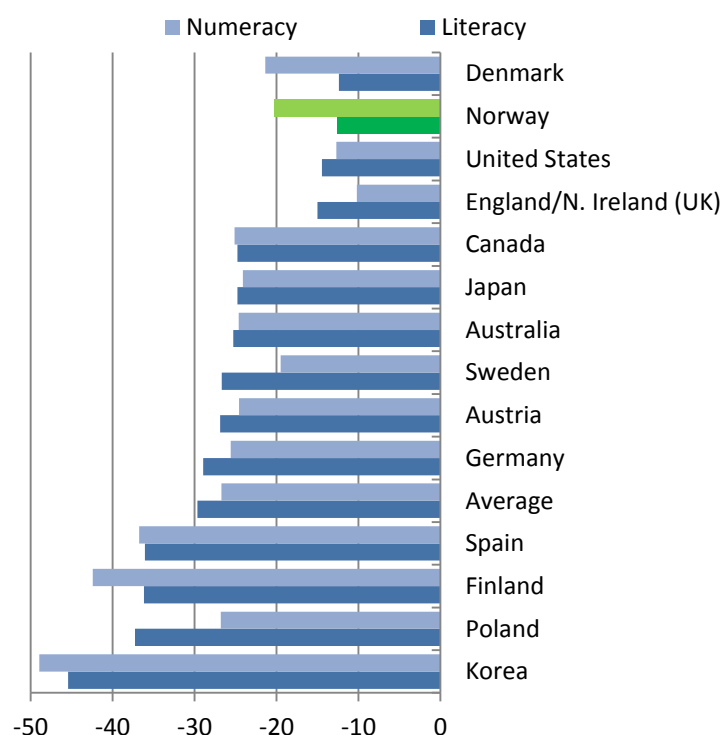
Norway in Focus: The Centre for Senior Policy

The Centre for Senior Policy is a national centre whose main actions include raising awareness among employers and employees of older workers' resources; advocating what is needed to motivate workers to stay longer at work; and stimulating age diversity at the workplace. Through co-ordination and co-operation with authorities, firms, the social partners and professional organisations, the Centre – whose board is made up of representatives from the social partners – works to encourage and develop appropriate policies for older workers in the labour market.

Source: OECD (2013c), *Ageing and Employment Policies: Norway 2013: Working Better with Age*, OECD Publishing. doi: [10.1787/9789264201484-en](https://doi.org/10.1787/9789264201484-en)

Figure 39. Norway's older workers are relatively highly-skilled

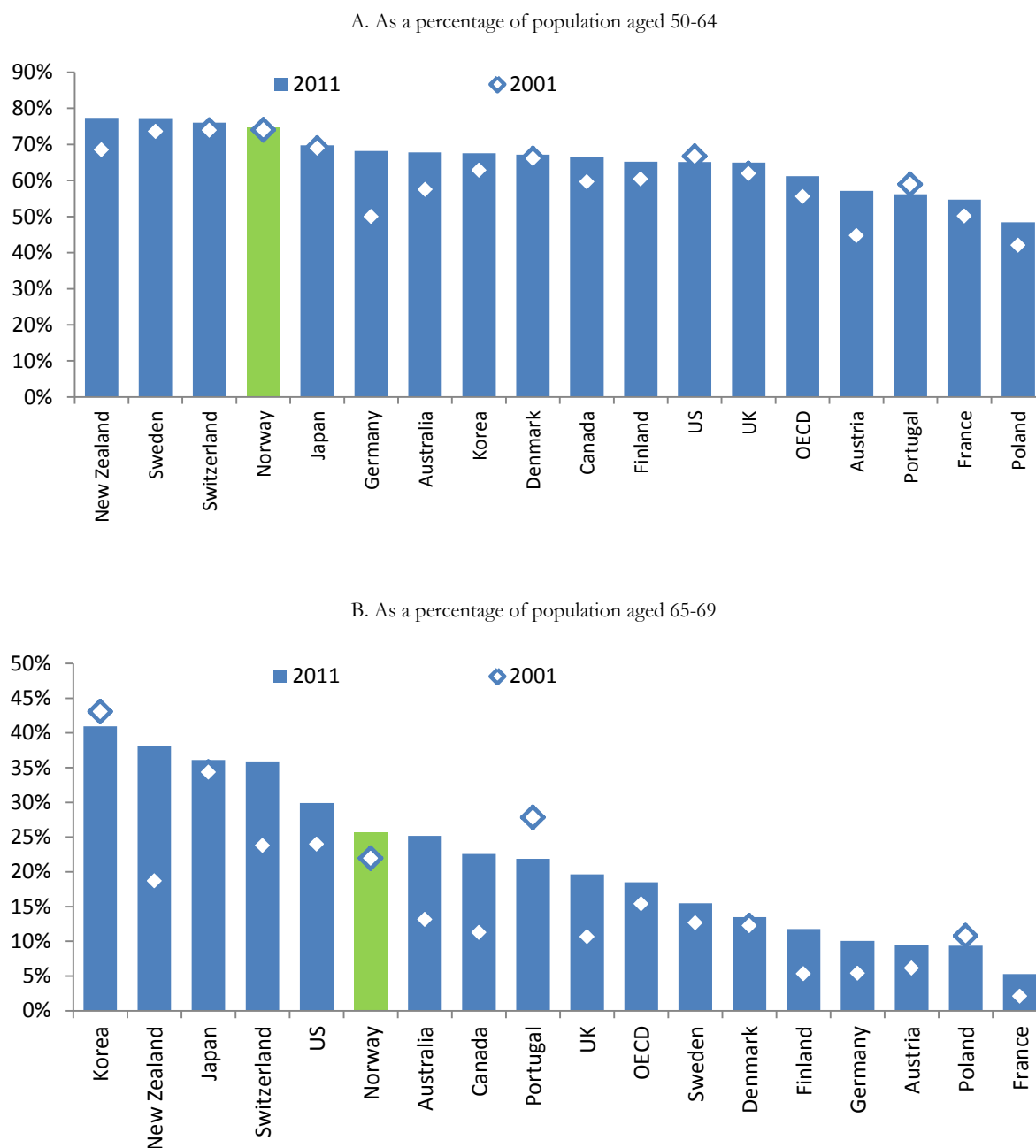
(Point difference on average numeracy and literacy scores between adults aged 55-65 and adults aged 25-34)



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

Norway is one of the few OECD countries where labour force participation rates remain relatively high. This is particularly notable for men, but women also have relatively high participation rates beyond the age of 60. Indeed, one in four adults aged between 65 and 69 years are still in employment, compared with an OECD average of 18.5%.

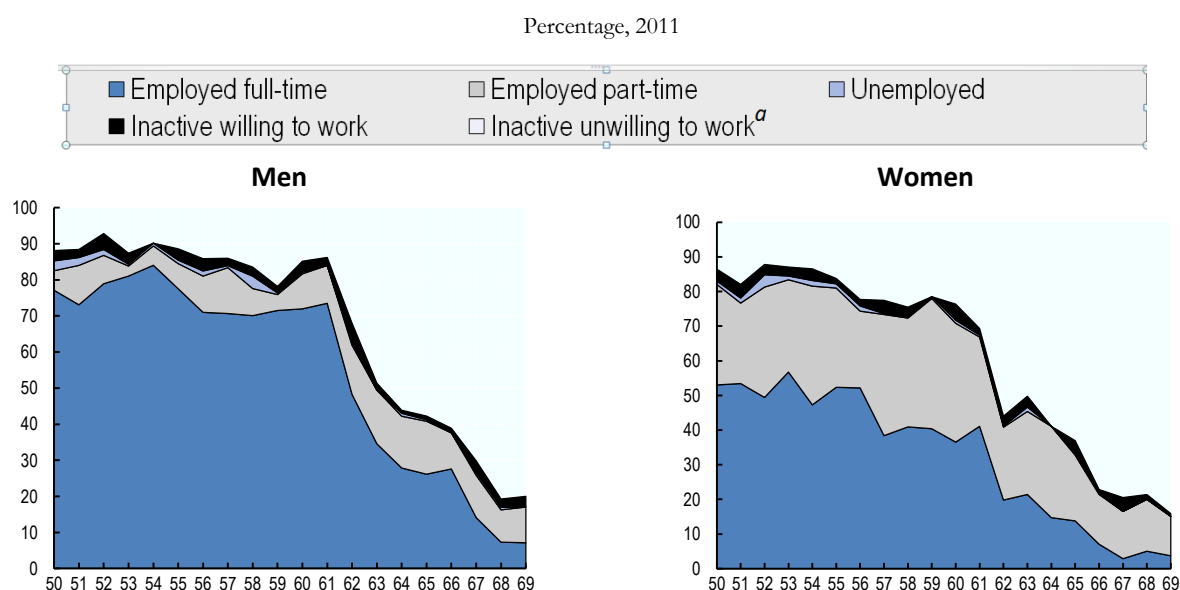
Figure 40. Employment rate of older workers aged 50-64 and 65-69, OECD countries, 2001 and 2011



Source: OECD (2013c), *Ageing and Employment Policies: Norway 2013: Working Better with Age*, OECD Publishing
doi: [10.1787/9789264201484-en](https://doi.org/10.1787/9789264201484-en)

Employment rates are similarly high. The overall employment rate for the 50-64 age group stood at 74.5% in Norway in 2011, well above the OECD average of 61.2% (OECD 2013c). Beyond the age of 62, however, employment among older workers drops off, with the proportion working full-time employment falling by approximately 40 percentage points (Figure 41). Those older workers with less than secondary education are among the least likely to continue in employment, even if their employment rates continue to exceed the OECD average.

Figure 41. Labour market status by age and gender



Source: OECD (2013c), *Ageing and Employment Policies: Norway 2013: Working Better with Age*, OECD Publishing
doi: [10.1787/9789264201484-en](https://doi.org/10.1787/9789264201484-en)

While employment rates among older workers are high in Norway, many older individuals are no longer searching for employment and almost one quarter of individuals aged above 55 are registered as disabled – nearly double the OECD average. Given the high level of skills embodied in older workers in Norway, this labour market exit represents a severe leakage from Norway's pool of skills.

Table 1. Disability benefit reciprocity rates by gender, Norway, 2000-11

As a percentage of the population in each group

	Age group	2000	2005	2010	2011
Total	50-54	14.7	13.7	12.2	12.4
	55-59	21.7	22.2	19.6	19.7
	60-64	35.5	33.6	31.8	30.4
	50-64	22.3	22.4	20.9	20.5
Women	50-54	18.2	16.5	14.4	14.9
	55-59	25.9	26.7	23.5	23.5
	60-64	39.6	38.3	37.1	35.7
	50-64	26.3	26.4	24.7	24.3
Men	50-54	11.4	11.0	10.1	10.1
	55-59	17.4	17.9	15.8	15.9
	60-64	31.3	28.8	26.6	25.2
	50-64	18.3	18.5	17.2	16.8

Source: OECD (2013c), *Ageing and Employment Policies: Norway 2013: Working Better with Age*, OECD Publishing
doi: [10.1787/9789264201484-en](https://doi.org/10.1787/9789264201484-en)

Norway in Focus: The 2011 Pension Reform

Prior to the 2011 pension reform the possibilities of combining pension income with income from work without a financial penalty were restricted. In addition, the implications of leaving work early (before the age of 67) were relatively small. Thus, the main objectives of the pension reform in 2010-11 were to increase the incentives to work and facilitate work opportunities for retirees.

The reform has introduced some flexibility in the rules governing pension withdrawal for persons between the ages of 62 and 75. Amongst other changes the reform includes the following features:

- pensions are accessible, under certain conditions, before the age of 67;
- pensions may be drawn fully or partially; and
- work income and the pension may be combined without deductions in the pension.

Source: OECD (2013c), *Ageing and Employment Policies: Norway 2013: Working Better with Age*, OECD Publishing doi: [10.1787/9789264201484-en](https://doi.org/10.1787/9789264201484-en)

Box 26. Better information on the costs and benefits of continuing work – for employees and employers

To encourage people to carry on working it is important to raise awareness about work and retirement options, help older workers make informed decisions and ensure that older people have the capacity to make such decisions.

In the **Netherlands**, new initiatives have been introduced to improve pension information and transparency. A national pension register launched in 2011 gives every Dutch citizen an online overview of his/her accrued pensions in pension funds, including from pension insurers. The register includes the accrued state of the basic public pension. A project now under way aims to further improve communication about pensions. Implementation of revised regulations concerning the information to be provided on pensions is planned for 2014.

Older peoples' opportunities for remaining in the labour force are also determined by employers. Hiring and firing decisions with respect to older people are influenced by employers' perceptions about the adaptability and productivity of older workers, and on the labour costs relative to those for younger workers. These decisions are also affected by employment protection legislation and other labour laws.

In **Australia** an Age Discrimination Commissioner is advocating the rights of older workers and jobseekers; raising awareness about unlawful age discrimination; and promoting the benefits of employing older people, including among private recruitment firms. The Commissioner is working alongside the Australian Law Reform Commission to identify barriers to mature age persons participating in the workforce that could be addressed through Commonwealth laws. In addition a Consultative Forum on Mature Age Participation was established to provide advice on removing barriers to employment for mature age people, with a particular focus on addressing negative employer and community attitudes. The forum included representatives of seniors, employers/industry groups, unions, and other key stakeholders.

Source: OECD (2012), Thematic follow-up review of policies to improve labour market prospects for older workers – Australia, available at <http://www.oecd.org/els/emp/Older%20Workers%20Australia-MOD.pdf> and the Netherlands, available at <http://www.oecd.org/els/emp/Older%20Workers%20Netherlands-MOD.pdf>



...but mobility among older workers is low suggesting adaptability may be limited

The retention rates among older workers (defined as the ratio of employees aged 60-64 with tenure of five years or more as a percentage of all employees aged 55-59) are relatively high – 62.2% relative to OECD average of 42.2%. However, the aggregate share of new hires of older workers is low in Norway and the gap between the hiring rates of the 25-49 and 50-64 age groups is high (Figure 42).

Figure 42. Hiring rates by age group and status before hiring, 2011



1. Newly hired workers who were also employed one year before (as % of employment in the age group a year before)

2. All workers with job tenure of less than one year at the time of the survey (as % of employment in the age group a year before)

Source: OECD (2013c), *Ageing and Employment Policies: Norway 2013: Working Better with Age*, OECD Publishing.

doi: [10.1787/9789264201484-en](https://doi.org/10.1787/9789264201484-en)

The fact that relatively few older workers are changing jobs can imply that they are locked into their current jobs. This situation may arise for a number of reasons. In the first place it may stem from hurdles resulting from the under-qualification of older workers. Indeed analysis of skills mismatch based upon the Survey of Adult Skills (PIAAC) has found that, while older workers are more likely to be under-qualified than prime-age adults, the likelihood of over-skilling declines with age (Quintini, forthcoming). Thus, if an older worker has acquired skills over the course of their working life but these skills are not recognised in a formal qualification, then they may struggle to communicate these skills to new employers when seeking to change jobs.

Box 27. Focusing on the needs of older workers in the Public Employment Service

In addition to good incentives to carry on working and age-friendly employer practices, the employability of older workers and their willingness to continue working are prerequisites for increasing their employment rates. Three key factors here are: up-to-date skills, ready access to employment services, and better working conditions.

Older workers form a very heterogeneous group in terms of health, skills, the types of job they hold and their local labour market situation – and require solutions tailored to their individual circumstances.



Luxembourg decided to reform its public employment service ADEM in 2009 to make it more attentive to the needs of older workers. The reform set out to change the role of the service so that it would no longer simply manage unemployment but would take proactive steps to promote and enhance employment opportunities and thus provide a genuine service for its clients. A pilot project “Fit4job 45+” was launched in 2010 to provide close, proactive supervision of people who had lost their jobs, to increase their employability by assessing their situation, and then to offer them tailor-made training in close collaboration with companies.

In **Belgium**, the federal government decided to extend the unemployed persons’ supervision plan, from a focus on persons under 50 to all unemployed persons under 55 and to all unemployed persons under 58 as of 1 January 2016. The programme is intended to monitor recipients of unemployment benefit to see whether they are actually looking for work. At the same time, the three regions will steadily widen their activation policy using various approaches.

The Flemish region’s public employment service (Vdab) had already extended its activation policy to those aged 53 to 55 years old. The new arrangements require new job-seekers to attend compulsory information sessions after three months unemployment, after which a report is drawn up on their skills, work experience, state of health and motivation. The service then provides help in finding work, focusing on job offers that have been validated by its advisers.

The Brussels region’s public employment service (Actiris) has been granting a “vocational transition premium scheme” to SMEs and associations with headquarters or a place of business in Brussels if they employ certain categories of job-seekers (including those over 45 years old with no more than a secondary school diploma and those over 55 years old) and give them professional training on the company’s premises. The Actiris advisers also seek to raise Brussels companies’ awareness of the problems and encourage them to adopt an age-diversity policy.

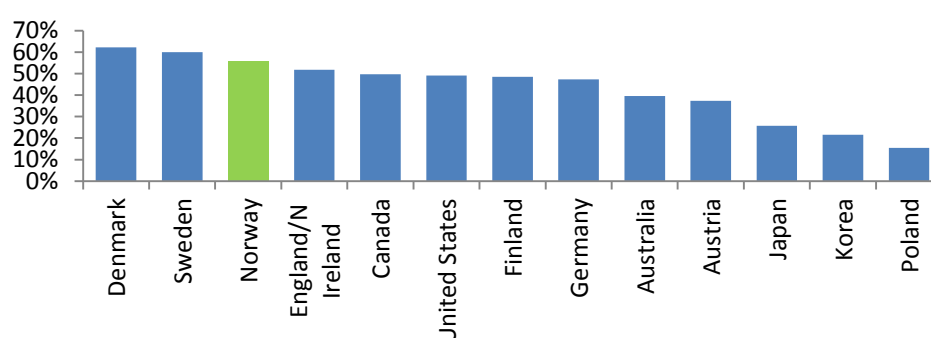
The Walloon region’s public employment service (Forem) has undertaken to observe the principle of equal opportunities and promote diversity in the labour market. Action to help older workers mainly consists of professional reorientation involving new forms of employment (such as combined employment, partly independent employment or part-time employment) and training aid. Forem’s advisers have also been taking steps to raise companies’ awareness of age diversity issues at human resource management level.

In **Canada**, the Targeted Initiative for Older Workers (TIOU) was introduced in 2006 with a design building on the lessons learned from Older Workers Pilot Project Initiative (OWPPI), which ended in 2006. The earlier pilot found that approaches combining individual work assessment, training, work experience and job search supports; hands on, relevant and practical training; flexible programming that can be tailored to an individual’s needs; and projects that include community partnerships were particularly successful. It was also determined that employment outcomes were lowest for approaches that did not include employment assistance or marketing of workers to employers; work placements involving 100% wage subsidy (no employer contribution); and stand-alone interventions such as employment assistance. The results of a 2010 evaluation of TIOU show signs of success in reintegrating unemployed older workers into the workforce: 75% of the participants surveyed found employment during or following participation.

Source: Thematic follow-up review of policies to improve labour market prospects for older workers – Luxembourg, available at <http://www.oecd.org/els/emp/Older%20Workers-LUXEMBOURG-%20TRAD.pdf> and Belgium, available at <http://www.oecd.org/els/emp/Older%20Workers-BELGIUM-%20TRAD.pdf> and Canada, available at http://www.oecd.org/els/emp/Older%20workers_Canada-MOD.pdf

The limited number of transitions – particularly from unemployment or inactivity into employment could also indicate that the skills of older workers have failed to adapt to the new skills demanded by the labour force. Indeed data collected for the Survey of Adult Skills (PIAAC) shows that the proportion of adults achieving low levels on tests of problem solving in technology rich environments is relatively high in Norway. Over 55% of adults achieved scores at level 1 or below (Figure 43). At this low level, tasks typically require the use of widely available and familiar technology applications, such as e-mail software or a web browser. Only simple forms of reasoning, such as assigning items to categories, are required.

Figure 43. Many older workers struggle to solve problems in technology rich environments
(55-65 year olds scoring level 1 or below)



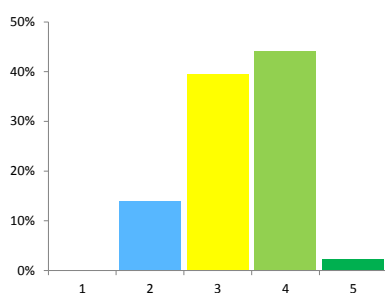
Source: OECD (2013b), *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills*, OECD Publishing.
doi: [10.1787/9789264204256-en](https://doi.org/10.1787/9789264204256-en)

Do adults at all skill levels and at all ages (including seniors) have opportunities to strengthen their skills through education and training?

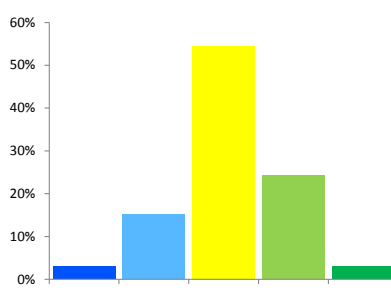
Participants were asked to use the OECD Skills Diagnostic Toolkit to score the performance of Norway's current skills system in delivering a number of critical outcomes. A low score indicates that the current skills system does poorly in delivering the outcome described and a high score indicates a strong performance. The results from workshops held at the national level and in two counties are presented below.



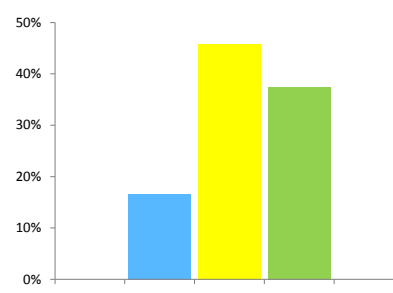
National



Buskerud



Nordland



■ 1 = weak ■ 2 ■ 3 ■ 4 ■ 5 = strong

The views of workshop participants on the ability of workers of all ages to access education and training were fairly homogenous throughout the country – with most participants feeling that Norway's performance was fair.

Box 28. Encourage upgrading of education levels and participation in lifelong learning

In **Finland** the Noste Programme was implemented in 2003–09 to raise the level of education among adult and older workers (OECD 2012). This objective was pursued by motivating the programme's target groups to enter into education, through the dissemination of information and outreach activities and by improving the groups' access to regularly financed vocational education and training. The programmes were intended for 30- to 59-year olds, although those 25 years old and over were also eligible, for completing comprehensive school education. The quantitative objective was to reach approximately 10% of the target group. Evaluations show that about 7.3% of the target group embarked on education or training, and 5.6% obtained some sort of qualification through the programme.



The Noste Programme also challenged education providers to create new operating models for adult and older workers' education. Outreach activities were developed to motivate the portion of the population least interested in participating. The less-educated adult group clearly underlined the importance of personalising studies, strengthening learning skills, guidance, and support measures.

Source: OECD (2012), Thematic follow-up review of policies to improve labour market prospects for older workers – Finland, available at <http://www.oecd.org/els/emp/Older%20Workers%20Finland-MOD.pdf>

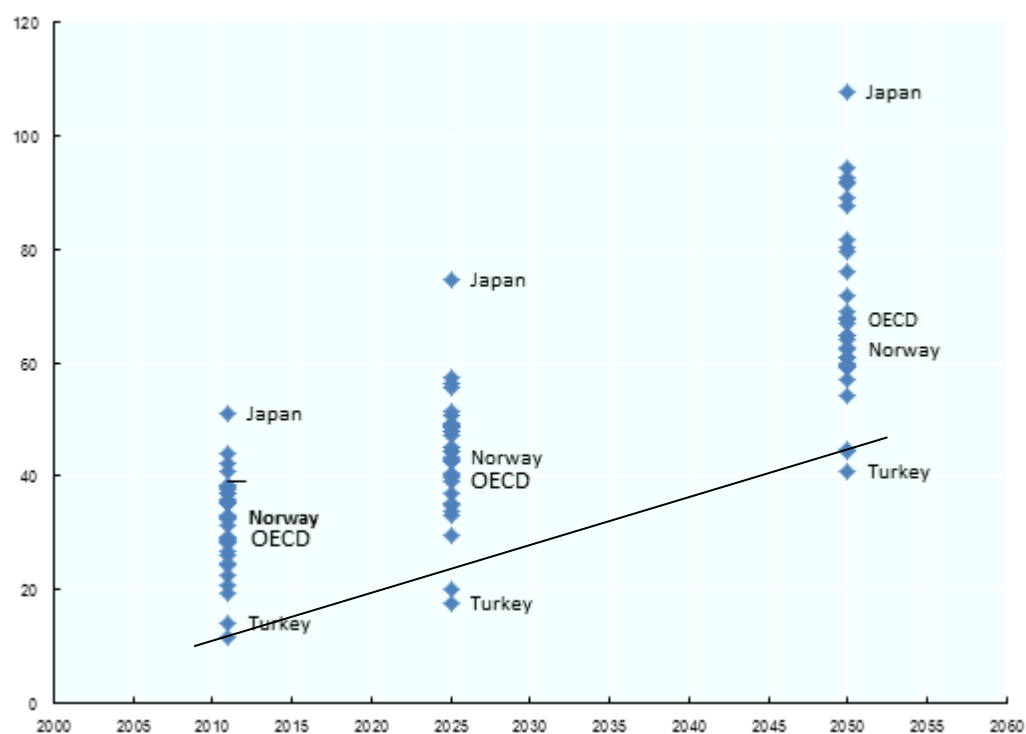
An ageing population means Norway will need to mobilise all available skills

In Norway, in line with the OECD average, the proportion of the population aged 65 and over is projected to increase from around 30% of the population aged 20 to 64 years old in 2011 to around 60% by 2050. Norway is better positioned than many other countries to meet the demographic challenge and, according to the projections of Statistics Norway the labour force is expected to continue to grow until 2060 (though these projections assume net immigration rates and birth rates above the OECD averages).

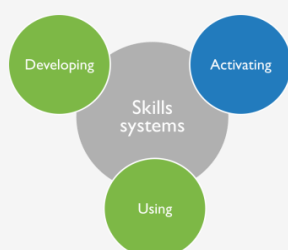
However, if Norway is to sustain economic growth in the context of this ageing population it will need to ensure all skills are activated. A large proportion of Norway's human capital stock is embodied in its older workers. Ensuring that this skills stock is activated will require recognition of informal learning as well as updating skills – complementing the existing skills of older workers with the emergent skills that will enable them to maintain their adaptability in the face of rapidly changing labour market needs.

Figure 44. Demographic dependency ratios across OECD countries, 2011, 2025 and 2050

Population aged 65+ as a percentage of the population aged 20-64



Source: OECD (2013c), *Ageing and Employment Policies: Norway 2013: Working Better with Age*, OECD Publishing.
doi: [10.1787/9789264201484-en](https://doi.org/10.1787/9789264201484-en).



Where do active older workers fit into the skills system?

Access rules for disability benefits (Challenge 4) and early retirement have a major impact on the extent to which older workers remain active. Furthermore, given that the strong foundation skills of older workers in Norway (Challenge 1) represent a considerable asset, their low labour market attachment can contribute to skills shortages (Challenge 7) as valuable skills leave the system.

BIBLIOGRAPHY

- Bhuller, Brinch and Königs (2013), "Time Aggregation and the Analysis of Welfare Persistence", unpublished Oxford/Statistics Norway working paper
- Eurofund (2012), "Youth Guarantee: Experiences from Finland and Sweden",
<http://www.eurofound.europa.eu/pubdocs/2012/42/en/1/EF1242EN.pdf>
- Gjesdal, S., P. Ringdal, K. Haug (2004), "Predictors of Disability Pension in Long-term Sickness Absence – Results from a Population-based and Prospective Study in Norway 1994-1999", *European Journal of Public Health*, Vol. 14, pp. 398-405.
- Handel, M. (2012), « Trends in Job Skill Demands in OECD Countries », *OECD Social, Employment and Migration Working Papers*, No. 143, OECD. doi : [10.1787/5k8zk8pcq6td-en](https://doi.org/10.1787/5k8zk8pcq6td-en)
- Heckman, J. J. (1978), "Simple statistical models for discrete panel data developed and applied to test the hypothesis of true state dependence against the hypothesis of spurious state dependence", *Annales de l'INSEE*, pp. 227-269.
- Heckman, J. J. (1981), "Heterogeneity and state dependence". in Rosen, S., . *Studies in Labor Markets*, pp. 91-140, University of Chicago Press.
- International Labour Office (2012), "Youth guarantees: a response to the youth employment crisis?"
http://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_209468.pdf
- Scarpetta, S. and A. Sonnet (2012), "Investing in Skills to Foster Youth Employability – What are the Key Policy Challenges?", www.oecd.org/els/emp/49567835.pdf
- Scharle, Á. and T. Weber (2011): "Youth guarantees: PES approaches and measures for low-skilled young people", The European Commission Mutual Learning Programme for Public Employment Services, available at:
<http://ec.europa.eu/social/keyDocuments.jsp?pager.offset=10&langId=en&mode=advancedSubmit&dvSearchKey=pesyouthintegration&orderBy=docOrder>
- Travkina, E. (forthcoming), "Local Strategies for Youth Employment: Lessons from Case Studies", OECD LEED Forum Learning Manual for Practitioners.
- OECD (2008), *Sickness, Disability and Work: Breaking the Barriers (Vol. 3): Denmark, Finland, Ireland and the Netherlands*, OECD Publishing. doi: [10.1787/9789264049826-en](https://doi.org/10.1787/9789264049826-en)
- OECD (2010), *Sickness, Disability and Work: Breaking the Barriers: A Synthesis of Findings across OECD Countries*, OECD Publishing doi: [10.1787/9789264088856-en](https://doi.org/10.1787/9789264088856-en)
- OECD (2012), Thematic follow-up review of policies to improve labour market prospects for older workers Belgium, available at <http://www.oecd.org/els/emp/Older%20Workers-BELGIUM-%20TRAD.pdf>.
- OECD (2012), Thematic follow-up review of policies to improve labour market prospects for older workers, Canada, available at http://www.oecd.org/els/emp/Older%20workers_Canada-MOD.pdf
- OECD (2012), Thematic follow-up review of policies to improve labour market prospects for older workers – Finland, available at <http://www.oecd.org/els/emp/Older%20Workers%20Finland-MOD.pdf>

OECD (2012), Thematic follow-up review of policies to improve labour market prospects for older workers – Luxembourg, available at <http://www.oecd.org/els/emp/Older%20Workers-LUXEMBOURG-%20TRAD.pdf>

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

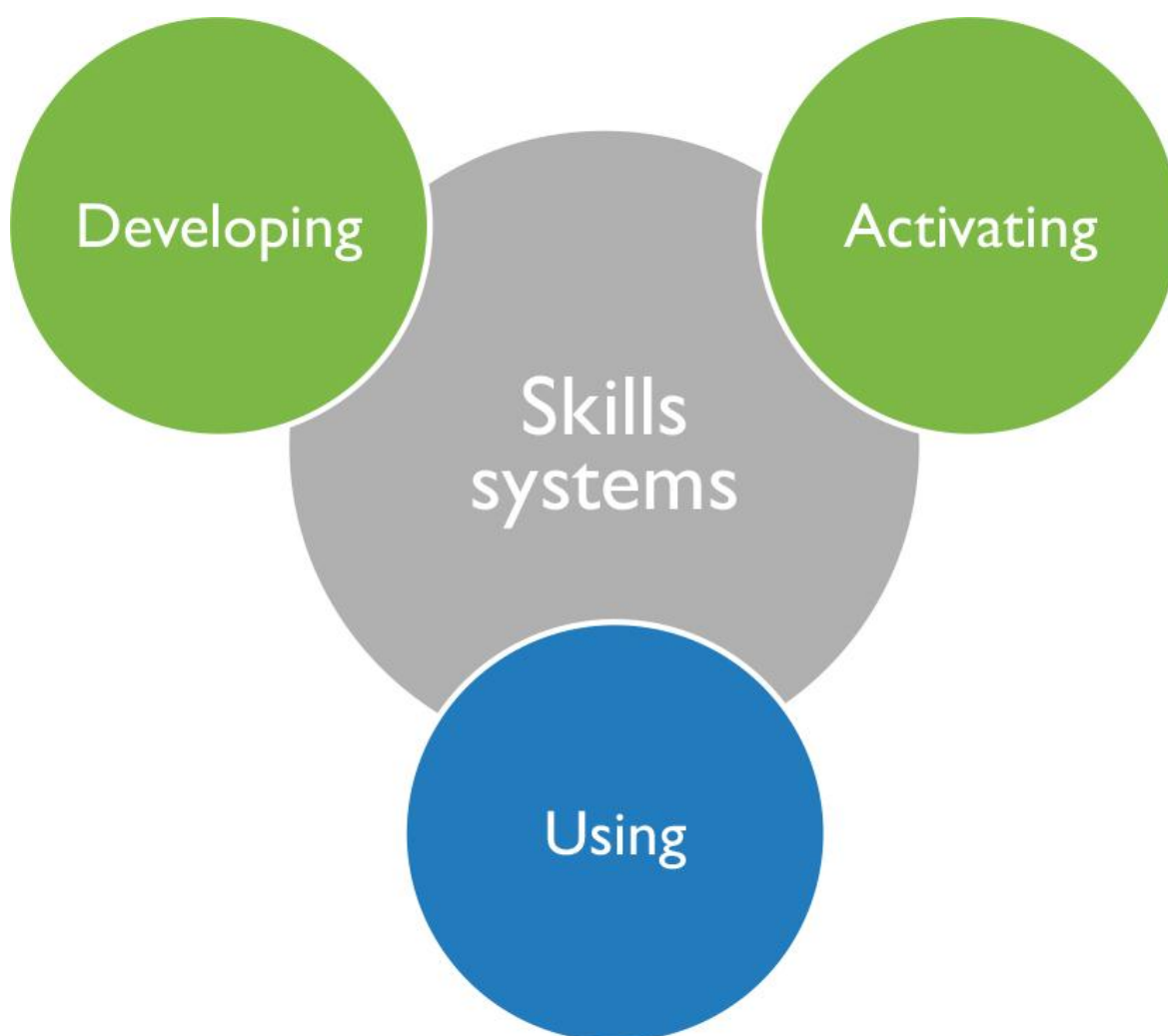
OECD (2013b), *Mental Health and Work: Norway*, Mental Health and Work, OECD Publishing. doi: [10.1787/9789264178984-en](https://doi.org/10.1787/9789264178984-en)

OECD (2013c), *Ageing and Employment Policies: Norway 2013: Working Better with Age*, OECD Publishing. doi: [10.1787/9789264201484-en](https://doi.org/10.1787/9789264201484-en)

OECD (2013d), *OECD Employment Outlook 2013*, OECD Publishing. doi: [10.1787/empl_outlook-2013-en](https://doi.org/10.1787/empl_outlook-2013-en)

Quintini, G., (2014, forthcoming) ‘Workers’ skills and how they are used at work’, OECD Publishing.

USING SKILLS



USING SKILLS



Norway could do more to ensure that people's skills are used effectively

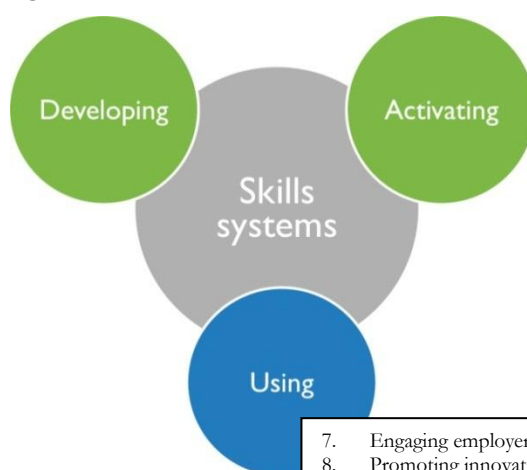
Once developed and activated, people's skills must be put to effective use if they are to deliver gains in productivity, innovation, incomes and job satisfaction. Indeed, skills mismatch is a significant challenge in many developed economies.

New data from the Survey of Adult Skills (PIAAC) provides additional evidence to show that, in many countries, workers are not well-matched with their current jobs. Some are over-skilled for their current jobs – they are capable of handling more complex tasks and their skills are under-used. Others are under-skilled for their current jobs – they lack the skills normally needed for their job.

This new data shows that Norwegian workers read, write, work with mathematics, solve problems and use computers in their jobs at around the average level observed across OECD countries participating in the Survey of Adult Skills (PIAAC). Norway has a lower than average proportion of workers whose proficiency in literacy and numeracy is estimated to be above the maximum required by their job (over-skilling). Around 5% of workers have a level of proficiency in literacy that is below the minimum required by their job (under-skilling).

Participants in the diagnostic workshops felt that one of Norway's greatest strength under this pillar lay in its potential for innovation and skills use in business clusters. Workshop participants also identified several broad challenges in using skills including: people's low propensity for geographic mobility and limited co-operation between employment services and businesses to fill vacancies in one region with skilled people from another. This section examines three challenges related to using skills:

7. engaging employers in ensuring a highly skilled workforce;
8. promoting innovation and entrepreneurship; and
9. enhancing the use of migrant skills.



- | | |
|----|---|
| 7. | Engaging employers in ensuring a highly skilled workforce |
| 8. | Promoting innovation and entrepreneurship |
| 9. | Enhance the use of migrant skills |

CHALLENGE 7: ENGAGING EMPLOYERS IN ENSURING A HIGHLY SKILLED WORKFORCE

Workshop participants clearly saw employers as playing a key role in ensuring a better skilled workforce and identified several challenges in this area:

“Skills mismatch”

“Limited flexibility in the workforce”

“Shortages of certain types of labour may dissuade employers entering markets”

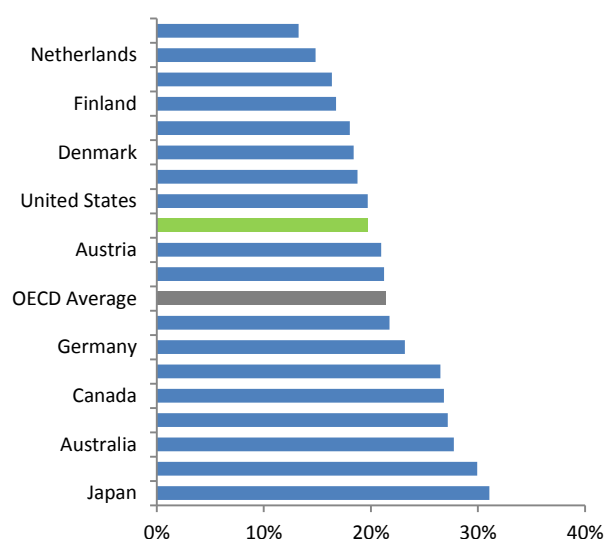


The qualifications of many workers are not matched to the requirements of their jobs

In addition to assessing literacy, numeracy and problem-solving skills, the Survey of Adult Skills (PIAAC) asks respondents about their qualifications and the type of work they do. This provides a measure of the extent to which workers are appropriately skilled for the requirements of their job. The survey shows that around 20% of Norwegian workers consider that they are over-qualified and around 15% consider they are under-qualified for their current jobs (Figure 45).

Figure 45. Incidence of over qualification

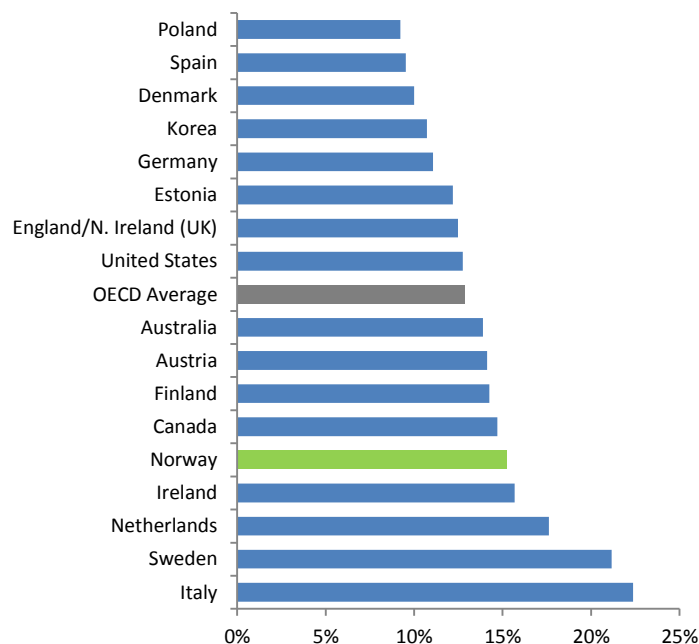
Percentage of workers whose highest qualification is higher than the qualification they deem necessary to get their job today



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

Figure 46. Incidence of under qualification

Percentage of workers whose highest qualification is lower than the qualification they deem necessary to get their job today



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

The Survey also shows that a much smaller share of workers are mis-matched on the basis of their literacy skills. On this measure, less than 10% of Norwegians are over-skilled and less than 5% are under-skilled.

Figure 47 below illustrates the extent to which skill mismatch and qualification mismatch coincide. The first panel shows those workers who are either under-qualified and under-skilled for their jobs, or over-skilled and over-qualified. In terms of the numbers of these workers who are clearly in inappropriate jobs, Norway performs marginally better than the average of countries that participated in the Survey of Adult Skills (PIAAC). The second panel illustrates the numbers of workers who are mismatched in terms of qualification and skills, but in opposite directions – under-qualified yet over-skilled and vice versa.

Finally the third panel represents those workers who are under- or over-qualified but whose skills render them well-matched to their position. A person in this situation may, for example, be highly-skilled but may have dropped out of the education system prematurely or may be an older worker who has developed skills throughout their working life. If the skills of such a person have been recognised on the job and they have taken on a more demanding position, this would be reflected in a close skills match despite an apparent qualification mismatch.

Overall, the picture which emerges is one in which the majority of workers, across participating countries have skill levels that are relatively well matched for the requirements of their jobs. This suggests that employers are relatively good at recognising the skills of their employees and either moving them into more appropriate jobs or adjusting the content of the job they are in. An alternative explanation may be that Norwegian employers are relatively successful in training their employees on the job so that, even if they are poorly matched in terms of their qualifications, they become well matched in terms of their skills.

Figure 47. Overlap between qualifications and skills-mismatch measures

Percentage of qualification-mismatched who are in each literacy mismatch status



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

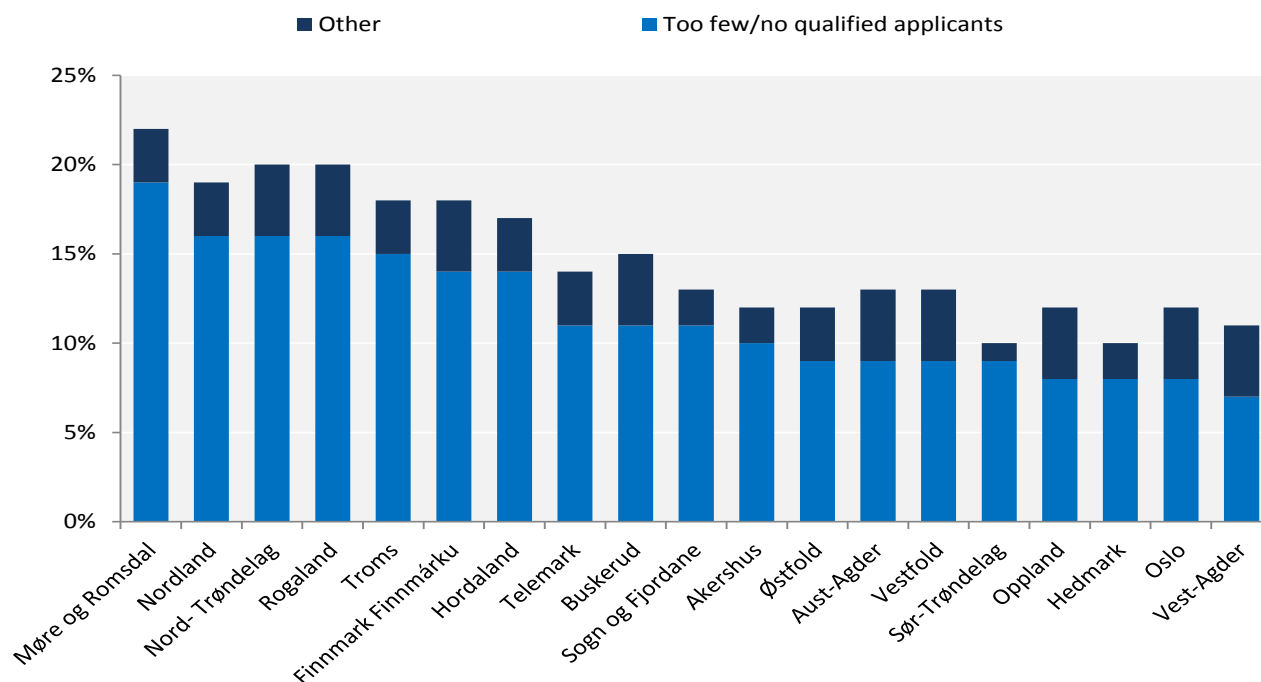
Many employers in Norway report struggling to meet their recruitment needs

Skill shortages arise when employers are unable to recruit staff with the skills they are looking for. The causes of skills shortages can be divided into three categories:

1. a general lack of workers within the country (also referred to as labour shortage);
2. geographical imbalances in the supply of labour, i.e. there are sufficient numbers of skilled people in the labour market but they cannot easily access the available jobs (also referred to as geographical mismatch); and
3. a shortfall in the number of appropriately skilled individuals.

Existing surveys of employers worldwide point to a lack of available skilled talent as a continuing drag on business performance. And according to a global survey by Manpower, around a third of employers across the OECD reported having difficulties filling specific job roles in 2012. Even during the recent financial and economic crisis, when unemployment increased substantially in many countries, a large number of firms reported struggling to meet their labour and skills needs.¹ While the situation has substantially improved in Norway between 2007 and 2013 (Manpower 2013), many employers continue to report difficulties in filling vacancies. According to a recent survey of Norwegian enterprises conducted by NAV, there is wide variation across the country (Figure 48).

Figure 48. Enterprises facing recruitment problems, by county

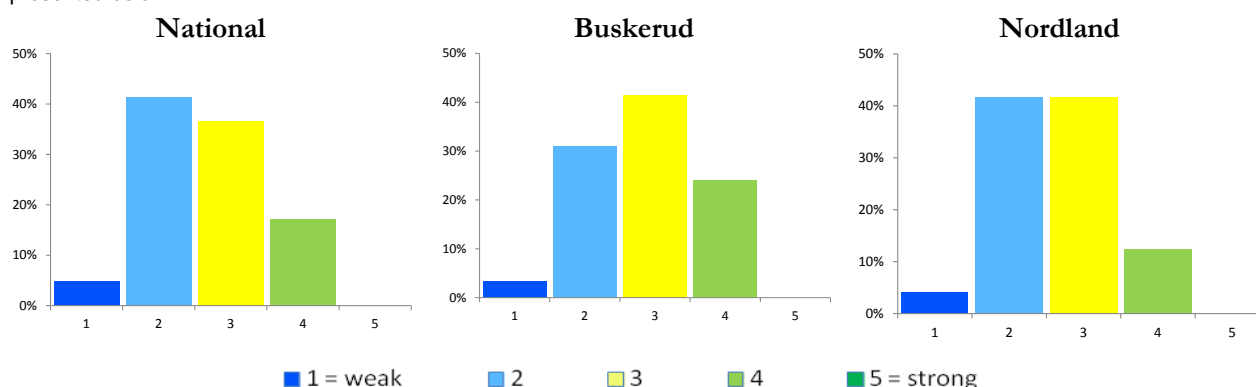


Source: Norwegian Labour and Welfare Enterprise Survey

¹ Employer-based estimates of skill shortages need to be interpreted with caution: they are based on subjective responses by employers; they do not indicate how extensive these skill shortages are relative to each employer's workforce; in some cases, employers may have faced recruitment difficulties because they offered pay or working conditions that were inferior to the prevailing levels for similar jobs elsewhere; and the results may not be representative of the situation facing all employers in the country.

Are employers in Norway able to recruit sufficient numbers of skilled people who fit their requirements?

Participants were asked to use the OECD Skills Diagnostic Toolkit to score the performance of Norway's current skills system in delivering a number of critical outcomes. A low score indicates that the current skills system does poorly in delivering the outcome described and a high score indicates a strong performance. The results from workshops held at the national level and in 2 counties are presented below.



It is striking that not a single participant in any of the three workshops felt that Norway's skills system showed strong performance in enabling employers to recruit appropriately skilled workers. Participants in the national diagnostic workshop that took place in Oslo were particularly concerned about the availability of appropriately skilled workers.

Box 29. Skills Obstacle Course: Haldis

Profile: Haldis is 47 years old and runs a successful small business in Ålesund producing and installing windows and doors. She employs 12 people and is an active member of the Ålesund Chamber of Commerce. She has won a multi-year contract to install new windows in all the public buildings in the area, but now needs to find enough qualified staff to handle this additional work.

Task: Workshop participants were asked to put themselves in the shoes of Haldis to help her navigate Norway's skills system

Goal: To hire four new qualified employees

Obstacles:

- o Location of opportunities
- o Attitude of potential staff
- o Tight labour market
- o Language skills of potential staff

Options:

- o Personal networks
- o PES/temp agencies
- o Adjust expectations



Box 30. Disseminating information on opportunities

Just as the dissemination of information on skills needs helps students inform their educational decisions (Challenge 3), so it helps appropriately skilled workers and the employers seeking their skills to find one another.

The **United States** Department of Labor has developed two online portals, "My Skills, My Future" and "My Next Move". The first one allows workers to register their previous job information with the aim of finding an appropriate job that is currently available. Users can also search the job database for job-training seminars and local job opportunities. The second one allows users to search for jobs by occupation, by industry and by using the "O*NET Interest Profiler", which matches an individual's interests with suitable occupations through the user's response to around 60 questions.

Users can search for jobs in three categories: careers with a "bright outlook" in growing industries, jobs that are part of the "green" economy, and occupations that have a Registered Apprenticeship programme. Each occupation that a user selects has an easy-to-read, one-page profile, including information about what knowledge, skills and abilities are needed; the occupation's outlook; the level of education required; technologies used within the occupation; and a list of similar jobs. In addition, each occupation page includes direct links to local salary information, training opportunities and relevant job openings.

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



To remain competitive employers must invest in the skills of their workforce

A key element in aligning education and training systems with labour market needs is to involve employers in investing in apprentices, and in building upon the existing skills in the workforce. Employer engagement in skills development takes various forms, including workplace learning, offering apprenticeships, setting up own study programmes and cooperating with universities.

Employer driven training may take place in the workplace or may be contracted to external training providers, it can vary in length and may or may not culminate in a certificate. Employer engagement in job-relevant training can also take the form of employer assisted training in which the initiative comes primarily from the employee while the employer facilitates its realisation through co-financing or through the provision of additional days off work. In short, employers can play an essential role in the skills development of the working population.

Employers have up to date information regarding their skills needs, they have access to the relevant techniques and technologies and, with improved Human Capital Reporting, employers have the potential to gather the information necessary to make efficient training decisions (UKCES 2009). However, if the perceived benefits of training are not sufficient to offset costs, employers may not invest in skills development. Furthermore, since many of the costs fall largely on the employer while the benefits are shared among the employee, the employer, and the society at large, the level of employer investment into the skills of their workforce may fall below the optimum.

Box 31. Employer benefits from investments in skills development

Production increases and innovation: training should have a positive impact on the quality and efficiency of an employee's production and trained employees are likely to make fewer mistakes. Skills mismatch, is a misalignment between an employee's skills and the skills requirement of the job. It is a problem when employees struggle with the feeling of not having adequate skills to cope with the requirements of the job. Training is a way of tackling this problem effectively with the related production benefits to the employer. Not only does the trained employee progress – studies have demonstrated positive externalities and spillover effects from the training onto other employees (De Grip and Sauermann, 2012). Finally, training can have a positive impact on various elements of a firm's innovation capacity if new technologies are assimilated and new skills are applied to improve the product, the production processes or the management structures of the firm (OECD, 2010b).

Tenure and saved recruitment costs: employer-driven training can be used by employers as a way to save all sorts of costs related to human capital acquisition (e.g. production bottlenecks due to a lack of qualified staff and difficulty of recruiting new workers). The propensity of an employer to engage in training depends on the availability and cost of skilled workers through external recruitment. So the real question to pose when assessing the relative benefits of training is: what would an alternative form of human capital acquisition (through short-term contracting or recruitment) cost? Are skilled workers readily available in the labour market? How costly is their recruitment (and how costly are recruitment mistakes due to limited information on the external candidates)? Is there a need for induction/training for new staff? Understanding the benefits from saved recruitment costs requires data on tenure of trained employees as well as a comparison of alternative sources of skills acquisition through recruitment of trained workers or short term contracts (Brunello and De Paola, 2009). The other question is: are employees who received training also more likely to stay with the company? The evidence on this question is inconclusive, as turnover differences between trained and non-trained workers is not statistically significant (Bassanini, 2007, Green, *et al.* 2000).

Box 31: Employer benefits from investments in skills development (continued)

Employee satisfaction: training can have a positive impact on employee satisfaction, either because people feel more confident in doing their work or because they get opportunities to evolve and progress. Depending on the country surveyed, from 8% to over 20% of employees report that they do not feel confident in their job (Quintini, 2011). As a result they experience higher levels of stress and are at a greater risk of health issues. Conversely, satisfied employees are not only healthier, they are also more productive. Employee motivation and satisfaction can have a positive impact on productivity, but independently of a quantifiable benefit they can be considered a non-monetary value in themselves. Related to this point, training can be considered part of the employee benefits and compensation package. To motivate employees, to attract them and encourage them to stay, offering training can be part of a firm's management strategy and competitive advantage since they will be better able to attract highly qualified candidates.

Firm reputation: some less immediately tangible benefits resulting from a firm's investments in training are even more difficult to quantify. These can include the firm's reputation for social engagement investing in education over and above their immediate needs in the production process.

Source: OECD (2014, forthcoming) 'Analytical framework for assessing employer benefits from investing in skills development, OECD Publishing.'

Box 32. Costs of employer driven training and cost sharing arrangements

- The costs:**
- o **Organisation and administration:** costs associated with identifying the skills needs of employees and organizing adequate training provision
 - o **Instructors:** cost of external training paid by the employer or time of the internal supervisor
 - o **Training material:** expenses for tools, written material, class room infrastructure
 - o **Foregone working hours:** reduced production of the employee receiving the training

The burden of costs of employer driven training can be shared in varying proportions between employers, the government, unions or the individual receiving the training. Other financial support mechanisms (such as tax breaks) are also sometimes used to incentivise training (see Müller and Behringer (2012) for a review of funding mechanism evaluations).

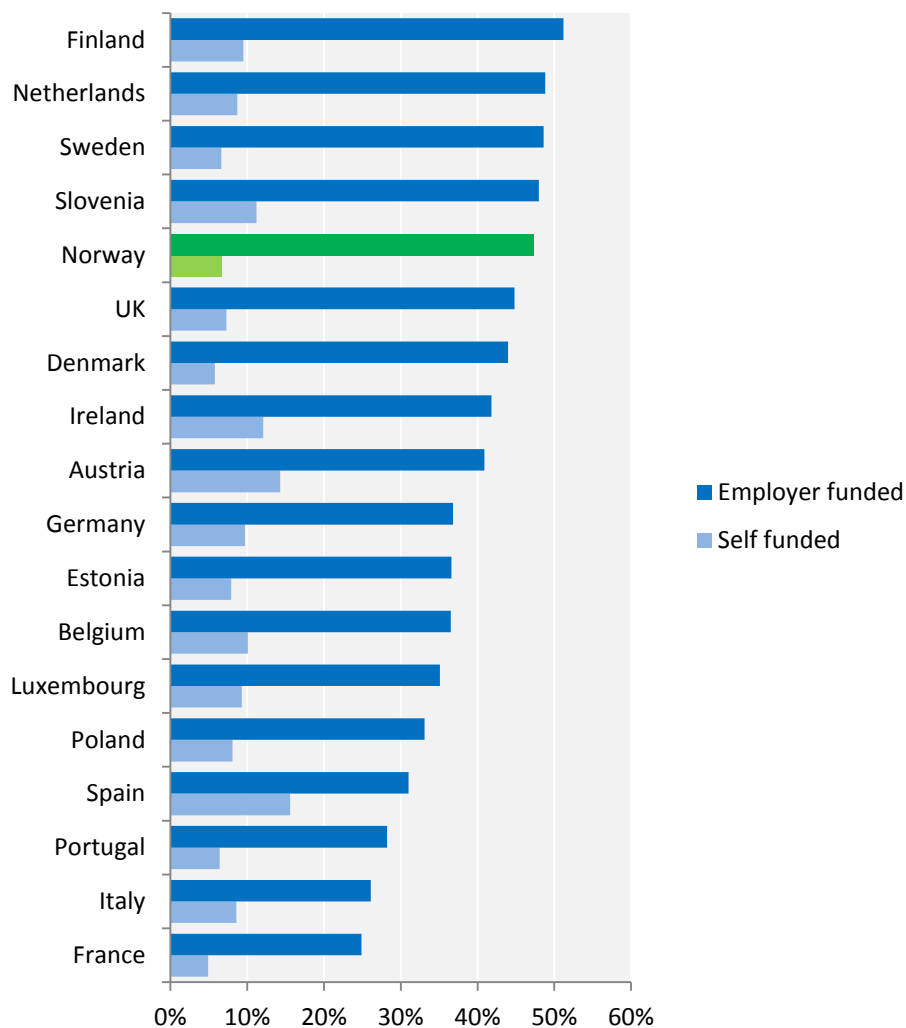
Cost sharing arrangements:

- o **Between employers:**
 - through voluntary collaboration;
 - through mandatory levies imposed at the national or sectoral level to combat "poaching".
- o **Employees** can shoulder some of the costs.
- o **Government** can also support training:
 - by offering subsidies;
 - by offering brokerage services.

A relevant example from Norway is the new instrument developed by Innovation Norway called "*Kompetanseutvikling i regionale næringsmiljøer*". The programme aims to develop training courses for existing workers in a network of small companies – along the lines of the Skill Nets in Ireland.

Source: OECD (2014, forthcoming) 'Analytical framework for assessing employer benefits from investing in skills development'; <http://www.innovasjon Norge.no/Bygg-en-bedrift/Klynger-og-bedriftsnettverk/Sok-midler-til-kompetanseutvikling-i-regionale-naringsmiljoer/> and <http://www.skillnets.ie/>

Figure 49. Percentage of employees who receive training by funding source



Source: European Working Conditions Survey 2010

Norway performs relatively well in terms of the magnitude of employer funded training. Data collected by the European Working Conditions Survey 2010 show that over 40% of employees reported receiving employer funded training putting Norway behind only Finland, the Netherlands, Sweden and Slovenia in this regard and ahead of the UK, Denmark and Germany among others (Figure 49).

Box 33. Overcoming the obstacles of work-based learning

There are various barriers that firms of all sizes, but particularly small and medium enterprises (SMEs), face in investing in employee training. These barriers include resource, time and cost constraints, but also bureaucracy and tax disincentives. Various policies have been put in place to try and overcome such obstacles, including pooling resources and partnership arrangements. In some countries, compulsory levy schemes exist to drive an increase in employer spending on training.



In Toronto, **Canada** such a levy-scheme has been initiated by the trade union for hospitality workers who began to push for a dedicated training academy for the sector. Apart from proposing to work with hotel employers, the union approached community groups, city councillors, representatives of the provincial government, federal government and others. The Hospitality Workers Training Centre (HWTC) – a partnership between the union and the major hotels – now offers on-site training in many hotels across the city, including classes in English as a Second Language, literacy, computer skills and housekeeping skills. The Centre is governed by a Board comprising of an equal number of members (4 each) from the union and the employers with the dual goals of providing existing members with the opportunity to upgrade their skills for promotion and creating opportunities for newcomers to enter the growing hospitality industry by providing the training they need to begin entry-level jobs in Toronto's hotels.

In **The Netherlands**, the city of Antwerp has developed a joint approach to raise skills levels in the construction sector, called Talentenwerf ("talent building site"). Talentenwerf is a partnership between the VDAB, the city of Antwerp, the Antwerp Education Council and the Fund for Professional Training in the Building Industry. Talentenwerf is run by staff from each of the different partner organisations and gathers staff and knowhow under one roof to produce a one-stop-shop for construction companies, their workers, jobseekers and local schools. Apart from matching supply and demand, much attention is devoted to the development of innovative training programmes with the highest possible participation from companies. Temporary training infrastructure is also provided on building sites so as to bring training and education closer to industry.

Source: Verma, A. (2012), Skills for Competitiveness: Country Report for Canada, OECD Local Economic and Employment Development (LEED) Working Papers, OECD Publishing; Froy, F. and S. Giguère (2010), "Putting in Place Jobs that Last: A Guide to Rebuilding Quality Employment at Local Level", OECD Local Economic and Employment Development (LEED) Working Papers, No. 2010/13, OECD Publishing.

Apprenticeships are an investment in the future for employers

Employers play a key role in aligning education and training systems with labour market needs when they collaborate with training institutions and offer apprenticeships. The standard model for upper secondary VET in Norway is two years in school followed by two years of apprenticeship in a company, though those who do not find an apprenticeship can stay on in school-based VET for a third year. International evidence shows that school-based VET combined with on-the-job training tends to yield better labour market outcomes than purely school-based VET and evidence from Norway confirms this finding. A national study indicates that students who had received an apprenticeship were much more likely to pass the final vocational examination than students who carried out their third year in school-based alternative vocational courses, even when controlling for previous performance (Støren, Helland and Grøgaard, 2007).

Apprentices in Norway are employees of the enterprise, and receive a wage that ranges from 30 to 80% of the wage of a qualified worker, this percentage increases over the apprenticeship period (OECD 2008). However, employers taking on apprentices receive direct subsidies from the county with additional subsidies available for apprentices in traditional crafts. Although the number of apprenticeship places offered in companies has increased in recent years, a sizeable proportion of those who apply for an apprenticeship fail to obtain one. Further efforts from employers are therefore needed to meet unmet demand for apprenticeship places.

Norway in Focus: Apprenticeship Promotion (Lærlingløftet)

The Norwegian government has recently launched a new initiative called “Apprenticeship Promotion” aiming to increase the number of apprenticeships and to recruit new companies as training establishments for apprentices. As part of the government’s ongoing collaboration with the social partners, the goal is to increase the number of apprenticeship contracts by 20% in the next four years.

The government has allocated 114 million NOK (14 million EUR) to this initiative and aims to strengthen collaboration with the social partners to ensure that the training apprentices receive becomes more relevant and work-oriented. Among the most significant actions are:

- increased state subsidies to training establishments;
- an extra subsidy of NOK 50 000 (6 250 EUR) to new training establishments; and
- a website with information for companies on the advantages of having apprentices as well as information on how to proceed to become a training establishment

Source: Lærlingløftet <http://xn--lrlinglftet-98a4v.no/>

Box 34. Sectoral and local initiatives to address skill shortages of sufficiently skilled workers

Local and regional government agencies have increasingly adopted sectoral strategy approaches to economic development. Public education and workforce systems organise their work through pathways and cluster models. For high schools and community colleges, establishing career-pathway models helps to connect them to the economy, and to produce workers with the appropriate skills for jobs in the region.



In the **United States** the State of Maryland started working on a sectoral strategy approach in 1995 under the School-to-Work Opportunities Act. The approach was bottom-up: mapping what knowledge and skills were required and developing programmes around clusters of skills. Within each county, a Cluster Advisory Board (CAB) focused on different industry clusters. In Montgomery County, Maryland, for example, which hosts the third-largest biotechnology cluster in the United States, a CAB is focused on the biosciences, health science and medicine cluster. Administrators, counsellors, and faculty members use the career-cluster system to develop programmes that extend from high school to two- and four-year colleges/universities, graduate schools, apprenticeship programmes and the workplace. Although the cluster framework was originally developed for high schools and young people, it is now being adopted by workforce investment boards and other programmes serving adults.

Source: Hamilton, V. (2012), “United States Career Pathway and Cluster Skill Development: Promising Models”, OECD LEED Working Paper, No. 2012/6, OECD Publishing, OECD LEED Local Skills Strategies, www.oecd.org/document/57/0,3746,en_2649_34417_48956153_1_1_1_1,00.html

Incentives encourage employers to invest in training their workforce

Corporate tax incentives in Norway are such that costs associated with the training of employees are deductible from taxable corporate income where the training is related to the work of the company (Torres, 2012). This is typical in OECD countries, where these kinds of training costs are deducted as normal business incentives.

These deductions, however, may disadvantage small and medium sized enterprises (SMEs) for whom the large fixed costs (in terms of time and resources) associated with work-based training can present additional barriers. SMEs may need additional support, or may need to co-ordinate locally. Furthermore such tax deductions do not help firms whose profits in a given year are low, hence a poor economic climate may lead to reductions in investments in work-based training.

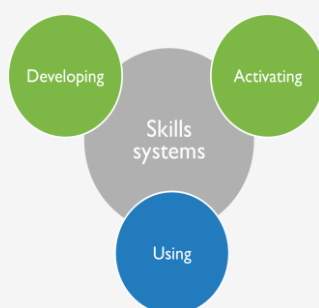
Lastly, the fact that the deductibility of expenses for privately-provided education in the Norwegian Personal Income Tax code is limited to those kind of expenses necessary for ‘maintaining’ one’s current occupation, may disadvantage those wishing to invest in their skills to change careers. This will limit people’s flexibility to respond to structural economic change and reduced employment opportunities in certain sectors.

Norway in Focus: The Industrial Ph. D Scheme (NAERINGSPHD)

The Industrial Ph.D. scheme, established in 2008 to facilitate the recruitment of researchers to Norwegian industry, funds industry-oriented doctoral research fellowships. Under the scheme companies may apply for support for a three-year period for a maximum of two employees seeking to pursue an ordinary doctoral degree. The doctoral candidate must be employed by the company and the doctoral research project must be of clear relevance to the company’s activities.

The aim of the scheme is to increase the knowledge intensity in Norwegian industry and to promote knowledge transfer from researchers to society at large through enhancing the level of interaction between academia and industry.

Source: The Research Council of Norway, http://www.forskningsradet.no/prognnett-naeringsphd/Home_page/1253952592752



Where does employer engagement fit into the skills system?

Strong employer engagement in Norway’s skills system is vital. By offering high quality apprenticeships employers can reinforce the importance of strong foundation skills while in school (Challenge 1). By providing input into the design of education programmes as well as work experience opportunities, employers can help educational institutions offer engaging and relevant courses. This can make a real difference in reducing drop-outs (Challenge 2), encouraging young people to consider future job opportunities when making their educational choices (Challenge 3), and reaching youth at risk of inactivity (Challenge 5). For people already in work, employers can invest in on-the-job training to help fill gaps in their employees’ foundation skills (Challenge 1) and encourage older workers to keep their skills up-to-date and remain in the labour force (Challenge 6).

CHALLENGE 8: PROMOTING INNOVATION AND ENTREPRENEURSHIP

Among the issues to emerge during workshop discussions that of promoting innovation and entrepreneurship in Norway came to the fore:

“New forms of employment and entrepreneurship change the role of employee-employer relations.”



Innovation and entrepreneurship can represent promising sources of employment and output

Access to natural resources has helped Norway to maintain a prosperous economy, a highly educated population, generous social assistance and low unemployment. While direct employment in petroleum extraction is not large, a substantial part of the mainland economy as well as public employment is reliant on it. As the growth contribution of petroleum declines innovation and entrepreneurship will become increasingly important in order to sustain Norwegian prosperity.

Innovation and entrepreneurship do not occur in a vacuum. Innovation requires policies that produce, attract and foster advanced skills and creative thinking. Entrepreneurship requires bringing together diverse thinkers from research and business to turn needs into ideas, and ideas into commercial applications.

Focus on Norway: The Norwegian Action Plan for Entrepreneurship in Education and Training

The Norwegian Action Plan for Entrepreneurship in Education and Training, first set up in 2004 and renewed in 2009 takes an approach differentiated between compulsory education and post-secondary education, with the main emphasis being in the latter.

In compulsory education the key approach is to develop entrepreneurship awareness programmes, at the discretion of individual educational institutions, for example through the Norwegian branch of the European Junior-Achievement – Young Enterprise (JA-YE) programme. One widely used programme in Norway, the Company Programme, involves teams of students role-playing in setting-up and developing a company and reporting to shareholders. According to JA-YE Norway, while there may be some self-selection in those students who choose to enrol students who have followed the company programme are around 50% more likely to start their own business.

In secondary and post-secondary vocational education guidelines require entrepreneurial skills to be included as part of the instruction.

In higher education, the Action Plan has taken the form of both including short entrepreneurship-related modules and full semester courses in many degree programmes, and of the setting-up of specific courses in entrepreneurship including at masters level. For example, the Norwegian Technical University in Trondheim offers a 2-year masters course in which teams of students have the opportunity to commercialise a technology-based product that they develop themselves.

Source: OECD (2014, forthcoming), OECD Economic Surveys: Norway, OECD Publishing.

While desirable, low unemployment and generous social assistance may dampen people's drive for *entrepreneurship*. At the same time, fully funded education and the compressed wage distribution does little to raise the relatively low proportion of students studying those subjects thought to be important for *innovation*. Currently just over 1% of Norwegian employees aged 25-34 hold a degree in Science, Technology, Engineering or Mathematics (OECD 2013).

Box 35. Breaking down the barriers to entrepreneurship

A general finding of evaluations is that entrepreneurship training schemes can lead to improvements in business practices, and help prospective entrepreneurs launch businesses more quickly. The best programmes provide a comprehensive package of training, finance and mentorship.



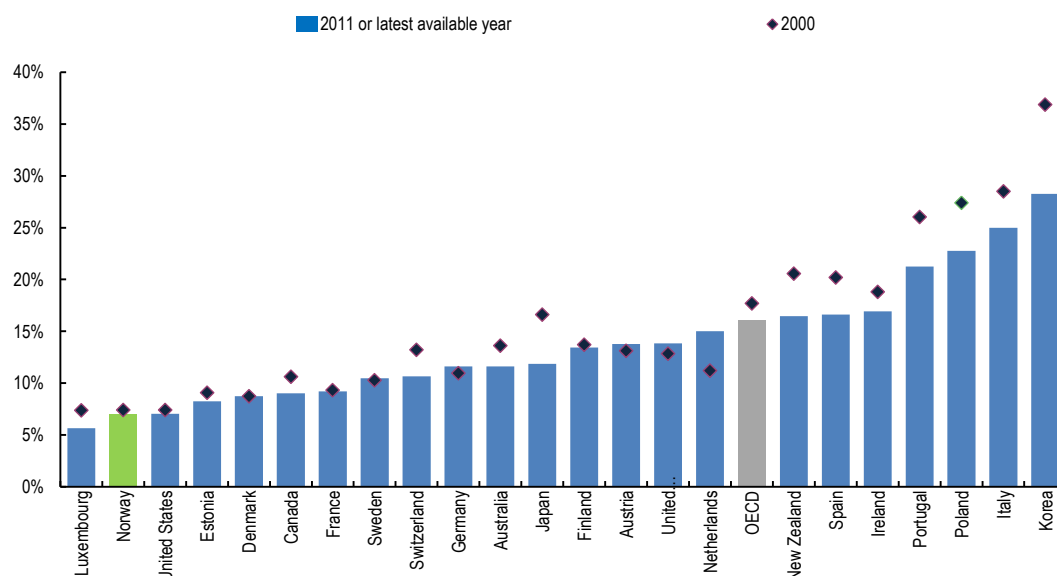
In Malmö, **Sweden**, in an attempt to provide a level playing field for enterprise and business development ALMI – a public service to provide advice, loans, venture capital and incubation for start-ups – have created a team specifically tasked with facilitating business development among migrants. The small team of five, meet with approximately 1000 migrants individuals each year, providing contacts, access to finance and, where necessary, language support. Over one third of those with whom ALMI has contact go on to start a business, with 70% remaining active after 3 years. Currently predominantly male (61% in 2011), successful recipients of ALMI's business development support include migrant businesses such as Nablus Mejeri, a family owned business now producing and exporting cheese from a factory in Malmö, based on a traditional Palestinian recipe.

Source: OECD (2012), *OECD Territorial Reviews: Skåne, Sweden 2012*, OECD Publishing. doi: [10.1787/9789264177741-en](https://doi.org/10.1787/9789264177741-en)

Yet self-employment and new firm creation are relatively low in Norway. And though self-employment is a relatively imprecise measure of entrepreneurial activity, low levels of self-employment could indicate the presence of barriers to entrepreneurship in the Norwegian economy. Norway's low unemployment, the context of relative economic security, and the high returns available through regular employment, could be providing disincentives for would-be entrepreneurs to take risks.

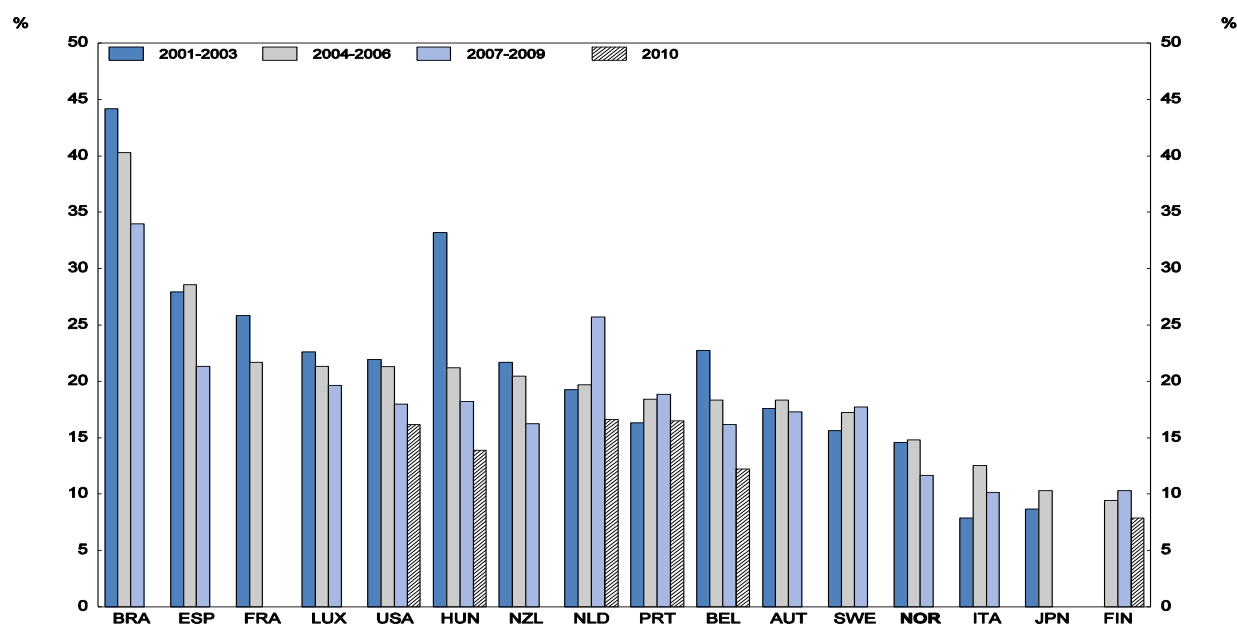
New firm creation is also relatively low in Norway and while the facilitation of private limited companies has been a priority, some aspects of employment protection – such as the restrictions on the use of temporary contracts and the relatively short working hours – may present additional barriers to new start-ups.

Figure 50. Self-employment as a share of total employment



Source: OECD (2013), *OECD Factbook 2013: Economic, Environmental and Social Statistics*, OECD Publishing.
doi: [10.1787/factbook-2013-en](https://doi.org/10.1787/factbook-2013-en)

Figure 51. Norway has a lower start-up rate than many countries

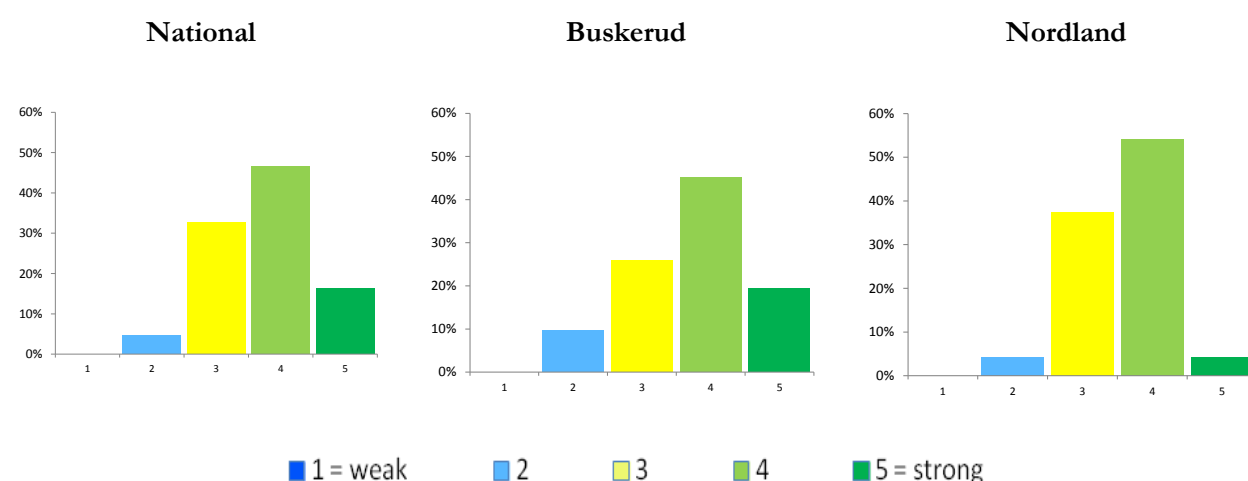


Note: The graph reports country averages in start-up rates (defined as the fraction of start-ups among all firms) across the indicated three-year periods. Start-up firms are those firms which are from 0 to 2 years old. The period covered is 2001-2011 for Austria, Belgium, Finland, Hungary, the Netherlands, Norway, and the United States; 2001-2010 for Brazil, Spain, Italy, Luxembourg and Sweden; 2001-2009 for Japan and New Zealand; 2001-2007 for France; and 2006-2011 for Portugal. Sectors considered are: manufacturing, construction, and non-financial business services. Businesses never growing above one employee and those existing for only one year are excluded. Owing to methodological differences, figures may deviate from officially published national statistics. For Japan data are at the establishment level, for other countries at the firm level.

Source: Preliminary results from OECD (2013), *OECD Science, Technology and Industry Scoreboard 2013: Innovation for Growth*, OECD Publishing. doi: [10.1787/sti_scoreboard-2013-en](https://doi.org/10.1787/sti_scoreboard-2013-en)

Are innovative industries and businesses growing and providing opportunities for skilled workers?

Participants were asked to use the OECD Skills Diagnostic Toolkit to score the performance of Norway's current skills system in delivering a number of critical outcomes. A low score indicates that the current skills system does poorly in delivering the outcome described and a high score indicates a strong performance. The results from workshops held in the capital and two counties – are presented below.



Participants across the country were relatively confident in the ability of innovative industries and businesses to grow and provide opportunities for skilled workers.

Successful entrepreneurs require a range of skills, both generic and job-specific...

Helping to move from innovative ideas to practical application, entrepreneurs play a critical role in the commercialisation of innovation and research. To start-up and operate a successful business entrepreneurs must use a range of skills including, but stretching beyond, those skills required of employees in the workplace. Identifying these skills is not straightforward – using levers to strengthen them is even less so.

A good starting point is the workplace skills that are required of any worker, both generic and firm specific. Generic skills refer to skills used in the work environment that are transferable to different jobs and industries. Such skills include basic cognitive skills as well non-cognitive skills such as communication and team work. In addition to these generic skills those that are specific to certain jobs or work functions and are related to the development, production and delivery of the specific products or services.

Alongside these generic and specific skills necessary in any workplace, operating as an entrepreneur, rather than an employee, puts a premium on skills such as business planning, self-motivation, assessing and managing risk, strategic thinking, making the best of personal networks, and motivating others (OECD, 2010a). Table 2 outlines the types of skills required by entrepreneurs.

Table 2. Types of skills required by entrepreneurs

Technical Skills	Business Management Skills	Personal Entrepreneurial Skills
Written and oral communication	Planning and goal setting	Self-control / discipline
Environment monitoring	Decision making	Risk management
Problem solving	Human resource management	Innovation
Technology implementation and use	Marketing	Persistence
Interpersonal	Finance	Leadership
Ability to organise	Accounting	Change management
	Customer relations	Network building
	Quality control	Strategic thinking
	Negotiation	
	Business launch	
	Growth management	
	Compliance with regulations	

Source: Hisrich, R., and M. Peters (1992), "Entrepreneurship: Starting, Developing, and Managing a New Enterprise", Irwin Publishing, Illinois.

Box 36. Enhancing the prominence of entrepreneurship in the education system

In **Finland** entrepreneurship education is included as an obligatory subject in all primary (ISCED 1) and secondary schools (ISCED 2 and 3 – lower and upper general secondary education) and has been given a strong emphasis in the latest five year development plan for education and research (2011-2016) elaborated by the Ministry of Education and Culture. The national core curriculum for basic education includes a cross-curriculum theme called "participatory citizenship and entrepreneurship" (for ISCED 1 and 2) and "active citizenship and entrepreneurship" (for ISCED 3). While school autonomy implies that methods of implementation may vary, guidelines are included as part of the core curriculum and these specify that the main focus should be on practical exercises and the creation of personal participation experiences.



In primary and secondary schools, the learning outcomes concern attitudes (self-awareness, self-confidence, taking initiative and responsibility, risk-taking, critical thinking, creativity and problem solving) and knowledge about entrepreneurship, career opportunities and the world of work and business. For some students (upper secondary education), learning outcomes may concern practical exploration of entrepreneurial opportunities.

A key component of entrepreneurship education is the learning environment where the focus is on the learner's own activity, learning takes place in a real-world setting in which instruction is based on problem-solving and interaction.

An initiative in the province of Guipuzcoa in the Basque Country, **Spain** has built non-cognitive skill development into educational modules for school children as well as the workplace and other civil society actors such as sports teams. The province has also promoted entrepreneurship initiatives in schools to raise awareness at an early age.

Source: For more information please see: www.minedu.fi/export/sites/default/OPM/Julkaisut/2009/liitteet/opm09.pdf; OECD (2010), *Higher Education in Regional and City Development: Amsterdam, The Netherlands 2010*, OECD Publishing. doi: [10.1787/9789264088955-en](https://doi.org/10.1787/9789264088955-en); OECD (2010), *Higher Education in Regional and City Development: Andalusia, Spain 2010*, OECD Publishing. doi: [10.1787/9789264088993-en](https://doi.org/10.1787/9789264088993-en); OECD (2011), *OECD Reviews of Regional Innovation: Basque Country, Spain 2011*, OECD Reviews of Regional Innovation, OECD Publishing. doi: [10.1787/9789264097377-en](https://doi.org/10.1787/9789264097377-en)

... yet many Norwegians feel they lack the skills to start a business

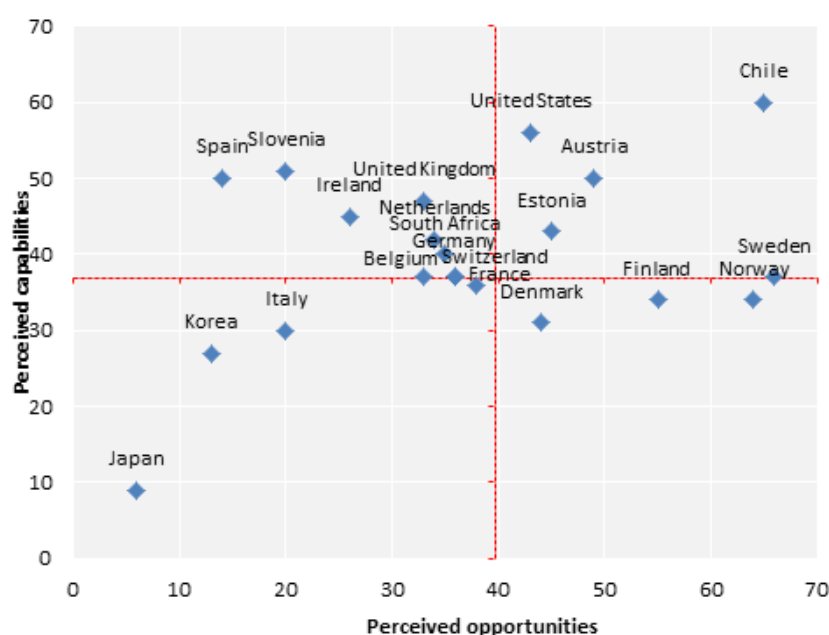
In addition to the skills necessary to run a small business, new entrepreneurs require the capacity to find new products and new markets and the confidence to begin. With higher probabilities of self-employment among the children of the self-employed (Dunn and Holtz-Eakin, 2000) these skills and the confidence to use them can pass from generation to generation. It is possible that, at the national level, low-levels of self-employment may be self-perpetuating in Norway.

According to the 2012 Global Entrepreneurship Monitor (GEM), 64% of respondents in Norway see good opportunities to start a firm in the area where they live – a level which is among the highest in the OECD (see Figure 52). However, many Norwegians still perceive that they lack necessary skills and, according to the GEM, the proportion of Norwegian respondents who believed they had the required skills and knowledge to start a business was just 34%.

Furthermore, despite relatively high survival rates among newly created enterprises in Norway, fear of failure appears to represent an important impediment to starting up a new business among potential entrepreneurs in Norway.

The education system can play an important role in equipping individuals with the appropriate skills to start their own business and, according to the 2012 Eurobarometer survey of entrepreneurship, a large proportion of Norwegians (76%) feel that their schooling helped them to ‘develop a sense of initiative and a sort of entrepreneurial attitude’ (OECD 2012b). Supervised experience within the education system may help them build on this confidence in their skills and reconcile it with their understanding of the skills required.

Figure 52. Perceived opportunities and capabilities among 18-64 year olds



Source: GEM 2012 Global Report (2013), <http://www.gemconsortium.org/docs/2645/gem-2012-global-report>

Box 37. Taxation and entrepreneurship

Public policy can foster entrepreneurship by removing barriers to starting and running a business, including by:

- Reducing “red tape” by ensuring that administrative and financial requirements to open and to maintain businesses are not too onerous, particularly for those with medium-to-low skills.
- Ensuring the tax code does not create disincentives for people moving from regular employment to self-employment.

These considerations must be balanced with the need to ensure that self-employment is not too lightly taxed, in which case it could become a means for tax arbitrage, with increased numbers of regular employees choosing to become self-employed and contracting their work to their former employer to pay lower levels of social security contributions – as opposed to self-employment stemming from genuine entrepreneurship.

It is also important for entrepreneurs and small businesses that the administrative set-up costs as well as compliance costs associated with taxation and regulation are kept in check. The compliance costs associated with VAT, corporate income tax, and social security contributions can be onerous, especially for sole-traders and for businesses with very small numbers of employees. Broadly speaking, while total business tax and compliance costs tend to be higher for large companies, as a percentage of sales they are significantly higher for SMEs. Along with many OECD countries, Norway reduces the number of times per year that certain businesses need to pay VAT. This has the effect of reducing the compliance costs for small firms – they only have to calculate liabilities and fill out forms a few times per year - without reducing the tax base. In Norway, businesses with an annual turnover of less than \$157.030 (NOK 1m) need only submit a VAT return once per year (the standard frequency is 6 times per year).

Source: OECD (2010), *Why Is Administrative Simplification So Complicated? Looking beyond 2010*, Cutting Red Tape, OECD Publishing. doi: [10.1787/9789264089754-en](https://doi.org/10.1787/9789264089754-en)

Unlocking entrepreneurial potential requires a broad range of stakeholders

Human capital is a key driver not only of innovation but also of entrepreneurship. Building the development of entrepreneurial skills into the education system at all levels is an important step towards encouraging people to consider starting their own business irrespective of their background. However, the promotion of entrepreneurship can go beyond the education sector, incorporating active labour market policies and migrant integration. It can involve actors across levels of government, as well as universities and private sector employers.

Innovative firms encourage entrepreneurial employees. These salaried employees within existing companies play an important role in innovation by creating new processes and product spin-offs which enhance the growth of existing companies. Such employees, while less likely to have to take financial risk than independent entrepreneurs, will nonetheless require the innovative thinking and ability to recognise opportunities, the ability to convince others and market a new idea and the organisational skills involved in bringing together different people and, potentially, financial resources. All of which are part of the entrepreneurs skills set.

Box 38. Engaging actors across the skills system in fostering entrepreneurship

In **Korea**, universities have been established as a core actor of the regional innovation system. The NURI (New Universities for Regional innovation) was planned to strengthen the innovation capacities of provincial universities in Korea. Major strategies of NURI include i) attracting good students and retaining talent in the regions, ii) improving educational conditions and developing workforce education, iii) building productive partnerships with local authorities and business and to provide skilled workers and advanced technologies to the industrial clusters in the regions and iv) playing a leadership role in developing and maintaining effective regional innovation systems.

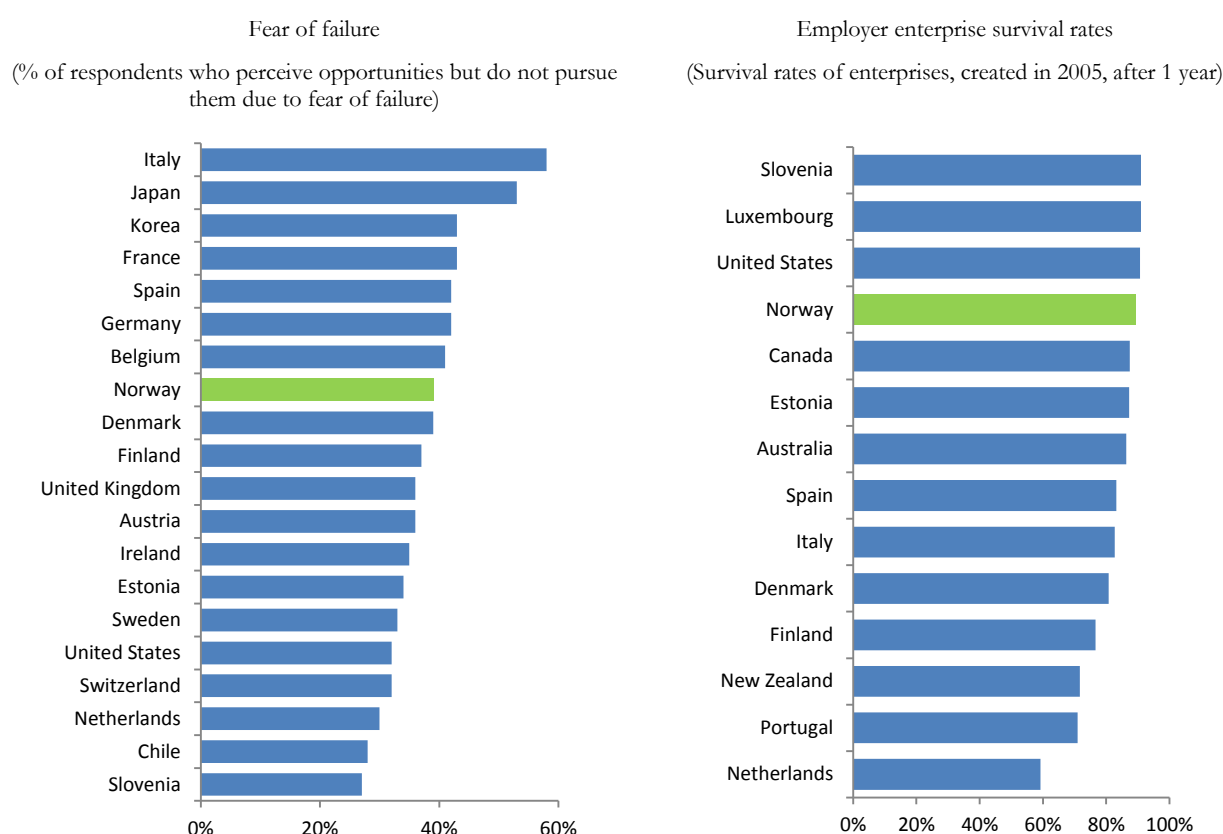


Box 38. Engaging actors across the skills system in fostering entrepreneurship (continued)

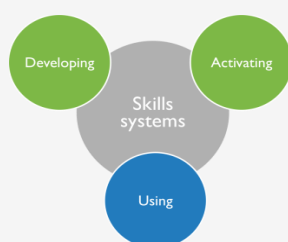
The Plato initiative started in the Flemish region of **Belgium** but has now been replicated in many European countries including Denmark, France, Germany, the Netherlands, Sweden and the UK. Under the Plato initiative expertise pooling is based on learning by interaction among participating SMEs on the one hand and between SMEs and large, well-established companies – who play the role of tutors – on the other. Typically, Plato is a two year programme addressing the managerial needs of a regional network of small firms. Small business owners and managers form groups of 8-12 members, each group containing two leaders representing large local parent companies.

Source: OECD (2010), *Higher Education in Regional and City Development: Amsterdam, The Netherlands 2010*, OECD Publishing. doi: [10.1787/9789264088955-en](https://doi.org/10.1787/9789264088955-en); OECD (2010), *Higher Education in Regional and City Development: Andalusia, Spain 2010*, OECD Publishing. doi: [10.1787/9789264088993-en](https://doi.org/10.1787/9789264088993-en); OECD (2011), *OECD Reviews of Regional Innovation: Basque Country, Spain 2011*, OECD Reviews of Regional Innovation, OECD Publishing. doi: [10.1787/9789264097377-en](https://doi.org/10.1787/9789264097377-en)

Figure 53. Fear of failure and enterprise survival rates



Source: OECD (2013), *Entrepreneurship at a Glance 2013*, OECD Publishing. doi: [10.1787/entrepreneur_aag-2013-en](https://doi.org/10.1787/entrepreneur_aag-2013-en)



Where does entrepreneurship fit into the skills system?

Strong numeracy and literacy skills are central to setting-up and running a business and also underpin the ability to learn new skills. Successful entrepreneurs require sound foundation skills (Challenge 1) and can, as employers, contribute to raising awareness of the importance of continuous investment in skills beyond school. Better information on how to become an entrepreneur may impact upon young people's choice of study (Challenge 3) and the propensity of migrant workers to set up their own businesses (Challenge 9).

CHALLENGE 9: ENHANCING THE USE OF MIGRANT WORKERS' SKILLS

Workshop participants made frequent reference to the obstacles facing migrant workers in making full use of their skills:

“Poorly functioning immigration systems fail to integrate high-skilled workers”

“Immigrants lack knowledge of the Norwegian language”

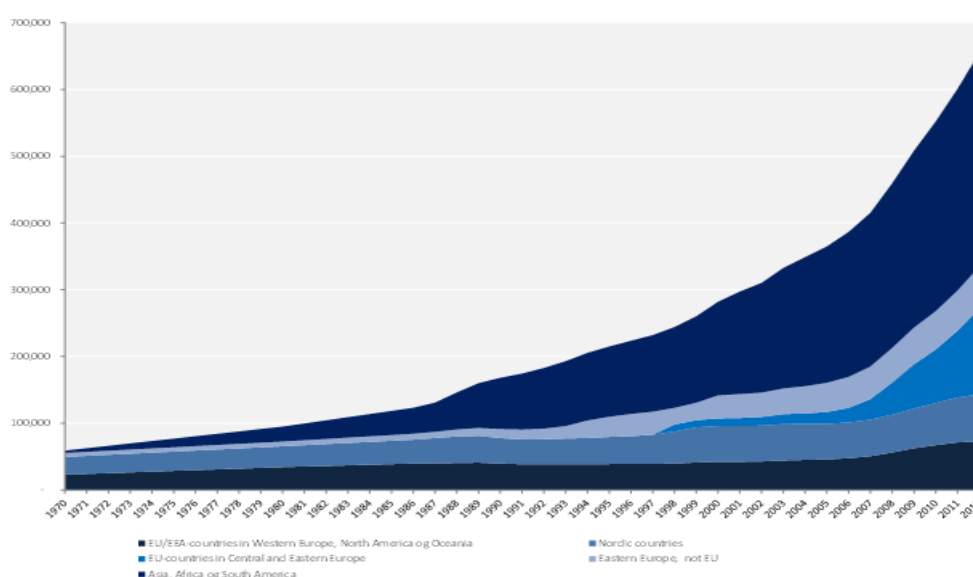


Migrants, particularly labour migrants, make up a large and growing proportion of the population

Migrants make up a growing share of the Norwegian population and according to projections from Statistics Norway, these figures are likely to increase so that, by 2040, migrants will comprise close to 20% of the Norwegian population – and up to 34% in Oslo.

The rapid increase in the immigrant population in Norway since the 1990s was initially due, largely, to asylum seekers and to some extent family reunification. More recently, however, following EU enlargement, there has been an upsurge of labour migrants from elsewhere in Europe. As a result, the characteristics of migrants to Norway differ markedly among cohorts and aggregate figures can mask compositional effects.

Figure 54. Evolution of the immigrant population in Norway



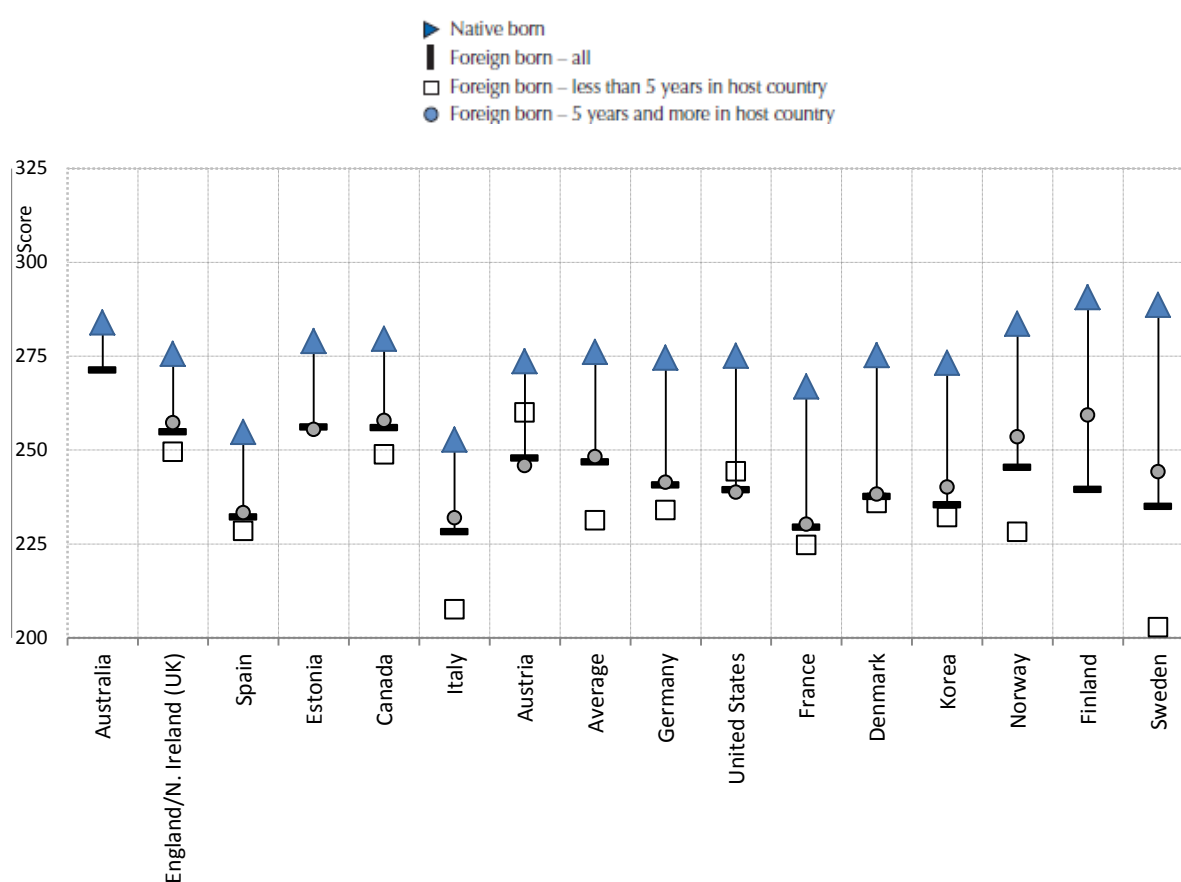
Source: Statistics Norway

Migrant skills lag behind their native counterparts...

The Survey of Adult Skills (PIAAC) shows that two-thirds of the foreign-born working-age adults have been in Norway for five years or longer and the vast majority of working-age migrants have a foreign language background. Literacy scores for migrant adults are, on average, significantly below those who were born in Norway and score an average score point difference of close to 40% (see Figure 55).

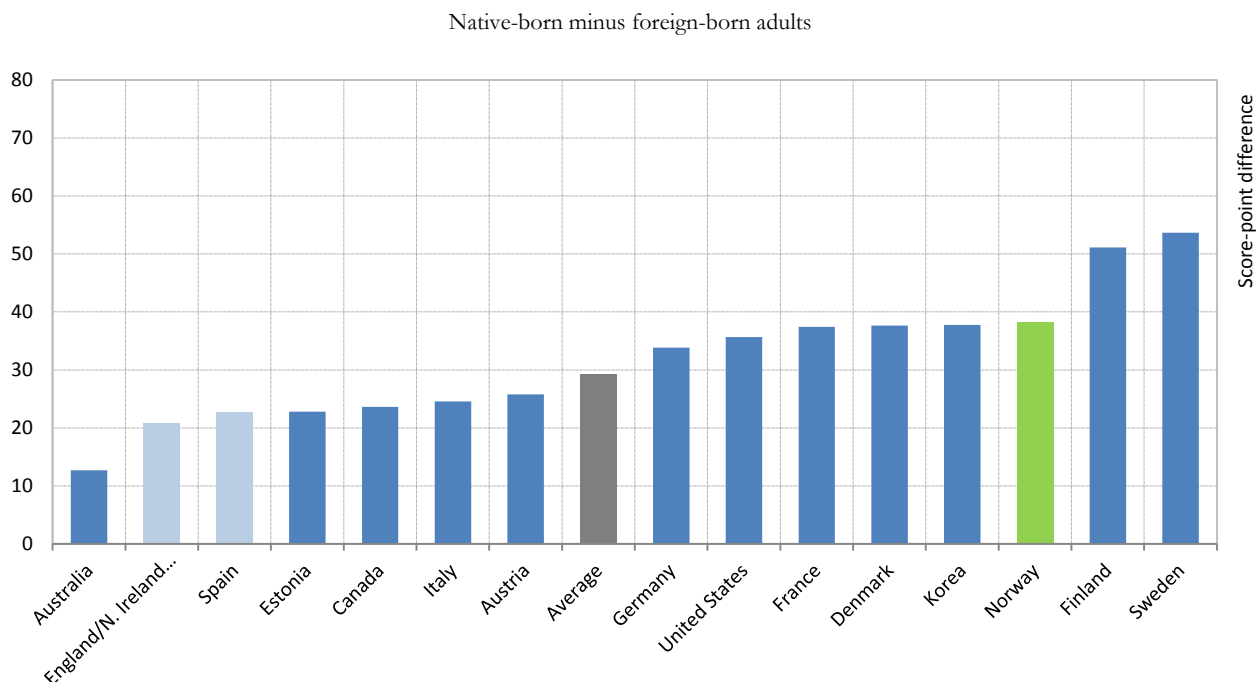
Although they continue to lag behind their native-born counterparts, migrants who have been in Norway for 5 years or more score significantly higher than those who have been in Norway for less than five years. The impact of five years of residence on literacy score is substantial in Norway when compared to other countries that participated in the Survey of Adult Skills (PIAAC). However, it should be noted that – due to the cross-sectional nature of the data – there may be some cohort effects at work. In other words, the composition of the cohort of people that migrated to Norway over five years ago may be significantly different than more recent migrants.

Figure 55. Differences in literacy proficiency scores between native- and foreign-born adults



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

Figure 56. Native- and foreign-born difference



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

Literacy scores for migrants are heavily influenced by many other factors, most notably, language background. Migrants to Norway, largely, do not speak Norwegian upon arrival. This can present a significant barrier to education, labour market integration, and integration into Norwegian society. Since 2005 all newly arrived immigrants from outside of the European Economic Area are obliged to take Norwegian language training and civic education. As of June 2011, the obligatory number of hours has been extended from 300 to 600. This requirement, however, is not compulsory for labour migrants from the European Economic Area and language training of 300 hours, while compulsory is unfunded for labour migrants from elsewhere.

Norway in Focus: Language training eligibility

Since September 2005 the “Act relating to rights and obligations relating to Norwegian language training” obliges all newly arrived immigrants from outside of the European Economic Area who do not master Norwegian (or Sami) to undertake a minimum of 300 hours of Norwegian language training. The Act has recently been amended to raise the number of obligatory hours to 600 for all individuals granted residence after June 2011. All obligatory training must be completed within 5 years of arriving in Norway.

Participants of the introduction scheme for refugees entitled to 300 hours of funded language training and work with a coordinator to draw up an individual language training plan. For those who need more than 300 hours of training it is possible to apply for more hours up to a maximum of 2 400 additional hours. Local authorities are responsible for the provision of this training.

Source: Norwegian Directorate of Integration and Diversity <http://www.imdi.no>

Box 39. Facilitating language training

In **Germany**, Frankfurt has long boasted a highly international population and an estimated 40% of its residents are foreign born. The authorities have long-standing training and language courses for migrant workers, but later started to experiment with family-based learning amongst immigrant groups, especially from the Turkish community. First developed by the City of Frankfurt, together with the Office for Multicultural Affairs and the city's schools and nurseries in 1973, there are about 100 courses in Frankfurt today. Immigrant parents of children in primary schools and kindergartens join their children in the classroom for two mornings a week and learn German. The contents of the language classes have a practical focus on the everyday words and expressions needed to navigate their new life.



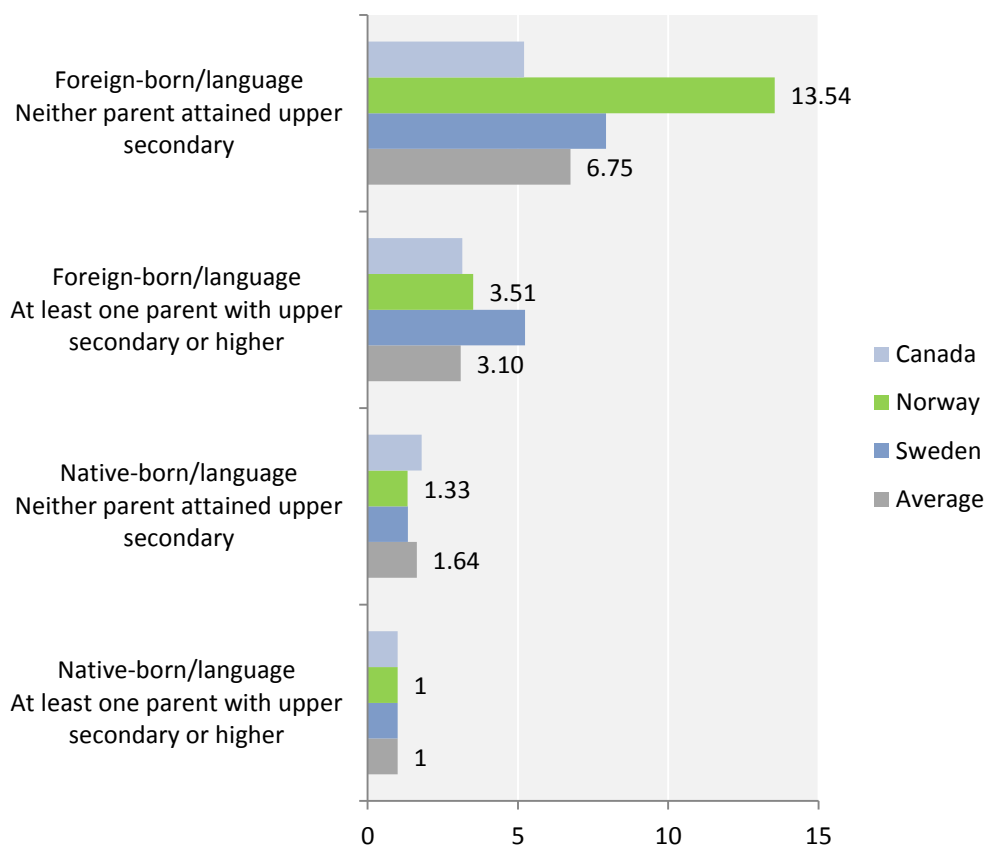
All participating schools have found that children demonstrated significant improvement in language and vocabulary skills as a result of increased use of German in their homes. Improved communication skills also enabled the children to participate more in school, improving education and social integration. It forms the basis for a stronger relationship between schools and immigrant parents, building more binding social capital amongst the community. It also allows parents to learn German without having to pay or make arrangements for costly childcare. Because a child's academic success is strongly influenced by the involvement and collaboration of parents, and because adults are often most keen to learn a new language or other new skills in order to help with their child's education, this programme contributes to achieving two goals simultaneously. Frankfurt is extending the programme into secondary schools and it is being replicated throughout Germany.

Source: Froy, F. and L. Pyne (2011), "Ensuring Labour Market Success for Ethnic Minority and Immigrant Youth", *OECD Local Economic and Employment Development (LEED) Working Papers*, No. 2011/09, OECD Publishing.
doi: [10.1787/5kg8g2l0547b-en](https://doi.org/10.1787/5kg8g2l0547b-en)

Other factors, such as early education and, in the case of second generation migrants, parental education can also have a substantial impact on migrant literacy rates. The problems facing those from socio-economically disadvantaged backgrounds are exacerbated for foreign language immigrants – those who are foreign-born and did not learn the language of assessment as a child.

When compared to those who have at least one parent with an upper secondary degree or higher and were born in Norway, or whose native language is Norwegian, it is possible to see that socio- economically disadvantaged individuals with a foreign language background are likely to perform significantly worse than their native language counterparts. They are nearly 14 times more likely to score at or below level 2 in the Survey of Adult Skills (PIAAC) (see Figure 57). This association between background and proficiency is substantially larger in Norway than in other participating countries.

Figure 57. Likelihood of scoring at or below level 2 in literacy, by immigrant, language and socio-economic background, odds ratio



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

Figure 57 also illustrates that much of this disadvantage stems from the co-incidence of foreign-language background and socio-economic disadvantage. The impact of socio-economic disadvantage alone is relatively low in Norway (and below the average of participating countries) and the impact of foreign-language background is also in line with that found elsewhere (and below that found in Sweden).

Employment rates for migrants are lower...

Employment rates are lower and unemployment rates substantially higher for migrants in Norway when compared to their native counterparts. And labour market outcomes vary considerably across regions and vary with the origin of the migrant (Table 3).

Table 3. Employed migrants, absolute numbers and percent of total population aged 16-74

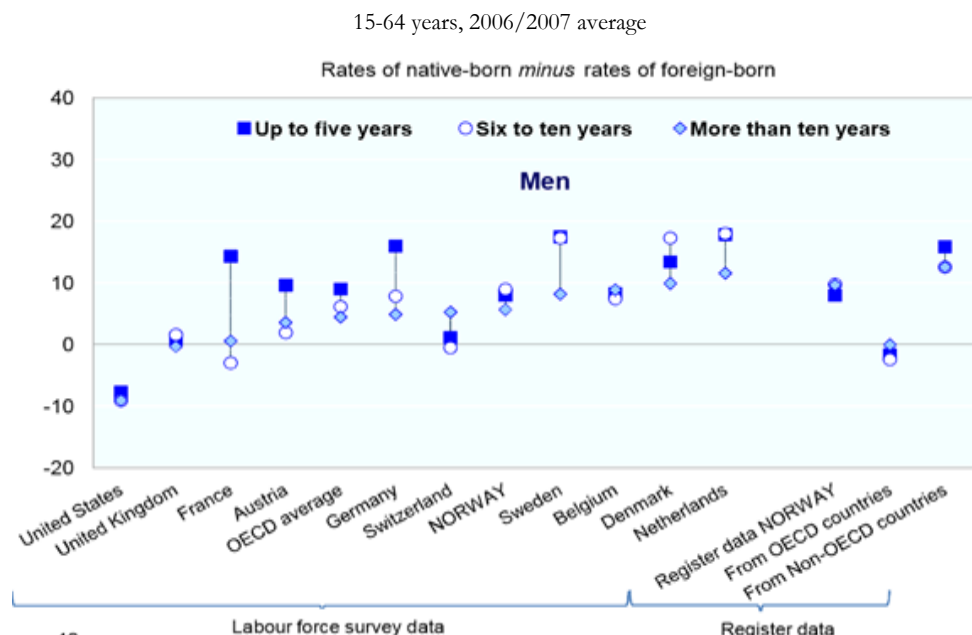
Register data, 2012

	2012		2011 - 2012
	Absolute figures	Per cent	Percentage points
Population in total	2 589 000	68.7	-0.4
Non-immigrant population	2 255 021	69.7	-0.4
Immigrants, total	333 979	62.8	0.0
The Nordic Countries	46 676	76.1	0.2
Western Europe except the Nordic Countries and Turkey	39 288	70.0	-0.4
EU members in Eastern Europe	89 490	73.0	-0.6
Eastern Europe outside of EU	30 282	62.3	0.1
North America and Oceania	6 501	66.4	0.6
Asia	85 923	54.6	0.7
Africa	24 705	42.5	-1.7
South and Central America	11 114	63.2	-0.4

Source: Statistics Norway

Furthermore, there is little progress in the reduction of these disparities in Norway over time (Figure 58). For example, while in Sweden the disparity between the employment rate of the foreign born population is nearly 10 percentage points less among those who have been resident for over ten years than those who have been resident for fewer than five years. In Norway, the equivalent gap is less than 5 percentage points. It should again be noted that these figures are cross cohort comparisons and the aggregate figures are hiding a composition effect. The migrant population in Norway varies significantly by duration of residence. According to register data, among the recent arrivals from non-Nordic countries (i.e. those with up to five years of residence) about one third have arrived as labour migrants – and they tend to have higher employment rates. Only 8% of the migrants with six to ten years of residence arrived as labour migrants.

Figure 58. Percentage point gaps in the employment rate of immigrants by duration of residence



Note: These results are cross-sectional data based on length of residence in the host countries

Source: Liebig, T. (2009), "Jobs for Immigrants: Labour Market Integration in Norway", *OECD Social, Employment and Migration Working Papers*, No. 94, OECD Publishing. doi: [10.1787/221336486778](https://doi.org/10.1787/221336486778)

Box 40. Strengthening links between integration programmes and labour markets

Contact with the labour market need not be only the goal of integration policy but also a tool. There is a risk that integration programmes that involve insufficient contact with labour markets and native Norwegian society may create lock-in effects and further entrench migrant segregation. Labour market contact can help to solve other integration problems, such as poor language skills, and lack of access to informal networks.



In **Canada**, the Toronto Region Immigrant Employment Council (TRIEC) has, since 2003, been bringing together multiple stakeholders – employers, regulatory bodies, professional associations, educators, labour, community groups, government and immigrants – to build understanding and develop local and practical solutions to integrate Toronto's immigrant community into the labour force. TRIEC relies heavily on the support of mentors within the business community. These mentoring schemes fulfil the dual role of enhancing the networks of new immigrants, whilst at the same time providing them with role models to focus their aspirations.

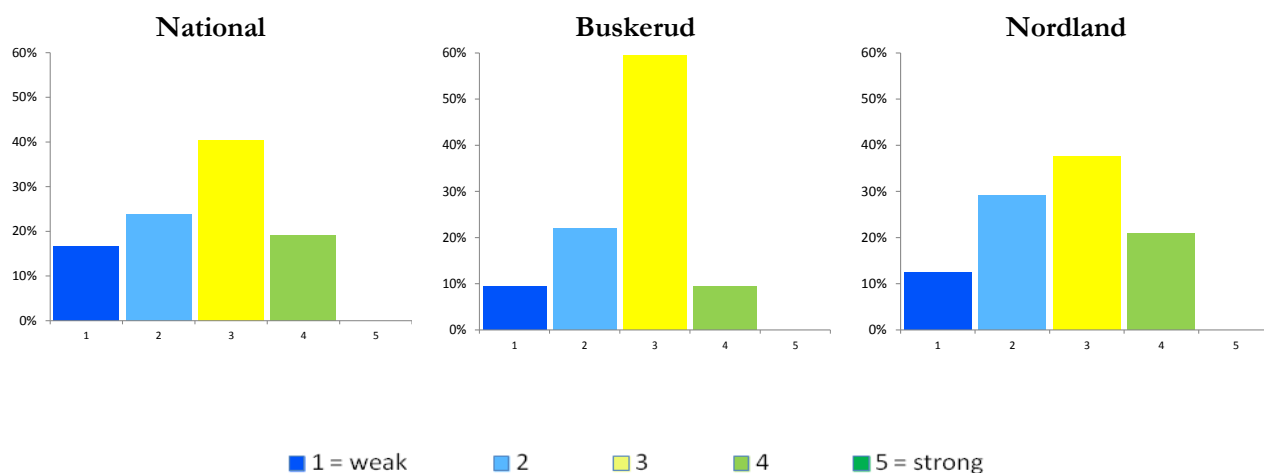
TRIEC's work is focused on three objectives: 1. Increase access and availability of services that help skilled immigrants effectively enter the local labour market. 2. Work with key stakeholders, particularly employers, to build capacity to work better with skilled immigrants. 3. Work with all levels of government to increase local co-ordination of public policy and programming.

Through the Workplace and Employee Survey (WES) – which collects panel data covering 24 197 employees within 6 693 workplaces annually since 1999 – TRIEC is able to supplement its qualitative "histories" of the successful trajectories of its participants with data matching detailed employee characteristics with search methods and labour market outcomes. TRIEC is thus able to provide tangible evidence of what works as well as identifying industries in which employee skill levels are best (and worst) matched to the requirements of the position.

Source: OECD (2012), *OECD Territorial Reviews: The Chicago Tri-State Metropolitan Area, United States 2012*, OECD Publishing. doi: [10.1787/9789264170315-en](https://doi.org/10.1787/9789264170315-en)

Do employment services place people in suitable jobs or targeted education/training programmes within 6 months of becoming unemployed?

Participants were asked to use the OECD Skills Diagnostic Toolkit to score the performance of Norway's current skills system in delivering a number of critical outcomes. A low score indicates that the current skills system does poorly in delivering the outcome described and a high score indicates a strong performance. The results from the three workshops held at the national and county levels are presented below.



Workshop participants expressed divergent views regarding the extent to which they felt employment services were able to rapidly place people in suitable education and training. More participants at the national level workshop felt that employment services were doing a poor job than did those who took part in the county level workshops.

... and over-qualification is relatively widespread among highly-skilled migrants

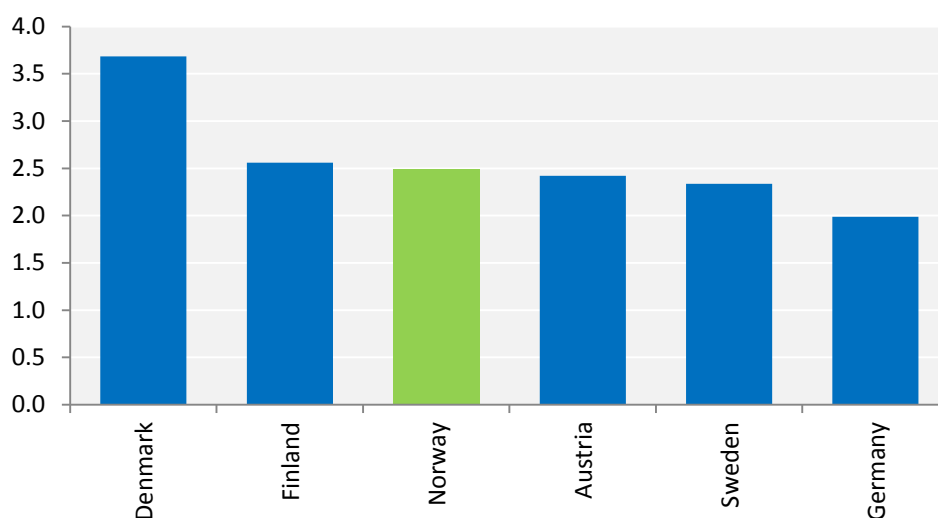
Ensuring a good match between the skills acquired in education and those required in the labour market is essential if countries want to make the most of the pool of human capital that is available to them. The likelihood of qualification mismatch, understood as a poor fit between an individual worker's qualifications and those demanded by his or her job, may be influenced by the characteristics of people and jobs. For example, it may take new entrants to the labour market time to sort themselves into well-matched jobs. Or, some workers may choose to accept a job for which they are over-qualified. This can happen when workers wish to reconcile work and family life or when workers are unable to access the jobs for which their qualifications are appropriate. An analysis of the socio-demographic factors associated with qualification mismatch shows clearly that foreign-born workers are more likely to be over-qualified than their native-born counterparts.

The qualifications held by migrants have often been acquired abroad and are often not recognized in their host country. This can mean that it is difficult for foreign-born workers to find employment matching their qualifications. Those highly-qualified foreign-born workers that successfully find employment may find themselves relegated to working in low-skilled jobs which represents an underutilisation of their skills by their new host country.

Over-qualification -- as measured in the Survey of Adult Skills (PIAAC) is relatively widespread among the foreign-born population in Norway (Figure 59). Foreign-born workers in Norway are two and a half times more likely to be over-qualified for their job – a rate which is higher than in Austria, Sweden and Germany. Many highly-skilled foreign-born workers remain in low-skilled jobs and may face long delays while waiting for their qualifications to be recognized by Norwegian Agency for Quality Assurance in Education (NOKUT). This under-usage of the available skill stocks in Norway implies a substantial inefficiency – especially in the light of Norway’s tight labour market. Some OECD countries have implemented specific measures to address the needs of over-qualified migrants (Box 42).

Figure 59. Odds ratio of over-qualification of foreign-born workers¹

Adjusted for years of education, age, gender and marital status, foreign-born status, establishment size, contract type, and hours worked. Reference level is native born, with an odds ratio of 1



Note: Over-qualification is derived relative to the qualification needed to get the job, as reported by the respondents.

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

Box 41. Skills Obstacle Course: Piotr

Profile: Piotr is 23 years old and arrived in Norway a year ago from Gdańsk, his home town in Poland. After finishing his technical upper-secondary, he qualified as an electrician and worked in the local shipyards. He has been working as an unskilled labourer on a short-term contract for one of the leading Norwegian shipbuilding companies in Drammen for the past 6 months. He speaks only basic Norwegian and a few words of English.

Task: Workshop participants were asked to put themselves in the shoes of Piotr to help him navigate Norway’s skills system.

Goal: To get a permanent job with the company, as a ship electrician.

Obstacles: ○ Uncertified education ○ Limited language skills ○ Lack of networks

Options: ○ Demand for qualified labour ○ Directive 2005/36/EC on credential recognition



Norway in Focus: Qualification recognition

In 2003, the Norwegian Agency for Quality Assurance in Education (NOKUT) was created as a specialised and autonomous agency. Its tasks include:

- evaluation of higher education institutions' systems for quality assurance;
- accreditation of higher education institutions and study programmes, and revision of previously granted accreditation;
- evaluations of significance to assessment of the quality of higher education;
- general recognition of qualifications awarded by foreign higher education institutions and Norwegian institutions not subject to the Act relating to universities and university colleges; and
- accreditation, as well as revisions of previously-granted accreditations, of tertiary vocational education

Source: Norwegian Agency for Quality Assurance in Education <http://www.nokut.no/>

Box 42. Recognizing credentials

In **Australia**, some states have established programmes to overcome the problem of over-qualification among recent skilled migrants. In Victoria, for example, the Overseas Qualified Professionals Programme (OQPP) provides recently arrived professionals who are either unemployed or employed in low-skilled jobs with an initial six-week training period to develop job-search skills, followed by a four- to six-week work-experience placement in the participant's field or in a closely related occupation. The programme includes mentoring elements and industry-specific networking sessions with employers and professional associations to provide further orientation and networking opportunities. Though the work-placement is generally not remunerated, six months after completing the programme, more than 60% of participants were in paid employment in a field corresponding to their qualifications and experience.

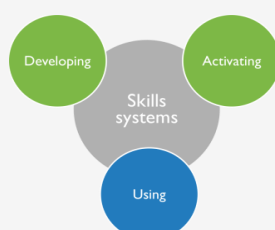


Following a different approach, in 2004, **Denmark** established regional knowledge centres for assessing the skills and qualifications of immigrants – a joint project by the Ministry of Employment and social partners. The assessment is generally done in workplace situations at companies and participants obtain “competence cards” relating immigrants’ skills to labour market needs. The centres also assist in finding employment that matches the immigrants’ skills.

In other countries, programmes have focused on over-qualification in specific occupations. In **Portugal**, two non-governmental organisations (the Gulbenkian Foundation and the Jesuit Refugee Service), jointly with universities and various ministries (Health, Interior and Foreign Affairs), developed a programme for foreign-trained doctors who were found to be working in low-skilled occupations such as in construction or cleaning. The programme provided for the translation of documents, bridging courses at medical faculties, as well as comprehensive preparation material, internships in teaching hospitals, and vocation-specific language training. Participants had to pass a final assessment examination. At the end of the pilot project, about 90% of the participants were employed as doctors. Participants were followed for one year after completion of the programme to ensure a lasting integration. The programme has now been mainstreamed.

Finally, one group that is particularly affected by skill under-utilisation is that of refugees, whose relatively high qualifications are largely discounted on the labour market. **The Netherlands** has set up several specific training programmes for highly qualified refugees. The Central Agency for the Reception of Asylum Seekers (COA) conducts a skills assessment for each accepted asylum seeker with a detailed description of his/her professional experience, and a so-called personal development plan to assess his/her possibilities on the Dutch labour market. During this phase, the refugee takes Dutch as a second language courses and courses on societal and professional orientation. Special work-study programmes have also been implemented for recently arrived refugees in a number of municipalities. In addition, the Ministry of Health offers specific training programmes for highly qualified refugees who wish to pursue their career as a doctor or a dentist. There have also been similar programmes for other regulated professions such as technicians and teachers.

Source: Quintini, G. (2011), “Right for the Job: Over-Qualified or Under-Skilled?”, *OECD Social, Employment and Migration Working Papers*, No. 120, OECD Publishing. doi: [10.1787/5kg59fcz3tkd-en](https://doi.org/10.1787/5kg59fcz3tkd-en); OECD (2008), *Jobs for Immigrants (Vol. 2): Labour Market Integration in Belgium, France, the Netherlands and Portugal*, OECD Publishing. doi: [10.1787/9789264055605-en](https://doi.org/10.1787/9789264055605-en)



How does migrant integration fit into the skills system?

Early disadvantage, often associated with a migrant background, can impede the development of solid foundation skills (Challenge 1) and have a lasting impact on the use of migrants’ skills potential. Inadequate Norwegian language skills among many migrants and difficulties in gaining recognition of their existing qualifications can mean insufficient utilisation of their skills by employers in sectors facing recruitment challenges, such as health and care services (Challenge 7).

BIBLIOGRAPHY

- Bassanini, A., *et al.* (2007), “Workplace training in Europe”, *Education and Training in Europe*, pp. 143–289, Oxford University Press.
- Brunello, G. and De Paola, M. (2009), “Is there under-provision of training?”, Empirical Research in Vocational Education and Training, Vol. 1.
http://www.pedocs.de/volltexte/2012/5154/pdf/ERVET_2009_1_Brunello_et_al_Is_there_under_provision_of_training_D_A.pdf
- De Grip, A. and Sauermann, J. (2012), “The effects of training on own and co-worker productivity: evidence from a field experiment”, *The Economic Journal*, No. 122, pp. 376–399.
- Dunn, T and D. Holtz-Eakin, (2000), "Financial Capital, Human Capital, and the Transition to Self-Employment: Evidence from Intergenerational Links", *NBER Working Paper*, No. 5622
<http://www.nber.org/papers/w5622>
- European Working Conditions Survey (2010), <http://www.eurofound.europa.eu/surveys/ewcs/2010/>
- Froy, F. and S. Giguère (2010), "Putting in Place Jobs that Last: A Guide to Rebuilding Quality Employment at Local Level", *OECD Local Economic and Employment Development (LEED) Working Papers*, No. 2010/13, OECD Publishing. doi: [10.1787/5km7jf7qtk9p-en](https://doi.org/10.1787/5km7jf7qtk9p-en)
- Froy, F. and L. Pyne (2011), "Ensuring Labour Market Success for Ethnic Minority and Immigrant Youth", *OECD Local Economic and Employment Development (LEED) Working Papers*, No. 2011/09, OECD Publishing. doi: [10.1787/5kg8g2l0547b-en](https://doi.org/10.1787/5kg8g2l0547b-en)
- Global Entrepreneurship Monitor (2012), <http://www.gemconsortium.org/docs/2645/gem-2012-global-report>
- Green, F., *et al* (2000), “The Impact of Training on Labour Mobility: Individual and Firm-level Evidence for Britain”, *SKOPE Research Paper*, No. 14, Oxford University Press.
- Guidelines for entrepreneurship education (2009),
www.minedu.fi/export/sites/default/OPM/Julkaisut/2009/liitteet/opm09.pdf.
- Hamilton, V. (2012), "Career Pathway and Cluster Skill Development: Promising Models from the United States", *OECD Local Economic and Employment Development (LEED) Working Papers*, No. 2012/14, OECD Publishing. doi: [10.1787/5k94g1s6f7td-en](https://doi.org/10.1787/5k94g1s6f7td-en)
- Hisrich R. D. & Peters M. P. (1995), *Entrepreneurship: Starting, Developing and Managing a New Enterprise*, Irwin, Illinois.
- Kuczera, M., *et al.* (2008), *OECD Reviews of Vocational Education and Training: A Learning for Jobs Review of Norway 2008*, OECD Reviews of Vocational Education and Training, OECD Publishing.
 doi: [10.1787/9789264113947-en](https://doi.org/10.1787/9789264113947-en)
- Liebig, T. (2009), "Jobs for Immigrants: Labour Market Integration in Norway", *OECD Social, Employment and Migration Working Papers*, No. 94, OECD Publishing. doi: [10.1787/221336486778](https://doi.org/10.1787/221336486778)

Müller, N. and F. Behringer (2012), "Subsidies and Levies as Policy Instruments to Encourage Employer-Provided Training", *OECD Education Working Papers*, No. 80, OECD Publishing.
doi: [10.1787/5k97b083v1vb-en](https://doi.org/10.1787/5k97b083v1vb-en)

Norwegian Labour and Welfare Administration (NAV) Enterprise Survey

OECD (2008), *Jobs for Immigrants (Vol. 2): Labour Market Integration in Belgium, France, the Netherlands and Portugal*, OECD Publishing. doi: [10.1787/9789264055605-en](https://doi.org/10.1787/9789264055605-en)

OECD (2009a), "Innovation in Education and Vocational Education and Training", in OECD, *Working Out Change: Systemic Innovation in Vocational Education and Training*, OECD Publishing.
doi: [10.1787/9789264075924-4-en](https://doi.org/10.1787/9789264075924-4-en)

OECD (2009b), *Taxation of SMEs: Key Issues and Policy Considerations*, OECD Tax Policy Studies, No. 18, OECD Publishing. doi: [10.1787/9789264024748-en](https://doi.org/10.1787/9789264024748-en)

OECD (2010a), *SMEs, Entrepreneurship and Innovation*, OECD Studies on SMEs and Entrepreneurship, OECD Publishing. doi: [10.1787/9789264080355-en](https://doi.org/10.1787/9789264080355-en)

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

OECD (2010c), *Higher Education in Regional and City Development: Andalusia, Spain 2010*, OECD Publishing. doi: [10.1787/9789264088993-en](https://doi.org/10.1787/9789264088993-en)

OECD (2011), *OECD Reviews of Regional Innovation: Basque Country, Spain 2011*, OECD Reviews of Regional Innovation, OECD Publishing. doi: [10.1787/9789264097377-en](https://doi.org/10.1787/9789264097377-en)

OECD Observer (2012a), "Can Youth Entrepreneurship Work?",
http://www.oecdobserver.org/news/fullstory.php/aid/4012/Can_youth_entrepreneurship_work_.html#

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

OECD (2012c), *OECD Territorial Reviews: Skåne, Sweden 2012*, OECD Publishing.
doi: [10.1787/9789264177741-en](https://doi.org/10.1787/9789264177741-en)

OECD (2012d), *OECD Territorial Reviews: The Chicago Tri-State Metropolitan Area, United States 2012*, OECD Publishing. doi: [10.1787/9789264170315-en](https://doi.org/10.1787/9789264170315-en)

OECD (2012e), *Policy Brief on Youth Entrepreneurship: Entrepreneurial Activities in Europe*, OECD LEED Division, Paris,
http://www.oecdobserver.org/news/fullstory.php/aid/4012/Can_youth_entrepreneurship_work_.html#sthash.WvxeJcWJ.dpuf

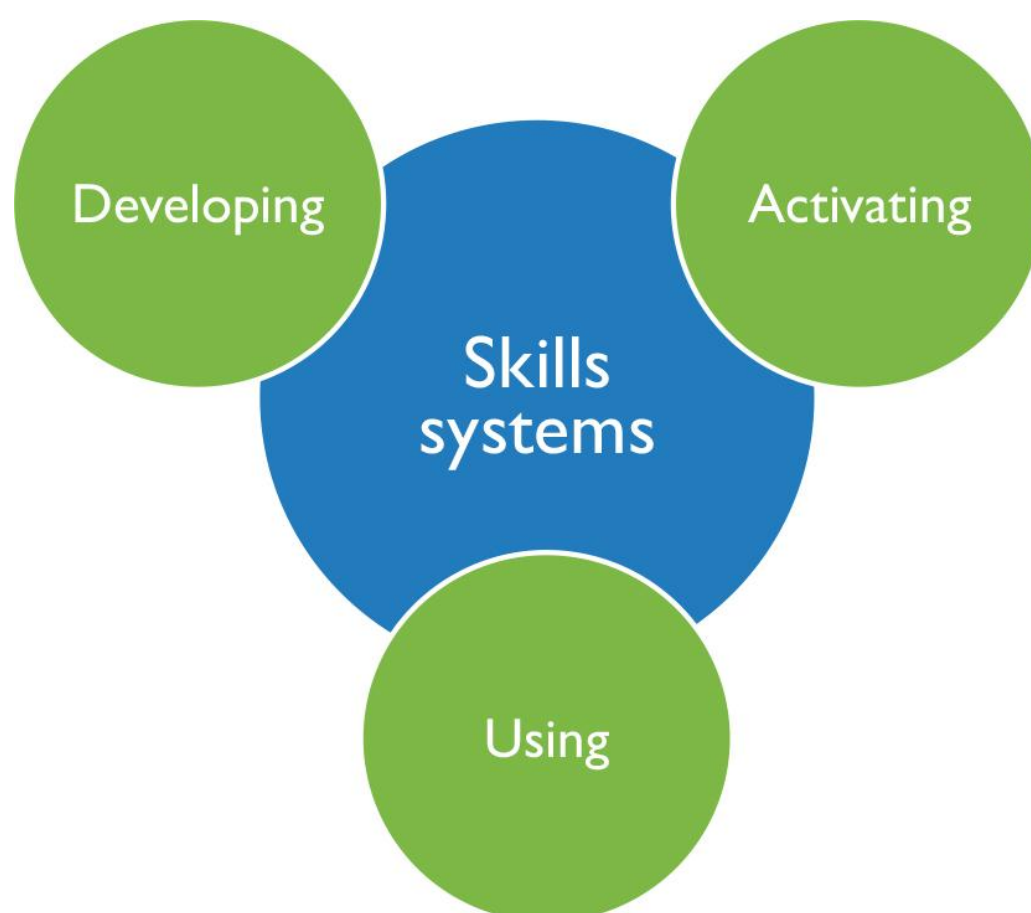
OECD (2013a), *Education at a Glance 2013: OECD Indicators*, OECD Publishing. doi: [10.1787/eag-2013-en](https://doi.org/10.1787/eag-2013-en)

OECD (2013b), *Entrepreneurship at a Glance 2013*, OECD Publishing. doi: [10.1787/entrepreneur_aag-2013-en](https://doi.org/10.1787/entrepreneur_aag-2013-en)

OECD (2013c), *OECD Factbook 2013: Economic, Environmental and Social Statistics*, OECD Publishing.
doi: [10.1787/factbook-2013-en](https://doi.org/10.1787/factbook-2013-en)

- OECD (2013d), *OECD Science, Technology and Industry Scoreboard 2013: Innovation for Growth*, OECD Publishing, doi: [10.1787/sti_scoreboard-2013-en](https://doi.org/10.1787/sti_scoreboard-2013-en)
- OECD (2013e), *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills*, OECD Publishing, doi: [10.1787/9789264204256-en](https://doi.org/10.1787/9789264204256-en)
- OECD (2014, forthcoming), *Analytical framework for assessing employer benefits from investing in skills development*, OECD Publishing.
- OECD (2014, forthcoming), *OECD Economic Surveys: Norway*, OECD Publishing.
- Quintini, G. (2011), "Right for the Job: Over-Qualified or Under-Skilled?", *OECD Social, Employment and Migration Working Papers*, No. 120, OECD Publishing, doi: [10.1787/5kg59fcz3tkd-en](https://doi.org/10.1787/5kg59fcz3tkd-en)
- [Støren, L.A., H. Helland and J.B. Grøgaard \(2007\), "Og hvem stod igjen...?", NIFU STEP, Oslo](#)
- Talent Shortage Survey (2013), Manpower, http://www.manpowergroup.com/wps/wcm/connect/587d2b45-c47a-4647-a7c1-e7a74f68fb85/2013_Talent_Shortage_Survey_Results_US_high+res.pdf?MOD=AJPERES
- The Research Council of Norway http://www.forskningsradet.no/prognett-naeringsphd/Home_page/1253952592752
- Torres, C. (2012), "Taxes and Investment in Skills", *OECD Taxation Working Papers*, No. 13, OECD Publishing, doi: [10.1787/5k92sn0qv5mp-en](https://doi.org/10.1787/5k92sn0qv5mp-en).
- United Kingdom Commission for Employment and Skills (UKCES) (2009), "Review of Employer Collective Measures: A Conceptual Review from a Public Policy Perspective", *Evidence Report 6*.
- [Utdanningsdirektoratet \(20012\), The Education Mirror 2012, The Norwegian Directorate for Education and Training, Oslo.](#)
- Verma, A. (2012), Skills for Competitiveness: Country Report for Canada, *OECD Local Economic and Employment Development (LEED) Working Papers*, OECD Publishing, doi: <http://dx.doi.org/10.1787/5k9bb1vz5jhb-en>
- <http://www.innovasjon Norge.no/Bygg-en-bedrift/Klynger-og-bedriftsnettverk/Sok-midler-til-kompetanseutvikling-i-regionale-naringsmiljoer/>
- [The Norwegian Labour and Welfare Administration, www.nav.no/page?id=805312736.](#)
- [Statistics Norway, www.ssb.no/english/subjects/04/02/30/utvgs_en/.](#)
- [Statistics Norway, www.ssb.no/english/subjects/04/02/30/vgu_en/.](#)

STRENGTHENING NORWAY'S SKILLS SYSTEM



STRENGTHENING NORWAY'S SKILLS SYSTEM

Sustainable economic development and social cohesion rests on strengthening Norway's skills system

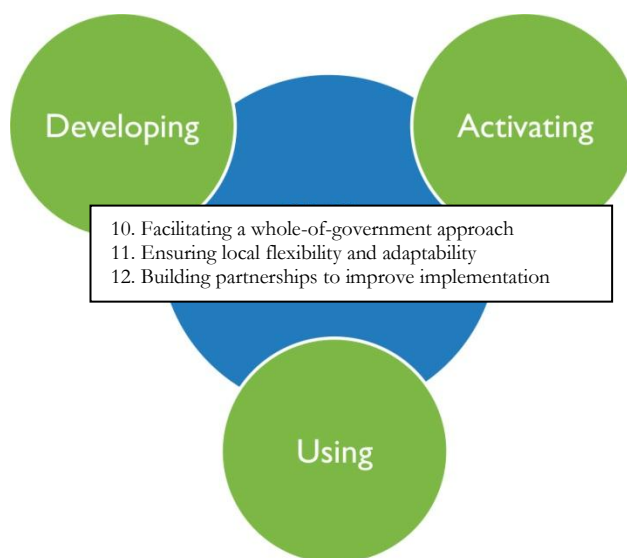
Today, many people in Norway recognise that the country's future prosperity will depend more upon its human capital than its natural resources. Strengthening the skills system is part of delivering on that long-term goal.

Achieving this goal will require both public and private actors to strive for more than just relative success compared to other OECD countries, and to avoid a “culture of complacency”. It calls for a more innovative, dynamic and flexible skills system. One which facilitates seamless transitions between educational and career pathways and easy access to timely and targeted training over the course of people's lifetimes. In short, a skills system suited for an age marked by continuous and rapid change.

One of Norway's main assets in this endeavour lies in its strong tradition of tri-partite co-operation between government, trade unions and employers. This was readily cited as a key strength by workshop participants. On the other hand they saw considerable room for improvement for strengthening co-ordination across government.

Drawing upon the insights offered by workshop participants, this section provides an initial review of the challenges of strengthening Norway's skills system. Given their systemic nature and important role as “enabling conditions”, progress in tackling these challenges may be expected to have positive repercussions on developing, activating and using skills. These three challenges are:

10. facilitating a whole-of-government approach to skills;
11. ensuring local flexibility and adaptability for nationally designed policies; and
12. building partnerships at the local and national level to improve implementation.



CHALLENGE 10: FACILITATING A WHOLE-OF-GOVERNMENT APPROACH TO SKILLS

During the workshops, participants clearly identified the following challenges relating to the need for greater coordination:

“Lack of whole-of-government approach”

“Strong sectoral government ministries have conflicting goals undermining policy coherence”

“Limited co-operation between education system, public services, business and industry”



The ability to make progress towards a more whole-of-government approach to skills, rests upon the availability of concrete mechanisms with which effective cross-government coordination can be fostered, including via: policy making processes; budgeting; performance measures; evaluation and oversight.

A whole-of-government approach to skills requires both horizontal and vertical policy co-ordination

The OECD Skills Strategy underscores the broad range of sectoral policies that shape a national skills system including education, science and technology, family, employment, industrial and economic development, migration and integration, social welfare, and public finance. Policy coherence among these sectoral policies is needed to ensure efficiency and avoid duplication of effort. A co-ordinated approach to skills policies allows policy makers to identify and weigh-up policy trade-offs, such as between spending on early education and preventing drop-out or investing in welfare programmes later on.

An effective skills system requires a high degree of co-ordination and effective multi-level governance – both along the vertical and horizontal dimensions. The **vertical** dimension refers to linkages between higher and lower levels of government, including their institutional, financial, and informational arrangements. The **horizontal** dimension refers to co-operation arrangements both at the national level between ministries and, at lower levels of government, between county councils, municipalities, actors and stakeholders.

Focus on Norway: A snapshot of the Norwegian governance structure

Horizontal Governance

The Norwegian model of governance at the national level is characterised by the line ministries' responsibilities for policy development and execution and by a relatively small Prime Minister's Office. This governance model is supported by a practice of government appointed committees and a strong tradition of wide public consultation on legislative initiatives. The Ministry of Justice reviews the texts of all new legislative proposals and proposed amendments, while the Ministry of Finance reviews all those with budgetary implications.

Vertical Governance

Norway is a unitary country the administration of which is organised along a classic three tier model:

Central government which is led by a Prime Minister, reflecting the parliamentary majority

19 County councils. The county council's main focus is on regional development, including expanding the labour market by stimulating skills, creativity and innovation. They also work to enhance the business climate. The county council is also responsible for the operation and development of upper secondary education.

428 municipalities The municipalities have wide ranging responsibilities for public service provision. Variations in size, both geographically and in number of residents, give the municipalities different conditions in which to exercise their role as service provider, social developer, local authority and provide an arena for local democracy. The municipalities are responsible for primary and lower secondary school, Norwegian language training for immigrants and lower secondary education for adults.

County Governors (*Fylkesmenn*) co-ordinate with counties and municipalities to ensure implementation of certain central government sectoral policies. They are subordinate to the Ministry of Local Government and Modernisation, however on specific sectoral issues, such as education, they may report directly to the ministry or agency in charge of that policy sector.

Source: OECD (2008), *OECD Territorial Reviews: Norway 2007*, OECD Publishing. OECD (2013), *Value for Money in Government: Norway 2013*, Value for Money in Government, OECD Publishing.

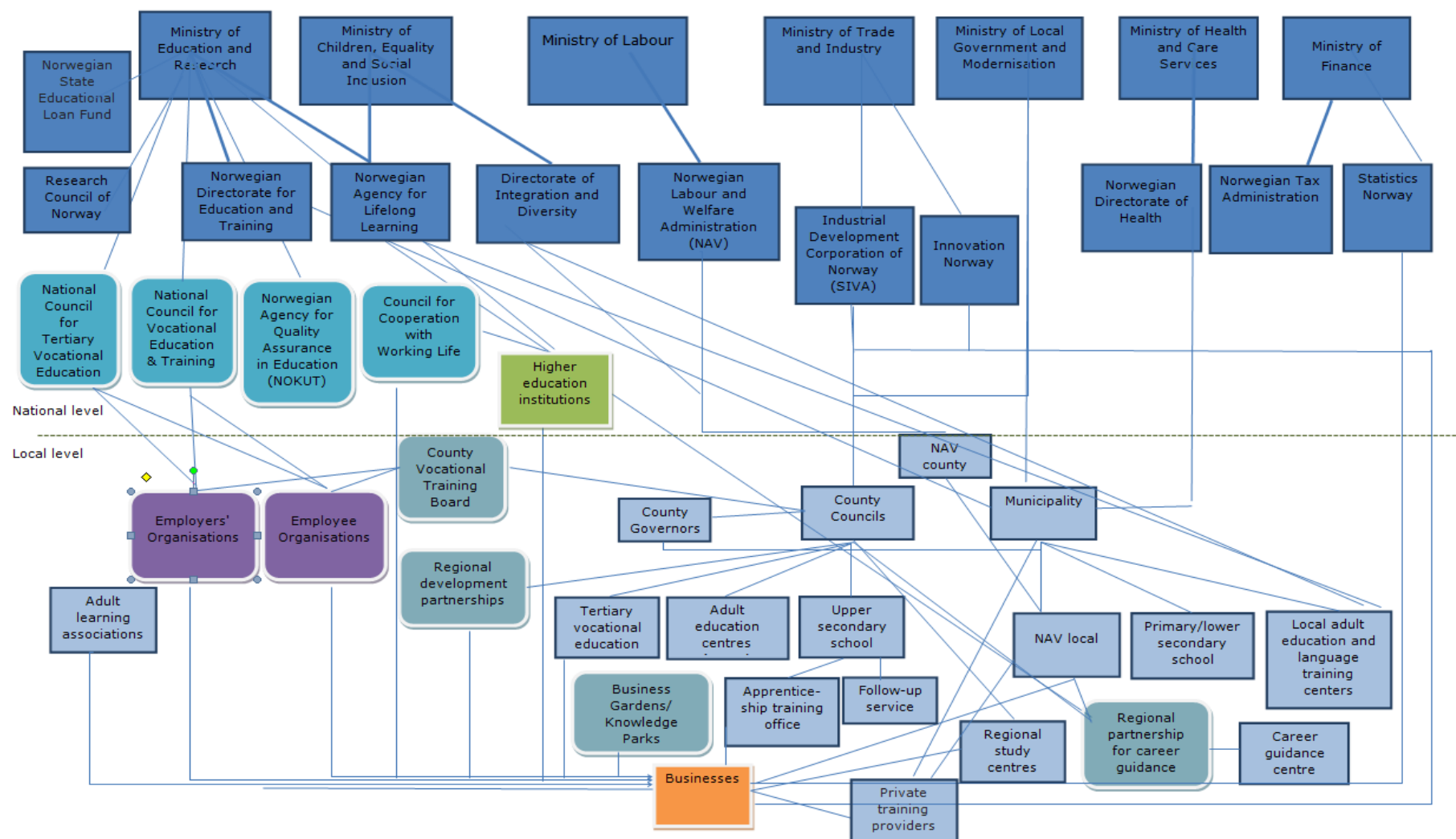
There are many actors involved in skills policy formation and implementation – both on the state and regional level.

The Ministry of Education and Research is responsible for setting the general guidelines for the education system and for overall supervision while responsibility for implementation is left to the local level. Management and administrative responsibility in compulsory schooling is exercised by municipalities while county councils have an analogous role for the upper-secondary school system (Boarini 2009). The Directorate for Education and Training operates under the Ministry of Education and Research and is responsible for promoting quality improvement, quality assessment, analysis and documentation in basic education and training. The directorate is also in charge of national supervision of primary and secondary education in Norway.

The Norwegian Labour and Welfare Administration (NAV) combines the role of helping to move people back into employment while at the same time providing financial security to individuals through arrangements such as unemployment benefits, family allowances, cash benefits, sickness benefits and pensions. Each municipality in Norway has a NAV office, which is run as a collaboration between the state-run Norwegian Labour and Welfare Administration and the municipality's social services. Migrant integration is supervised by the Directorate for Integration and Diversity which operates under the Ministry of Children, Equality and Social Inclusion.

The Ministry of Local Government and Modernisation has a co-ordination role when it comes to national policy aimed at the county council and municipal level. In addition both the Ministry of Trade and Industry and the Ministry of Local Government and Modernisation work with the business sector in the promotion of knowledge based growth, innovation and entrepreneurship -- both in businesses and among the workforce more widely. Other public actors who play a role in the skills system include the Ministry of Health and Care Services, and the Ministry of Finance (see Figure 60 below).

Figure 60. Main actors in Norway's skills system



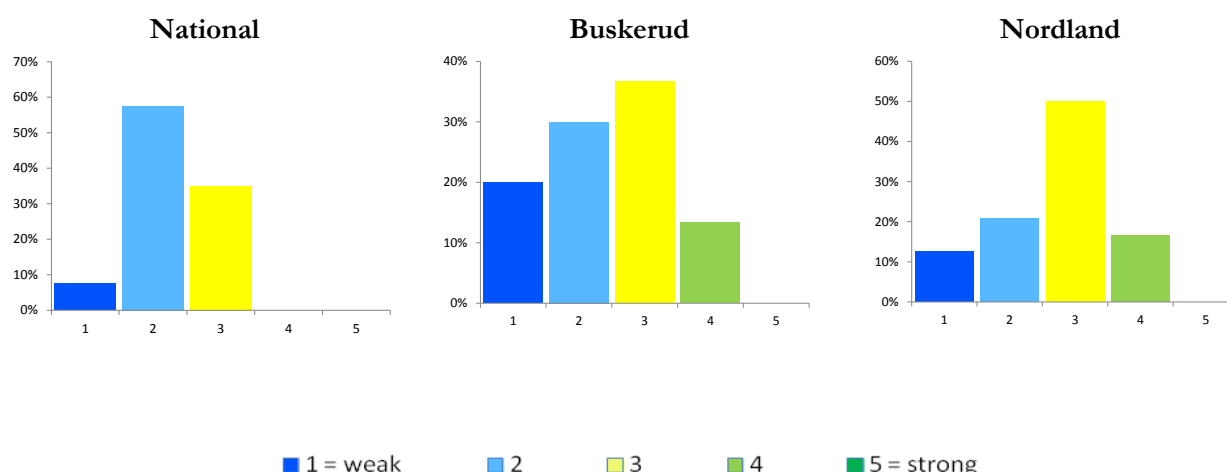
NOTE: See Annex 1 for full description of each actor.

Concrete mechanisms for horizontal co-ordination can help overcome sectoral policy silos

Despite the inherently cross-sectoral nature of skills policy horizontal co-ordination in this area has, thus far, been carried out in a pragmatic way rather than through established, formal mechanisms. Inter-ministerial working groups, committees and action plans aim to achieve consensus and provide a framework for horizontal co-operation but few are established on a permanent basis.

Do co-ordination mechanisms across the public sector ensure coherence of skills policies in Norway?

Participants were asked to use the OECD Skills Diagnostic Toolkit to score the performance of Norway's current skills system in delivering a number of critical skills outcomes. A low score indicates that participants' assessment that the current skills system does poorly in delivering on this outcome and a high score indicates their view that Norway shows strong performance in this area. The results from workshops held in the capital and in two counties (Buskerud and Nordland) are presented below.



Participants saw significant scope for improving co-ordination mechanisms across the public sector when designing new skills policies, legislation and regulations. Interestingly, at the national level, the sentiment was more polarized with close to 60% of participants feeling that co-ordination mechanisms were fairly weak. Participants in county workshops had more diverse views on this issue.

The collective responsibility of the Council of Ministers for all government decisions ensures that all ministries are broadly incentivised to achieve agreements with other ministries. However, beyond this, the ability to make progress towards a more whole-of-government approach to skills, rests upon the availability of concrete mechanisms with which effective cross-government coordination can be fostered.

Box 43. Mechanisms for national cross-sectoral co-ordination in OECD countries

Co-ordinating structures such as inter-ministerial committees and commissions. This is one of the simplest systems for horizontal governance as it is based on the existing government structure.

Fully-fledged ministries with broad responsibilities and powers that encompass traditionally separate sectors. Some positive implications of the concentration of different responsibilities within the same authority include: a more open and coherent view, the concentration of skills and the possibility for a more integrated approach.

Strategic planning and programming, including agreements, frameworks and instruments. The formulation and implementation of national policy programmes can provide the impetus and framework for greater central co-ordination and is widely used across OECD countries. Long-term strategic documents, focusing on the co-ordination of diverse issues and interests across sectors as well as between levels of government often incorporate monitoring, feedback and revision mechanisms.

Special units or agencies that provide planning and advisory support to facilitate policy coherence across sectors at the central level. High-level “special units” have been created in several countries to ensure consistency among sectors. The closer such units or co-ordinators are to a chief executive, the greater the incentives are for co-operation across sectoral ministries.

Combining financing and/or creating a consistent and comprehensive budget. The budgeting system is also a powerful tool for more integrated policy-making. Integrating financial tools and programmes can contribute to improve transparency, synergy across sectors and facilitate accountability and performance monitoring.

Source: Adapted from OECD (2010), *Regional Development Policies in OECD Countries*, OECD Publishing. doi: [10.1787/9789264087255-en](https://doi.org/10.1787/9789264087255-en).

Clear ministerial responsibility combined with lack of a formalised pre-agreement stage in the budgetary processes can stymie incentives to co-operate – particularly when costs and benefits appear in different remits. And, while the Ministry of Finance plays a key role in reviewing all policy proposals with budget implications in Norway, it plays less of a role in the budget process than in other OECD countries. For example, Austria and Germany also rely on strong line ministries but are able to call upon the Ministry of Finance or the Chancellery (centre of government) to arbitrate between and facilitate inter-ministerial co-operation (OECD 2013c).

Difficulties in inter-ministerial co-ordination on financing skills policy has led to ministerial policy development that often operates in silos. Policy silos dictated by ministerial remits can mean that policy issues which span several ministries can be highly complex as multiple processes operate in parallel. This can lead to confusion and undermine the efficiency with which skills challenges are addressed.

The field of adult education provides a good example of this complexity:

- Primary and secondary education fall under the remit of the Ministry of Education and Research and the Directorate of Education:
 - secondary education is administered by the county council; while
 - primary and lower-secondary education are administered by the municipality;
- Re-skilling and employment activation training falls under the remit of the Ministry of Labour and the Norwegian Labour and Welfare Administration (NAV);

- Norwegian language training for migrants falls within the remit of the Ministry of Children, Equality and Social Inclusion and the Directorate for Integration and Diversity;
- The Agency for Adult Learning (Vox) has the administrative responsibility for the Programme for Basic Competence in Working Life (BKA). The agency also coordinates career guidance and is in charge of curricular and pedagogical issues relating to the teaching of Norwegian and socio-cultural orientation to adult immigrants.

Institutional complexity can create a logic driven by the delivery system rather than one centred on the needs of the user. This can lead to suboptimal outcomes for the individual users of the system, as well as the actors that must work across the system at local and regional levels. Indeed, as noted under Challenge 1, while all adults are entitled to an upper-secondary education, the complex system administered by multiple Ministries and their agencies – coupled with limited public awareness – can lead to limited take-up of this statutory right. While there are 650 000 adults without an upper-secondary education in Norway only 20 000 participated in upper-secondary education in 2012 (Statistics Norway). Furthermore, a large proportion of the participants in this adult education is accounted for by immigrants, for whom a long and inflexible upper-secondary education may not be appropriate or who may require Norwegian language training first.

In addition, those who remain outside the labour force, due to lack of demand for their skills, are currently the responsibility of NAV. If these individuals require education and training beyond the scope of the courses on offer through NAV, they risk losing access to social security benefits if they enrol for study. If, on the other hand, they return to a full-time upper-secondary education, administered under the Directorate of Education and Training, they risk losing their flexibility and ability to respond to employment opportunities should they arise. Lack of horizontal co-ordination among agencies and lack of policy coherence leads to a system that is unable to fully meet the skills needs of those it is meant to support.

Box 44. Fostering joined-up public service delivery

In **Australia**, an international leader in innovative service delivery, the most important example of horizontal integration for innovative service delivery is the Centrelink agency. Centrelink aims to provide a one-stop shop where all central government social services and benefits are horizontally integrated.

The agency delivers payment services on behalf of the Ministry of Human Services and the Ministry of Families, Housing, Community Services and Indigenous Affairs as well as 20 other agencies and ministries. Centrelink has an integrated ICT database that contains all the relevant information regarding a citizen's potential payment needs. The payment services include: old-age pensions, family support, unemployment benefits for young people, study loans and disability pensions. Centrelink recently took over the passport service. The case-handling staff, based either in headquarters or in the 15 regional offices, are organised according to programme, and programme staff also have counterparts in the line departments that Centrelink serves. Regarding the relationship between the agency and the line ministry, Centrelink officials have suggested that they should be involved early in the policy development process by participating in departmental working groups in order to assess the implementation requirements that new initiatives will entail.



In **Denmark**, the emphasis has been on using ICT to make interaction with the government “seamless”. A citizen portal is in the process of being set up that will enable a broad array of public sector organisations – central and local – to use a common interface with citizens. Horizontal integration is also pursued across government through enhanced ICT standard setting by the Ministry of Finance, which will allow easy communication between all government units (central and local). The use of common e-government components across the public sector or within selected domains is of great utility, not only to ensure increased efficiency (with large savings in some cases) but also to establish a more integrated public sector.

Source: OECD (2013), *Value for Money in Government: Norway 2013*, Value for Money in Government, OECD Publishing.

CHALLENGE 11: ENSURING LOCAL FLEXIBILITY AND ADAPTABILITY FOR NATIONALLY DESIGNED POLICIES

Workshop participants identified obstacles to adapting national skills policies to local needs:

“Lack of a system to disseminate skills information”

“Borders between counties and municipalities hinder flexibility and development”



In a geographically diverse country such as Norway, where many of the responsibilities for developing and implementing skills policies fall to the county council or municipal level, careful consideration should be given to the need to balance autonomy and accountability. Several issues require particular attention, including:

- how far national policies are flexible and may be adapted to local needs and challenges;
- capacity of local actors and stakeholders to design and implement programmes based upon local needs and challenges;
- availability of locally specific data to inform local programmes and strategies;
- how far policy outcomes are monitored and evaluated at the local level; and
- accountability mechanisms for subnational administration.

Focus on Norway: The Knowledge Promotion Reform

The “Knowledge Promotion” reform was launched in 2006 with the dual objectives of decentralizing decision-making and responsibilities in the education sector, while at the same time ensuring a baseline for national competence standards. The reform places more emphasis on basic skills (the ability to read, the ability to do arithmetic, the ability to express oneself orally and in writing; the ability to make use of information and communication technology), but leaves local discretion -- within a nationally determined framework -- regarding subjects and tuition time.

The reform covers both compulsory schooling and upper-secondary education and aims to strengthen individually adapted learning through new curricula with clearly defined competence goals. Subject curricula were developed to leave room for local priorities and adapted education, under the assumption that local curricula development would occur.

The emphasis on goals and quality assessment represents an attempt to introduce robust performance and results management mechanisms into the education sector. However, the goals remain far from prescriptive (“In assigning such skills targets, the subject syllabuses are expressing high academic ambition for all students, who *in varying degrees* should be able to reach the targets that have been set.” (emphasis added)).

While, early in the reform period, the majority of school-owners were content with the new autonomy to make independent decisions, by the time of an independent evaluation in 2011 (see Aasen *et al.* 2012) only a minority felt the same way.

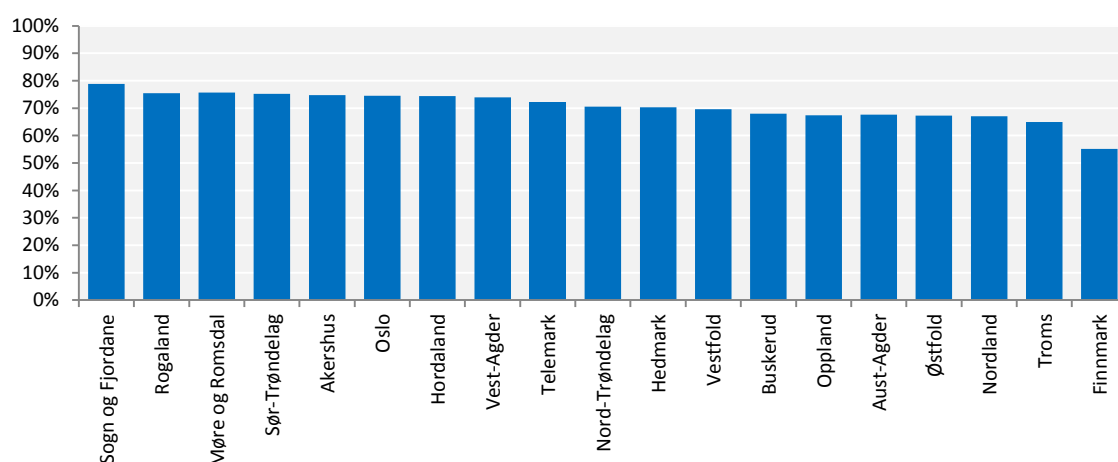
Evaluation of the Knowledge Promotion Reform by the Nordic Institute for Studies on Innovation, Research and Education (NIFU) and University of Oslo, at the behest of the Directorate of Education and Training, have concluded that the result of the reform has largely been to increase the steering power of the national political and administrative authorities leaving the lower administrative levels to implement nationally determined policy.

Source: Aasen, Møller, Rye, Ottesen, Prøitz Hertzberg (2012) Kunnskapsløftet som styringsreform - et løft eller et løfte? NIFU. Boarini, R. (2009), “Making the most of Norwegian Schools”, *OECD Economics Department Working Papers*, No. 661, OECD Publishing. doi: [10.1787/227333554837](https://doi.org/10.1787/227333554837)

Regional differences shape the context in which skills are developed, activated and used in Norway

Norway’s geography, with long distances, low population density, and small local labour markets with limited possibilities for commuting, presents particular challenges for balancing skill demand and supply at local levels. While many of the skills challenges identified in this report are common to many regions in Norway, these challenges often involve significant regional and local variations. For example, on-time completion of upper secondary school ranges from just 55% in Finnmark County to close to 80% in Sogn og Fjordane County. At the same time, employers can face difficulties in meeting all their skill needs from within their local labour market while their capacity to hire and keep skilled employees will depend in part on the overall attractiveness of the region. Thus, policies aimed at more-closely aligning education and training systems with labour market needs also need to take into account and respond effectively to local conditions.

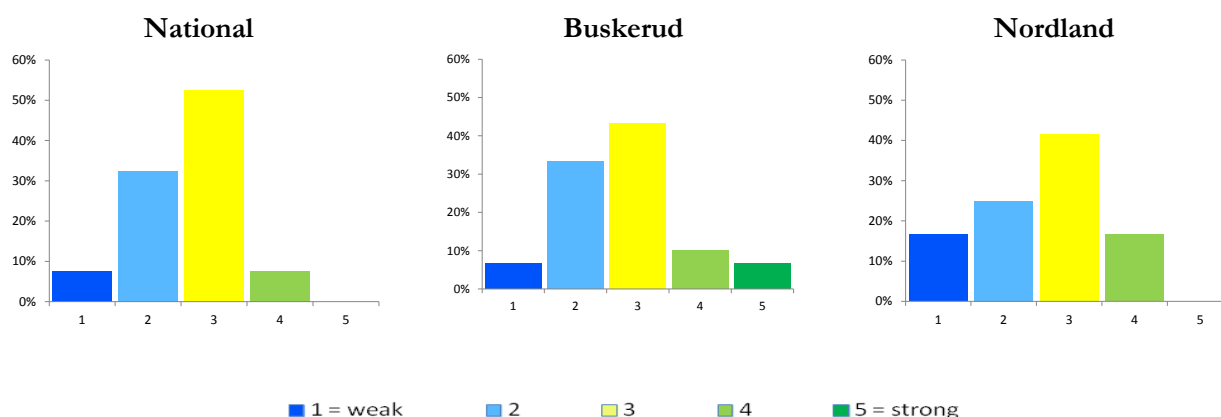
Figure 61. Completion of upper secondary within two years of expected time, by county
2004 age cohort



Source: Statistics Norway

Are local needs catered for through flexibility in skills policy design and implementation in Norway?

Participants were asked to use the OECD Skills Diagnostic Toolkit to score the performance of Norway's current skills system in delivering a number of critical skills outcomes. A low score indicates that participants' assessment that the current skills system does poorly in delivering on this outcome and a high score indicates their view that Norway shows strong performance in this area. The results from workshops held in the capital and in two counties (Buskerud and Nordland) are presented below.



Participants in the diagnostic workshops across the country expressed diverse perceptions regarding the degree to which skills policy is tailored to local needs in Norway. Participants in Nordland county were the most likely to feel local needs are not catered for in the design and implementation of skills policy.

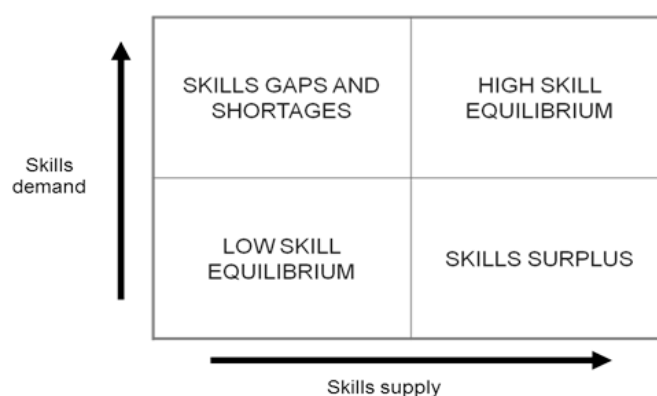
... so achieving equality in educational outcomes requires local flexibility

The OECD defines local flexibility as, “the possibility to adjust policy at its various design, implementation and delivery stages to make it better adapted to local contexts, actions carried out by other organisations, strategies being pursued, and challenges and opportunities faced” (Giguère and Froy, 2009). Local flexibility and adaptability of national policies and programmes can contribute to achieving a better balance between skills supply and demand within local labour markets (see box 45 below).

Box 45. Balancing skills supply and demand at the local level

Research by the OECD LEED Programme has highlighted how a mismatch between supply and demand can build up at the local level creating inefficiencies in the local labour market as the skills being deployed are not effectively utilised by employers. A statistical tool has been developed to understand the balance between skills supply and demand within local labour markets.

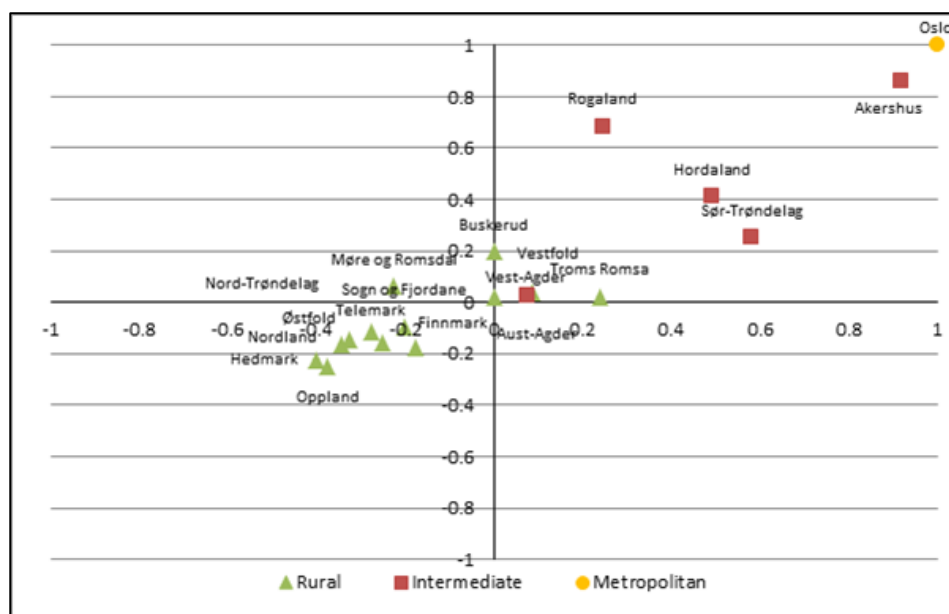
Understanding the relationship between skills supply and demand



Looking at the figure above, in the top-left corner (skills gaps and shortages), demand for high skills is met by a supply of low skills, a situation that results in reported skills gaps and shortages. In the top-right corner, demand for high skills is met by an equal supply of high skills resulting in a high-skill equilibrium. This is the most desired destination of all high performing local economies. At the bottom-left corner the demand for low skills is met by a supply of low skills resulting in a low-skill equilibrium. Lastly, in the bottom-right corner, demand for low skills is met by a supply of high skills resulting in an economy where high skills are available but are not utilised. This leads to the outward migration of talent, underemployment, skill under-utilisation, and attrition of human capital, all of which signal missed opportunities for creating prosperity.

Source: Froy, F., S. Giguère and M. Meghnagi (2012), "Skills for Competitiveness: A Synthesis Report", *OECD Local Economic and Employment Development (LEED) Working Papers*, No. 2012/09, OECD Publishing.
doi: [10.1787/5k98xwskmvr6-en](https://doi.org/10.1787/5k98xwskmvr6-en)

Figure 62. Balancing Supply and Demand, Norway 2009



The analysis is carried out at Territorial Level 3 regions (regions with populations ranging between 150 000-800 000). The supply of skills was measured by the percentage of the population with post-secondary education. The demand for skills was measured by the percentage of the population employed in medium-high skilled occupations. Regions are also classified in relation to the average state unemployment rate. The indices are standardised using the inter-decile method and are compared with the national median. Further explanations on the methodology can be found in Froy, Giguère and Meghnagi (2012).

Source: Froy and Giguère, 2010, Froy, Giguère and Meghnagi, (2012), "Skills for Competitiveness: A Synthesis Report", OECD Local Economic and Employment Development (LEED) Working Papers, No. 2012/09, OECD Publishing

In the context of Norway, the OECD LEED tool can help to provide policy makers with an understanding of skills mismatches which may occur at the subnational level. This typology, when applied to regions in Norway (see Figure 62 above), can provide information on the relationship between supply and demand of skills providing a context for place-based policy approaches at the local level. It can also help policy makers in determining the extent to which certain areas may be experiencing skills mismatches.

The results from this analysis show very clearly the skills variations across counties in Norway. Five counties (Oslo, Akershus, Rogaland, Hordaland, Sør-Trøndelag) occupy the high skills equilibrium quadrant, while two counties (Buskerud and Vest-Agder) are on the axis between the high skills equilibrium and skills shortages quadrants. Aust-Agder, Vestfold, and Troms are on the axis between a high-skills equilibrium and skills surpluses. Eight counties fall in the low skills equilibrium quadrant (Oppland, Hedmark, Nordland, Østfold, Telemark, Finnmark, Nord-Trøndelag, Sogn og Fjordane).

Typically, areas that fall in the low-skills equilibrium are rural areas with a high number of low quality jobs relative to the rest of the jurisdiction. Møre og Romsdal falls into the skills shortages and gaps quadrant indicating potential mismatches in this region. It should be noted that the diagnostic tool does not capture some of the complex pockets of disadvantage that may exist within regions

Norway spends a relatively small proportion of education expenditures at the central level. Funds are provided by the State to lower-level government as a block grant which covers education and other social expenditures (notably health care, child and elderly care) and local authorities are free to decide on the allocation of resources to schools. Thus local government preferences, together with differences in the settlement patterns, result in a wide diversity in the allocation of expenditures across municipalities. On average municipalities spend 38% of their budget on education, with a minimum of 15% and a maximum of 71% (Boarini 2009). Much of this expenditure variation, however, results from factors beyond the control of the municipality. For example, scattered settlement patterns can imply large variation in school size and hence teacher-student ratios which is one of the main drivers of variation in expenditures (Falch et al 2008).

Accompanied by accountability based on full information and transparency...

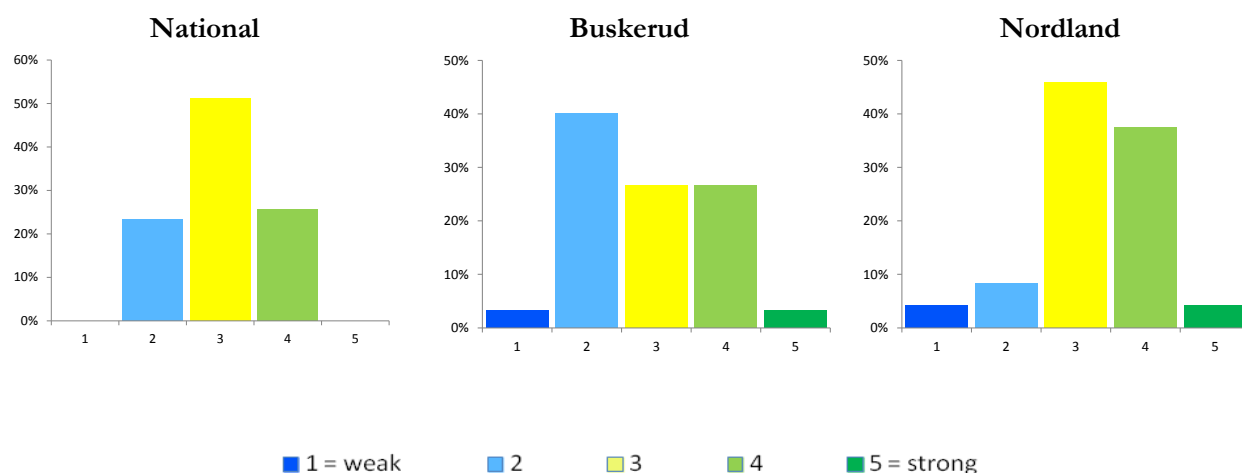
Ensuring quality in the context of local policy autonomy requires well established accountability devices built on clear objectives, instruments, and information. Effective information and data is necessary for sharing good practice, for aligning actors and for evidence-based decisions on the scale-up of those policies and implementation practices that have proven to be successful and discontinuation of those that have not.

Research, statistics and analyses are an important part of the *national system of evaluation* in Norway. And a national quality assessment system (NKVS), established in 2004, incorporates national tests and a web-based portal for presentation of data by field relating to: learning outcomes and environments, resources, completion rates in upper secondary school and training, school facts and, more recently, user surveys about learning and well-being (Nusche, D., *et al.* 2011). Yet results of national assessment tests are not consistently published at the school level and despite an increasing focus on quality development and effective and equitable learning, there remain wide differences in performance across municipalities (Boarini 2009).

The White Paper “Quality in School”, launched in June 2008, goes some way to enhancing the local accountability that must accompany increases in local policy flexibility. In addition to an expansion of the national assessment system, the paper proposes measures to facilitate the use of performance information at the local level to increase local accountability and state support to schools with low performance. Municipalities are required to prepare an annual report on the results of their schools. To this end a tool has been developed via which data to be included in the annual report are automatically imported to a pre-prepared template.

Do public sector institutions gather/publish data and policy-relevant evidence about skills demand and use it when designing skills policies?

Participants were asked to use the OECD Skills Diagnostic Toolkit to score the performance of Norway's current skills system in delivering a number of critical skills outcomes. A low score indicates that participants' assessment that the current skills system does poorly in delivering on this outcome and a high score indicates their view that Norway shows strong performance in this area. The results from workshops held in the capital and in two counties (Buskerud and Nordland) are presented below.



No clear position emerged among diagnostic workshop participants regarding the success of public sector institutions in collecting and disseminating appropriate information and data and basing skills policy design on appropriate evidence. Opinions in the regions of Buskerud and Nordland were more diverse than they were at the national level with participants in Buskerud tending to view as less performance as least.

Box 46. Sharing facilities to promote information flows

Australia's Monash University campus at Gippsland called the Gippsland Education Precinct is a multi-sectoral "institution" formed by a partnership between Monash University, Kurnai College, Apprenticeship Group Australia (formerly Gippsland Group Training), GippsTAFE (vocational education institution) and La Trobe City. It aims to improve access equity and education and employment opportunities through integrated learning pathways from Year 11 to TAFE diploma, university degree or PhD, with strong partnerships with business, industry and all levels of government. By co-locating all four education providers on a single site, the precinct helps widen access by enabling easier transition to apprenticeships, TAFE or university. As part of a AUD 20 million project, the Precinct offers state of the art facilities in all areas including IT, science, art, library, sport & recreation and technology – and students can utilise Monash facilities including laboratories, computers, student union and staff. The Gippsland Education Precinct provides the option to remain in Gippsland to live and work. Educational programmes are being developed in close consultation with local industry to help improve the employability in the region and hence its sustainability.



Source: OECD (2010a), Higher Education in Regional and City Development: Victoria, Australia, OECD Publishing

...as the basis for rigorous evaluation and assessment

Building on comprehensive information and data, a system for effective evaluation of policy implementation is a precondition for accountability. While countries have taken different approaches to evaluation, some consensus has emerged over the elements of successful evaluation policy (adapted from OECD 2013b):

- **A holistic approach** that generates synergies, avoids duplication and prevents inconsistencies in objectives.
- **Evaluation and assessment that is aligned with intended goals and objectives.** To avoid creating behavioural distortions, it is important to ensure that assessment is focussed on outcomes that are sought, rather than those that are easy to measure.
- **A broad range of approaches** that avoid creating incentives that distort how actors (students, teachers, employers, public employees) behave. For example, if teachers are judged largely on results from student tests, they may “teach to the test”. Similarly, if public employment services are assessed on the basis of the number of unemployed for whom they find jobs, they may focus solely on the people who are easiest to help back into employment.
- **Capacity at all levels** of the skills system. For example, teachers may need training in the use of formative assessment, public officials may need to upgrade their skills in collecting and managing data.
- **Consideration of local needs** so that implementing central goals is balanced with the need to adapt to the particular requirements of regions, districts and schools.
- **Careful design** that builds upon the use of pilots and experimentation while building consensus among all stakeholders.

In the provision of education some municipalities have begun to adopt quality assessment policies based on clearly defined policy targets (see Nusche *et al.* 2011). However there are, as yet, no national requirements for such policies. Norway’s tradition of school self-evaluation, together with the lack of national guidelines for the methods a school must use, means that school evaluations remain unharmonised and hard to compare. Efforts are currently being made at the national level to strengthen the sector’s ability to assess its own results and carry out comprehensive change processes (OECD 2011).

CHALLENGE 12: IMPROVING IMPLEMENTATION AND BUILDING PARTNERSHIPS AT THE LOCAL AND NATIONAL LEVEL

Norway has a strong tradition of close cooperation between government, employers and trade unions in all areas of public policy. This longstanding experience of building and maintaining partnerships is a major asset on which to draw when tackling Norway's skills challenges.

This notwithstanding, during the workshops, participants identified the following obstacles to implementation and building partnerships:

“Lack of co-ordination among regional agencies”

“Balance between regional coverage of higher education establishments and quality of institutions”



Partnership between central and sub-central levels of government is crucial in achieving a whole-of-government approach...

Not only for policy development (see Challenge 10), but also for policy implementation. Vertical interactions between institutional levels, as well as horizontal co-operation and peer processes facilitate tailoring policy objectives, identifying relevant indicators, setting realistic targets, and devising appropriate incentive mechanisms. Moreover, incentives and accountability are more likely to be effective if there is strong *ex ante* commitment from all levels of government to rigorous assessment of performance (OECD 2009).

Broad national level partnerships facilitate a holistic approach to skills challenges

Norway's own experience of building broad partnerships at the national level to improve skills outcomes offers many useful insights. The Norwegian “Competence Reform”, which ran from 1996-2004, directly led to measures giving all adults the statutory right to an upper secondary education from August 2000, the right to study leave from January 2001, and the right to a primary education from August 2002. Financial assistance was increased, tax incentives for training were introduced, and in the same period a new Norwegian Agency for Lifelong Learning (Vox) was founded.

Among the many lessons learned from Norway's experience with its Competence Reform, the following appear to merit particular attention:

- **Designing an effective consultative body:** Ensuring avenues for communication and collaboration between government ministries and social partners is a critical element of success in implementing such a wide-ranging reform. In the case of the Competence Reform, however, effectiveness may have been undermined by the desire to maximize inclusion. The forum included many different representatives with varying levels of engagement in the process, which may have hampered its effectiveness as a decision-making body.

- **Creating ownership:** Achieving significant improvements in a country's human capital takes years or even decades, but government ministries often have difficulty understanding and embracing their role in long-term, cross-government initiatives. The importance of creating lasting and deep ownership for long-term, systemic reform cannot be underestimated.
- **Embedding partnership processes:** Long-term change of this magnitude will only survive the changing political landscape if the partnership processes involved are institutionalized in some way, for instance through regular progress reports to Parliament.
- **Sustaining engagement:** Many achievements of the Competence Reform process were thanks to the efforts to engage social partners from the very start. The roles and responsibilities of each participating group were clearly established, and there was buy-in not only for the goals of the reform but for its implementation and funding mechanisms. However, a 'supply side' approach is not enough to deliver results. Employers and trade unions must be active in creating a sustained momentum for the partnership – the 'demand side'.

...and strong partnerships at the local level are necessary for effective policy development and implementation

There are a wide variety of stakeholders at the county and municipal level in Norway, each with the potential to play an important role in implementing effective skills policies. These include the Norwegian Labour and Welfare Administration (NAV), Vocational education and training institutions, universities, local and regional councils, employers and economic development actors. Nationally designed policies, even if they are adapted to local needs, may fail at the implementation stage if these actors do not have access to forums for co-ordination, to develop partnerships for practical implementation. To reap the benefits of national co-ordination, partnerships at the local level are also needed to ensure that the statutory rights to adult education are both practical and possible for those that require them. Educational institutions, Norwegian Labour and Welfare Administration (NAV) representatives, county councils, employers, and social services need to work together to ensure that training and education is appropriately tailored to the learning needs of adults, as well as the challenge of juggling learning and work, or learning and searching for work.

Box 47. A co-ordinated approach to migrant integration – Partnership Skåne

In **Sweden**, partnership Skåne is a regional platform led by the County Administrative Board of Skåne, in collaboration with Region Skåne, municipalities, universities, social and economic associations, and the health scientific community to offer a co-ordinated package of economic and social services to newly arrived immigrants and asylum-seekers. Partnership Skåne offers several kinds of services to propose different gateways into the Skåne society. For example, based on the observation that many newly arrived immigrants carry with them war memories, psychosomatic trauma and other ailments, community and health communicators are trained to convey both physical and psychological health-related information to newly arrived immigrants in their own language and to help them. The communicators are usually newly arrived immigrants themselves. Individual dialogue in the immigrant's native language provides the tools needed to explain the differences between country systems as well as Sweden's rules and routines. A Somali Information and Business Centre was set up to focus specifically on integrating Somalis. It offers counselling and training for Somalis who wish to settle and start their own business in Skåne.



Partnership Skåne also strives to support co-operation between the Public Employment Service, municipalities, local businesses and the social economy to offer new teaching methods for better focused vocational language courses. In particular, the "integration via associations" model has been put in place to inform newly arrived immigrants about existing community associations and facilitate contact between them. The goal is to enhance the immigrants' understanding of Swedish social codes (which are often implicit) and to help them establish social networks.

Source: OECD (2012), *OECD Territorial Reviews: Skåne, Sweden 2012*, OECD Publishing.
doi: [10.1787/9789264177741-en](https://doi.org/10.1787/9789264177741-en)

Box 48. Campus Helgeland, Norway

The region of Helgeland in Nordland County, with a population of approximately 78,000, is characterized by small industrial towns, rural areas and a coastline with a wide-reaching archipelago. Due to its industrial history, the region has long traditions of cooperation and joint problem solving between public, private and well-organized civil society institutions and actors. While there are three higher education institutions in Nordland county, none of these are in the region of Helgeland. And due to the large distances in Nordland county (500 km from south to north) this has been a cause of concern among industrial actors and local politicians in Helgeland.



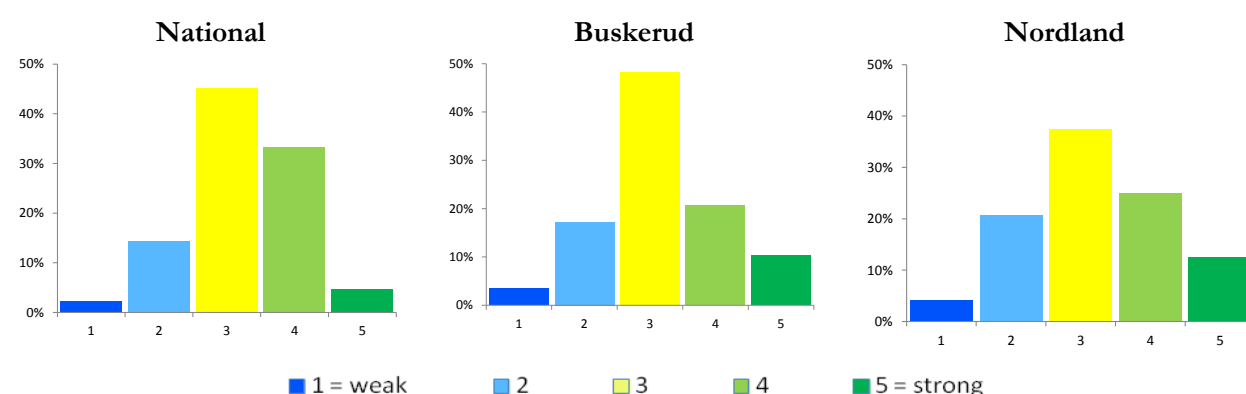
While Helgeland has several productive processing industries and a well-developed cluster of suppliers –growing due to the rapidly expanding offshore petroleum industry – the level of formal education in the region is low and outward migration of highly educated young people is high. In response to this dilemma a coordinating institution 'Campus Helgeland' has been developed through joint initiatives of public, private and civil society actors with the aim of becoming a networking institution focused upon enhancing skills and innovation in the region.

A national example of cooperation between academia and the work place Campus Helgeland, opened in August 2013, houses higher education institutions, libraries, industrial networking institutions and some private firms all within grounds of 130 000 square meters. Education delivered at Campus Helgeland is directed both towards public and private sector needs. Engineering education, which is expected to start in 2014, will increasingly cater to the needs of private industrial actors.

The space has been financed by the municipality with support from the local bank and a financial guarantee for the first years of operation from the Norwegian government. The decision of the municipality to finance Campus Helgeland was made after a long process of negotiation in which different projects and project ideas were combined to reach consensus.

Do strong partnerships between government and non-government actors support skills policy implementation in Norway?

Participants were asked to use the OECD Skills Diagnostic Toolkit to score the performance of Norway's current skills system in delivering a number of critical skills outcomes. A low score indicates that participants' assessment that the current skills system does poorly in delivering on this outcome and a high score indicates their view that Norway shows strong performance in this area. The results from workshops held in the capital and in two counties (Buskerud and Nordland) are presented below.



The majority of participants, both at the national level and in the two regions that conducted diagnostic workshops, were fairly confident in the ability of partnerships to support the implementation of skills policies..

Norway in Focus: Levels of Co-operation**Insights from Skills Strategy Regional Diagnostic Workshop: Buskerud County****Breaking down barriers:**

- lack of structures fostering co-operation between counties and municipalities;
- borders between counties and municipalities hinder flexibility and development;
- communities and industries operate in separate clusters;
- scarcity of arenas for meeting and convening locally.

Clarity in roles and responsibilities:

- lack of common goals
- multiple actors and fragmented responsibilities lead to confusing systems;
- clear division of roles and responsibilities between different public actors is needed;
- better information on other units/organisations would be helpful.

Linking education providers and employers:

- co-operation between education and employers needs to be strengthened – from early childhood education and care (ECEC) to university;
 - co-operation between the different providers of courses, including adult education, is limited;
 - shorter and more flexible educational pathways are necessary;
 - teachers lack skills and knowledge about business and industry;
 - lack of co-operation between school and industry limits entrepreneurial culture.
-

Box 49. Locally-based collaborative governance structures

Workforce Investment Boards in the United States: In the United States, the Local Workforce Investment Boards (LWIBs) have played a strong role in creating more integrated strategies to address employment and skills within broader economic development strategies locally since 1998. There are over 600 WIBs across the US, at the state and local level, and they are strongly business-led, being both chaired by business and having a majority of business members. Each Local Workforce Investment Area is governed by a Local Workforce Investment Board, which is responsible for providing employment and training services within a specific geographic area. The LWIBs administer Workforce Investment Act services as designated by the Governor and within the regulations of the federal statute and U.S. Department of Labor guidelines. There are also designated seats for representatives from labour unions and local educational institutions, with economic development officials sitting on the boards in many states. While performance of the boards varies, in some areas they have developed strong integrated strategies which bridge across employment, skills and economic development. LWIBs are typically an extension of a local government unit, which in most cases is the county government and can include more than one government entity. They are not agencies of the federal or state governments, and the staff are not comprised of federal or state employees.



Local Workforce Planning Boards in Ontario, Canada: There are 25 workforce planning areas in communities across Ontario. These boards conduct localised research and actively engage organizations and community partners in local labour market projects. Each board is as individual as the community it serves, and each addresses labour market issues in its own way as all communities have their own priorities. The Ministry of Training Colleges and Universities sets broad direction for the boards through annual operating and reporting requirements but leaves the way in which that direction is addressed specifically to the boards. Funding for each board is small in the order of \$250,000.CDN annually that allows for an executive director, researcher and administrative help. All other resources are volunteered within the community or come by way of individual project funding from either the federal or provincial governments. Each board operates in its own way, but all have a mission to identify workforce issues that are characteristic of the local community and to provide collaborative solutions by engaging stakeholders and working with partners. Every local workforce planning board in Ontario publishes detailed reports about its labour market projects, activities and partnerships. Local workforce planning boards champion local workforce development solutions for their communities and help to strategically align the actions of all local stakeholders in the community. In a recent report on reforming Ontario public services, a recommendation was made that the role of the boards should be expanded to provide a greater emphasis on engaging employers and promoting workplace training.

Source: OECD (forthcoming), "Local Job Creation: How Employment and Training Agencies Can Help – Country Report for Australia", *OECD Local Economic and Employment Development (LEED) Working Papers*, OECD Publishing; OECD (2013), "Local Job Creation: How Employment and Training Agencies Can Help, United States", *OECD Local Economic and Employment Development (LEED) Working Papers*, No. 2013/10, OECD Publishing. doi: [10.1787/5k44zcpz25vg-en](https://doi.org/10.1787/5k44zcpz25vg-en)

Successful implementation requires strong capacity among partners

The effectiveness of policy implementation can break down if relevant institutions and people lack the capacity to design, implement and monitor policy and to make adjustments on the basis of informed evaluation. Capacity challenges can be particularly severe at the less densely populated areas as multiple roles must be undertaken by a limited number of actors. Among the capabilities particularly relevant for implementation of skills policies are:

- **Management:** the capacity to identify and manage partnerships between diverse stakeholders through systems of consultation and participation.
- **Analytical:** the competence to analyse and compare the results of statistics and indicators
- **Monitoring:** the capacity to monitor policy outcomes and use results to make adjustments
- **Accountability:** the capacity to implement accountability mechanisms and hold parties to accountable for outcomes

An evaluation of the recent Knowledge Promotion reform in Norway found that the ability of the reform to decentralize responsibilities and decision making in the education sector was, to some extent, limited by the varying capacities of school owners to manage the new responsibilities introduced by the reform (Aasen et al 2012). While school-owners have largely been positive about greater access to results and data, there is also a need for increased capacity at the school owner level when it comes to analysis of results. This is particularly in the case in smaller municipalities who are often in a more vulnerable position – both in terms of their finances and competence.

In response to feedback from school owners, many of whom felt that they lacked information and guidelines for implementation of the reform, several additional components of support have been introduced. These have included guidance on reform implementation, competence development and support in developing an action plan. Developed under the Knowledge Promotion Reform, the “Competence for development” programme (*Kompetanse for utvikling*) aims to strengthen teachers’ and principals’ competences through in-service professional training. It is financed by the central government, with money transferred to municipalities and counties on the basis of the number of teachers (85% of funds), the number of schools (10%) and a fixed amount per county (5%). Municipalities and counties are able to decide freely how to allocate this money as long as they remain within a national priority framework.

Box 50. Local employment coordinators in vulnerable areas

Australia’s Keep Australia Working strategy has made the coordination of employment policies at the local level a priority. One of the measures included the identification of Priority Employment Areas - areas most vulnerable to the expected downturn and future unemployment - to ensure that these areas received their appropriate share of additional funding and support. In each Priority Employment Area, Local Employment Coordinators (LECs) were appointed and advisory committees were established comprising local stakeholders from employment, vocational education and training, as well as economic development backgrounds. LECs assist in driving local responses to local labour market problem areas. The Local Employment Coordinator is an agent of the federal government and their main role is to:



- identify the needs of the area and match them with employment, education and training opportunities;
- target business and industries to identify emerging employment opportunities;
- develop and maintain a relationship with the Advisory Committee;
- identify skills and labour shortages, and structural barriers that compromise job matching; and
- identify projects or activities which may be funded through allocated federal funding - the Flexible Funding Pool - and which will deliver employment and skills development outcomes.

Another key role played by the LEC is to organise a Jobs and Skills Expo. The Expo is a ‘one-stop jobs and skills marketplace’, bringing employers, employment service providers, labour and recruitment agencies, and registered training providers all under one roof on one day. For example, the latest Jobs and Skills Expo in Ballarat, Victoria in April 2012 was attended by about 2000 persons. It provided a good opportunity for businesses to connect with the community at large, and with jobseekers in particular, and to disseminate information about their skill needs. Job seekers got an overview of the variety of jobs and training opportunities that were available and could meet potential employers face-to-face.

Source: OECD (forthcoming), “Local Job Creation: How Employment and Training Agencies Can Help – Country Report for Australia”, *OECD Local Economic and Employment Development (LEED) Working Papers*, OECD Publishing.

BIBLIOGRAPHY

- Aasen, Møller, Rye, Ottesen, Prøitz Hertzberg (2012), "Kunnskapsløftet som styringsreform - et løft eller et løfte?", NIFU http://www.udir.no/Upload/Rapporter/2012/FIRE_slutt.pdf
- Boarini, R. (2009), "Making the most of Norwegian Schools", *OECD Economics Department Working Papers*, No. 661, OECD Publishing. doi: [10.1787/227333554837](https://doi.org/10.1787/227333554837)
- Falch T., M. Rønning and B. Strøm, (2008), "A Cost Model of Schools: School size, school structure and student composition", forthcoming in N. Soguel and P. Jaccard (eds), *Governance and Performance of Education Systems*, Springer.
- Froy, F., S. Giguère and M. Meghnagi (2012), "Skills for Competitiveness: A Synthesis Report", *OECD Local Economic and Employment Development (LEED) Working Papers*, No. 2012/09, OECD Publishing. doi: [10.1787/5k98xwskmvr6-en](https://doi.org/10.1787/5k98xwskmvr6-en)
- GEM 2012 Global Report (2013), <http://www.gemconsortium.org/docs/2645/gem-2012-global-report>
- Norwegian Labour and Welfare Administration (NAV) (2013) "Work and Welfare", <https://www.nav.no/>
- Nusche, D., *et al.* (2011), *OECD Reviews of Evaluation and Assessment in Education: Norway 2011*, OECD Reviews of Evaluation and Assessment in Education, OECD Publishing. doi: [10.1787/9789264117006-en](https://doi.org/10.1787/9789264117006-en)
- OECD (2008), *OECD Territorial Reviews: Norway 2007*, OECD Publishing. doi: [10.1787/9789264038080-en](https://doi.org/10.1787/9789264038080-en)
- OECD (2009), *Governing Regional Development Policy: The Use of Performance Indicators*, OECD Publishing. doi: [10.1787/9789264056299-en](https://doi.org/10.1787/9789264056299-en)
- OECD (2010a), *Higher Education in Regional and City Development: State of Victoria, Australia 2010*, OECD Publishing. doi: [10.1787/9789264088979-en](https://doi.org/10.1787/9789264088979-en)
- OECD (2010b), *Regional Development Policies in OECD Countries*, OECD Publishing. doi: [10.1787/9789264087255-en](https://doi.org/10.1787/9789264087255-en)
- OECD (2012), *OECD Territorial Reviews: Skåne, Sweden 2012*, OECD Publishing. doi: [10.1787/9789264177741-en](https://doi.org/10.1787/9789264177741-en)
- OECD (2013a), "Local Job Creation: How Employment and Training Agencies Can Help, United States", *OECD Local Economic and Employment Development (LEED) Working Papers*, No. 2013/10, OECD Publishing. doi: [10.1787/5k44zcpz25vg-en](https://doi.org/10.1787/5k44zcpz25vg-en)
- OECD (2013b), "The OECD Review on Evaluation and Assessment Frameworks for Improving School Outcomes", in P. Santiago, *et al.*, *Teacher Evaluation in Chile 2013*, OECD Publishing. doi: [10.1787/9789264172616-11-en](https://doi.org/10.1787/9789264172616-11-en)

OECD (2013c), *Value for Money in Government: Norway 2013*, Value for Money in Government, OECD Publishing.
doi: [10.1787/9789264201927-en](https://doi.org/10.1787/9789264201927-en)

OECD (forthcoming), “Local Job Creation: How Employment and Training Agencies Can Help – Country Report for Australia”, *OECD Local Economic and Employment Development (LEED) Working Papers*, OECD Publishing.

OECD (forthcoming), “Local Job Creation: How Employment and Training Agencies Can Help – Country Report for Canada”, *OECD Local Economic and Employment Development (LEED) Working Papers*, OECD Publishing.

Statistics Norway website <http://www.ssb.no/>

NEXT STEPS

Moving from diagnosis to action

This diagnostic report marks an important milestone in the OECD-Norway collaborative project on “Building an effective skills strategy for Norway” and encapsulates the key findings of the diagnostic phase which was completed in 2013. The OECD Skills Strategy Diagnostic Toolkit has proved useful as a framework for engaging a wide range of stakeholders in far-reaching discussions of the skills challenges facing Norway today and in the future.

The report highlights the breadth of the skills challenges ahead. Effective and integrated policy responses will need to weave together measures from such diverse fields as education and training, employment, migration and integration, economy, tax, local economic development, research and innovation.

The next stage of the project in 2014 will seek to build on these shared insights to generate options for concrete actions to meet Norway’s future skill needs and to improve the match between supply and demand for skills. Maximising Norway’s skills potential is an endeavour which goes well beyond the capacity of government alone and will require the active contribution of many stakeholders at the national, county and local level including employers, trade unions, students and teachers.

Above all, it will require a shared commitment across government ministries and social partners to build a responsive and resilient skills system which fosters Norway’s competitiveness, social cohesion and high standards of living for all.

ANNEXES

ANNEX 1 – ACTORS IN THE NORWEGIAN SKILLS SYSTEM

Ministry of Education and Research	Ministry of Education and Research is responsible for lifelong learning, kindergartens, primary and secondary schools, tertiary vocational education, adult education and higher education and research
Ministry of Labour	The Ministry of Labour is responsible for labour market policy, the working environment, pensions and welfare policy.
Ministry of Children, Equality and Social Inclusion	The Ministry of Children, Equality and Social Inclusion seeks to strengthen the rights of consumers, families, children and young people, anti-discrimination, integration of immigrants and full equality between men and women
Ministry of Health and Care Services	The Ministry of Health and Care Services has the overall responsibility for government policy on health and care services in Norway.
Ministry of Finance	The Ministry of Finance is responsible for planning and implementing Norwegian economic policy and for coordinating the work with the Fiscal Budget.
Ministry of Local Government and Modernisation	The Ministry is responsible for Norwegian housing policy, rural and regional development, local government and the administration of elections. As of 1 January 2014 the ministry has expanded its role and will have a central role in the Government's efforts to improve the public administration in Norway. Its responsibilities include: highest authority on Civil Service pay and working conditions; represents the Government as employer negotiates pay and working conditions with the Civil Service main unions; concludes agreements, including the Main Collective Agreement, the Basic (Cooperation) Agreement and several special agreements.
Ministry of Trade and Industry	The Ministry of Trade and Industry is responsible for designating industrial policy with an eye to the future. This includes involvement in any policy area that affects value creation.
Norwegian Directorate for Education and Training	The Norwegian Directorate for Education and Training is responsible for the development of kindergarten and primary and secondary education. The Directorate is the executive agency for the Ministry of Education and Research. The Directorate has the overall responsibility for supervising kindergarten, education and the governance of the education sector, as well as the implementation of Acts of Parliament and regulations. The Directorate is responsible for managing the Norwegian Support System for Special Education (Statped), state-owned schools and the educational direction of the National Education Centres.
Norwegian Directorate of Integration and Diversity	IMDi was established on 1 January 2006 to act as a competence centre and a driving force for integration and diversity. The directorate cooperates with immigrant organisations/groups, municipalities, government agencies and the private sector. It provides advice and implements government policy.
Norwegian Agency for Lifelong Learning	Vox, Norwegian Agency for Lifelong Learning, is an agency of the Norwegian Ministry of Education and Research. Its main goal is to contribute to supporting active citizenship, improving employability and increasing participation in education. Vox has the administrative responsibility for The Programme for Basic Competence in Working Life (BKA), and Vox also administers the funds for Adult learning associations and distance learning. The agency also coordinates the career guidance field in Norway through the National Unit for Lifelong Guidance. Vox is in charge of curricular and pedagogical issues relating to the teaching of Norwegian and socio-cultural orientation to adult immigrants.
Norwegian Labour and Welfare Administration (NAV)	NAV was established on 1 July 2006. NAV administers a third of the national budget through schemes such as unemployment benefit, work assessment allowance, sickness benefit, pensions, child benefit and cash-for-care benefit. NAV has nineteen county offices. The county offices are responsible for the operation and establishment of NAV office in partnership with municipalities. They are also responsible for administrative and special units of the county (e.g. special units such as employment centres). NAV local offices are the user's first point of contact with NAV. The local authorities and central government cooperate to find good solutions for users through 456 NAV offices in municipalities and city boroughs. Each local authority and NAV agrees on what local authority services their office should provide. The services provided by a NAV office will thus vary from place to place.
NAV-county and NAV-local	
Norwegian Directorate of Health	The Norwegian Directorate of Health is an executive agency and competent authority subordinate to the Norwegian Ministry of Health and Care Services. The mission of the Directorate of Health is to improve the health of the entire nation through integrated and targeted activities across services, sectors and administrative levels.

Norwegian Tax Administration	The Norwegian Tax Administration is subordinate to the Ministry of Finance and is responsible for an updated population register and that taxes are determined and paid properly.
Statistics Norway	Statistics Norway has overall responsibility for official statistics in Norway, and carries out extensive research and analysis activities. Statistics Norway reports to the Ministry of Finance under the Statistics Act of 1989, but is a professionally autonomous organization with a mandate to determine what it publishes, as well as when and how publication takes place.
Industrial Development Corporation of Norway (SIVA)	SIVA aims to develop strong regional and local industrial clusters through ownership in infrastructure, investment and knowledge networks as well as innovation centers. SIVA is a partner in 56 business gardens, 24 business incubators, 19 industry incubators in core industries, 25 science and research parks, 10 seed-venture companies and 12 Norwegian Centers of Expertise across Norway.
Research Council of Norway	The Research Council of Norway is a national strategic and funding agency for research activities, and a chief source of advice on, and input into, research policy for the Norwegian Government, the central government administration and the overall research community.
Innovation Norway	Innovation Norway (IN) is the Norwegian Government's instrument for innovation and development of Norwegian enterprises and industry. IN supports companies in developing their competitive advantage and to enhance innovation. IN contributes to enhancing innovation in Norwegian enterprises and industry, building competitive Norwegian enterprises for both domestic and international markets, securing development in rural areas and promote interaction between enterprises, knowledge communities and R&D institutions
Higher education institutions	All universities and colleges (except certain private institutions) are run by the state, but the institutions have considerable academic and administrative autonomy. Norway currently has eight universities, 19 colleges and eight academic colleges under state ownership. Norway has also a number of private higher education institutions, including 23 who receive state subsidies. Universities and colleges offer contract research. This includes research, development, studies and teaching, and is aimed at both private and public sectors. The institutions have the responsibility to provide or arrange provision of continuing and further education in their field.
Norwegian Agency for Quality Assurance in Education (NOKUT)	NOKUT – the Norwegian Agency for Quality Assurance in Education – is a professionally independent government agency that contributes towards quality assurance and enhancement in higher education and tertiary vocational education. NOKUT's tasks include foreign higher education qualifications as well as Norwegian higher education.
Council for Vocational Training (SRY)	The Council for Vocational Training (SRY) is the national body in which the social partners meet education authorities. Under the Education Act, the Council shall advise the Ministry, take the initiative to promote vocational training and promote cooperation between actors nationally and locally. The Council is appointed by the Ministry of Education and Research.
Council for cooperation with working life (RSA)	All higher education institutions are to establish individually or together with other institutions a Council for cooperation with working life (RSA). Establishment of RSAs will contribute to a more structured cooperation between the institution and working life, and will stimulate the creation of more work-related courses.
County Governor	The County Governor is the state's representative in the county and is responsible for following up resolutions, goals and policies of the Parliament and Government. The County Governor performs various administrative tasks on behalf of the ministries and constitutes an important link between the municipalities and central authorities.
County Council	The County Council's main task is to act as a regional developer. Their focus is on how to help expand the labor market by stimulating skills, creativity and innovation. They also work to provide businesses with the best possible general conditions by, for example, developing the transport sector. The County Council is also responsible for delivering welfare services. The largest service currently provided by the County Council is the operation and development of upper secondary education.
Municipality	The municipalities are a fundamental part of the infrastructure of our welfare state and they have a wide ranging responsibility for public welfare services. What lies behind this is the principle that tasks shall be performed as close as possible to the residents. Variations in size, both geographically and in number of residents, give the municipalities different conditions in which to exercise their role as service provider, social developer, local authority and arena for local democracy. The municipalities are responsible for primary and lower secondary school, Norwegian language training for immigrants and lower secondary education for adults.

Social Partners

The social partners play a key role in the apprentice scheme and participate in designing skill policies through various councils and hearings. The Basic Agreement LO-NHO has a chapter devoted to skills/competence development. The company shall identify employees' needs for competence, and where there are gaps between the company's current and future needs, this should be covered by appropriate training or other measures. The costs of continuing and further education in accordance with business needs are the companies' responsibility. The company and the employees both have responsibility that potential competency gaps are adequately covered. The agreement also states that it is important that the company has a system for documenting the individual's experience, training and practice related to employment.

Lower secondary school

The municipalities are responsible for primary and lower secondary schools. Primary education lasts for ten years and is divided into primary school from 1st to 7th grade and lower secondary school from 8 to 10th grade. Adults over compulsory school age, who have a need for training at this level have the right to lower secondary education. Lower secondary education for adults can be combined with Norwegian language training for adult immigrants. Training at this level for adults are often not located at a regular elementary school, but at an adult education center.

Upper secondary school

The County Councils are responsible for the upper secondary schools. Upper secondary school includes all education between lower secondary and higher education. In upper secondary education there are 12 educational programs, three general studies and nine vocational education pathways.

Local adult education centres

Local adult education centres offer primary Norwegian language training for immigrants at the municipal level. They are often providers of lower secondary education for adults and are the responsibility of municipalities.

OPUS-Training and Development Centers – Regional adult education centers

The counties own these centres and their task is primarily to safeguard the right of adults to upper secondary education. OPUS often offer both guidance and validation of prior learning.

Career Guidance Partnerships

Career Guidance Partnerships have been established in most counties in Norway. The objective is to develop cooperation and coordination between the different career guidance services in each county, as well as to enhance the quality of the services. Partnerships include regional authorities, the educational sector, the work and welfare sector, the social partners and other relevant stakeholders. Their main task is to ensure equal access to career guidance services for everybody throughout their lifetime – from young people, to adults and seniors.

Career Centres

Career Centres help to ensure access to career counseling for youth and adults in all counties. All centres are funded by counties, and NAV contribute to the funding of approximately half of the centers. Career centres are organized differently, and the services and activities they offer can vary. A common feature of the largest career centres is that they offer free career counseling for all adults in and outside the labor market and education. They also contribute to competence development of counselors in the school sector and in NAV.

Follow-up service

The follow-up service is the counties' responsibility. The service will follow up students who are not in education or work. The service applies to the year in which the person reaches 21 years of age. The purpose of the follow-up service is to ensure that all young people who are in the target group are offered training or employment. Offers which are conveyed through the follow-up service should primarily aim to lead to an university and college admissions certification, vocational qualifications or competence at a lower level in upper secondary education.

Apprenticeship training office

Several companies can cooperate in a training office to coordinate admission and training of apprentices/trainees. Each company included in the training office must be approved as a training establishment. Youth sign an apprenticeship contract with the training office, which is legally responsible for the contract.

Tertiary vocational colleges

Tertiary vocational colleges offer education that is based on an upper secondary education, but education at this level is not at college/university level. Tertiary vocational education programmes are short vocational courses. They build on prior learning or upper secondary education. It offers an alternative to college and university education, and provides education in a particular profession.

Businesses

Businesses play a major role in the skills system.

- In the apprenticeship scheme: Good contact between companies, industry associations, education authorities and pupils in advance of the student intake is essential for proper coordination. The private sector are responsible for informing about their expectations regarding the development of industries and what they expect will be the need for apprentices within different subjects.
- Learning in the workplace: The main form of skills development in business occurs in connection with the individual's work (informal learning). In addition, corporate investments in skills development, both formal and non-formal are comprehensive.

The County Vocational Training Board

The Vocational Training Board is a county agency that manages the apprenticeship scheme and the craft certificate examination and gives advice on what schooling county councils should provide. The Board works to improve the quality of vocational training and promote the needs and views from working life towards the county. The board gives its opinion when companies are to be approved as training firm and also when a firm's approval is revoked.

Adult learning associations and distance learning

Adult education associations are umbrella organizations for voluntary non-profit organizations which offer training in leisure-oriented topics or vocational skills mainly to adults, but without being restricted to a permanent syllabus or a final examination. Typical examples are courses in singing and musical skills or training for elected representatives of trade unions and other organisations. Adult education associations may also provide education and training leading to formal certifications that are supplementary or alternative to education provided by the public education system. Distance learning enterprises, like the adult education associations, are required to operate on a non-profit basis for the public good and to have nation-wide coverage. Distance learning institutions include organisations and foundations as well as industry sector colleges (e.g. the College of Industry).

National Council for Tertiary Vocational Education

The National Council for Tertiary Vocational Education is an advisory body appointed by the Ministry of Education and Research. Vox is the secretariat for the council. The council consists of representatives from the vocational college sector, employers, employees and students. They shall ensure that the different views of the Council are known in the ministry.

Business Gardens / Knowledge Parks, science and research parks

Business Gardens bring businesses together into a network for establishment and growth. The goal is to contribute to the establishment of new knowledge-based businesses.

The parks provide the network, the facilities and the advice needed for companies to grow, develop and commercialise good business ideas.

Regional Development Partnerships

The County Council appoints regional development partnerships and plays a leading role. The purpose of the regional partnership is to bring together different actors - politicians, government agencies, user groups and voluntary groups - to discuss goals and strategic guidelines for taking action in situations where a regional player is unable to reach the agreed objectives alone. The partnership must be based on the specific needs of citizens and businesses in each region. Specifically, these partnerships can be relevant in the development of regional development programmes.

Regional Study Centers

The main target groups of these centres are adults. Their services are often related to higher education, but also a significant activity is aimed at the upper secondary level. Study centres are drivers for skills development and they inform the public about educational opportunities and programmes. They identify needs for skills in the region, especially in business and then develop relevant offers regionally. The study centres also establish meeting places and arenas for learning. The centres are often wholly or partly owned by the municipalities and county authorities also own shares in some centres.

State Educational Loan Fund

The State Educational Loan Fund manages the education support scheme in Norway. They can provide support for students taking approved educational programmes both in Norway and abroad. As the administrative body for the state's plan for education financing the Norwegian State Educational Loan Fund has a major role to play for students and authorities.

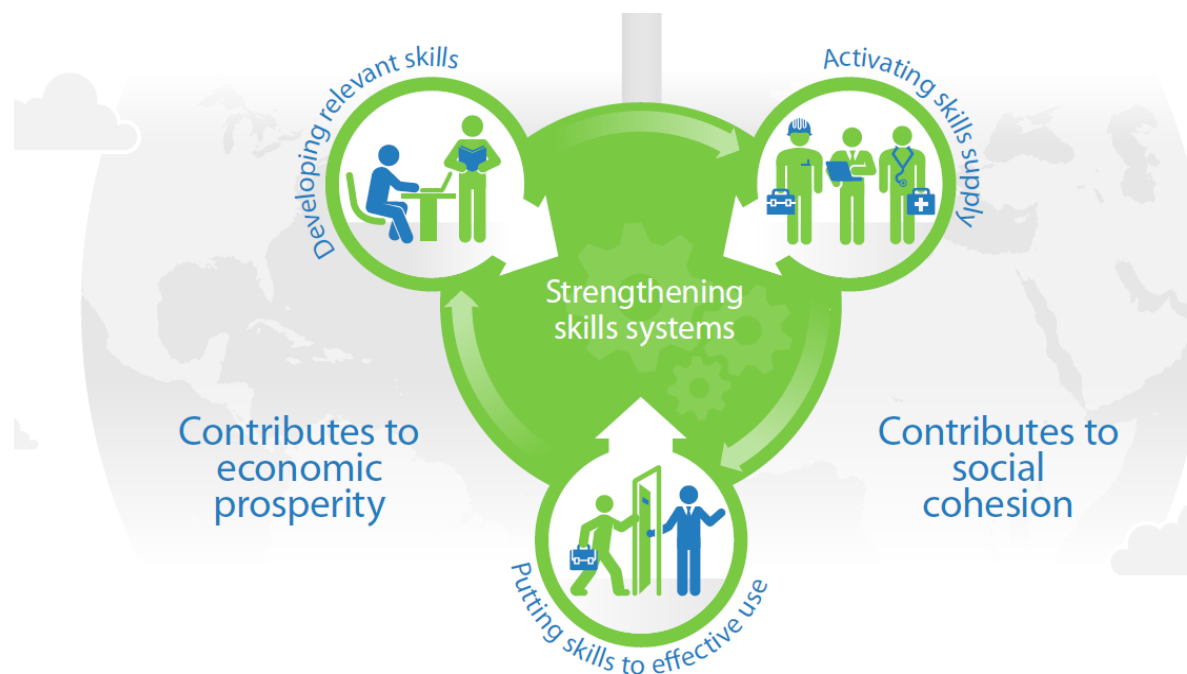


OECD Skills Strategy

Building an effective skills strategy for Norway

Diagnostic Workshop Highlights

23/24 May 2013 - Oslo



BACKGROUND

What is the OECD Skills Strategy?

The OECD Skills Strategy provides a framework for countries to analyse their skills systems and to apply a whole-of-government approach to find better ways to develop, activate and use skills to boost employment and growth while promoting social inclusion.

What is the goal of this project?

Building an effective Skills Strategy for Norway is a joint project between the OECD and the Norwegian government the main goal of which is to provide a strategic assessment of the national skills system in Norway. The results will help build an effective skills system able to meet Norway's current and future skill needs through harnessing the potential of the whole society and improving the match between supply and demand for skills. The project is designed to be cross-sectoral, involving a wide range of ministries and benefiting from the engagement of a range of relevant stakeholders – including employers, trade unions and civil society organisations.

Why was the Diagnostic Workshop held?

Norway is the first country to undertake the full project cycle of the OECD Skills Strategy. This Diagnostic Workshop represented the second phase of the project building upon the Scoping Workshop that took place in January 2013. The Diagnostic Workshop identified the strengths and challenges facing the Norwegian skills system including the challenges facing vulnerable groups in the development, activation and use of their skills. The workshop involved structured small group discussions and a series of exercises, the results of which have helped to inform the focus of the project. This workshop report summarizes the results of exercises of the workshop and should not be construed as representing the views of the OECD.

Who participated in the Diagnostic Workshop?

The workshop was conducted on 23/24 May 2013 with over fifty participants from 6 Norwegian ministries and a range of stakeholders (see last page).

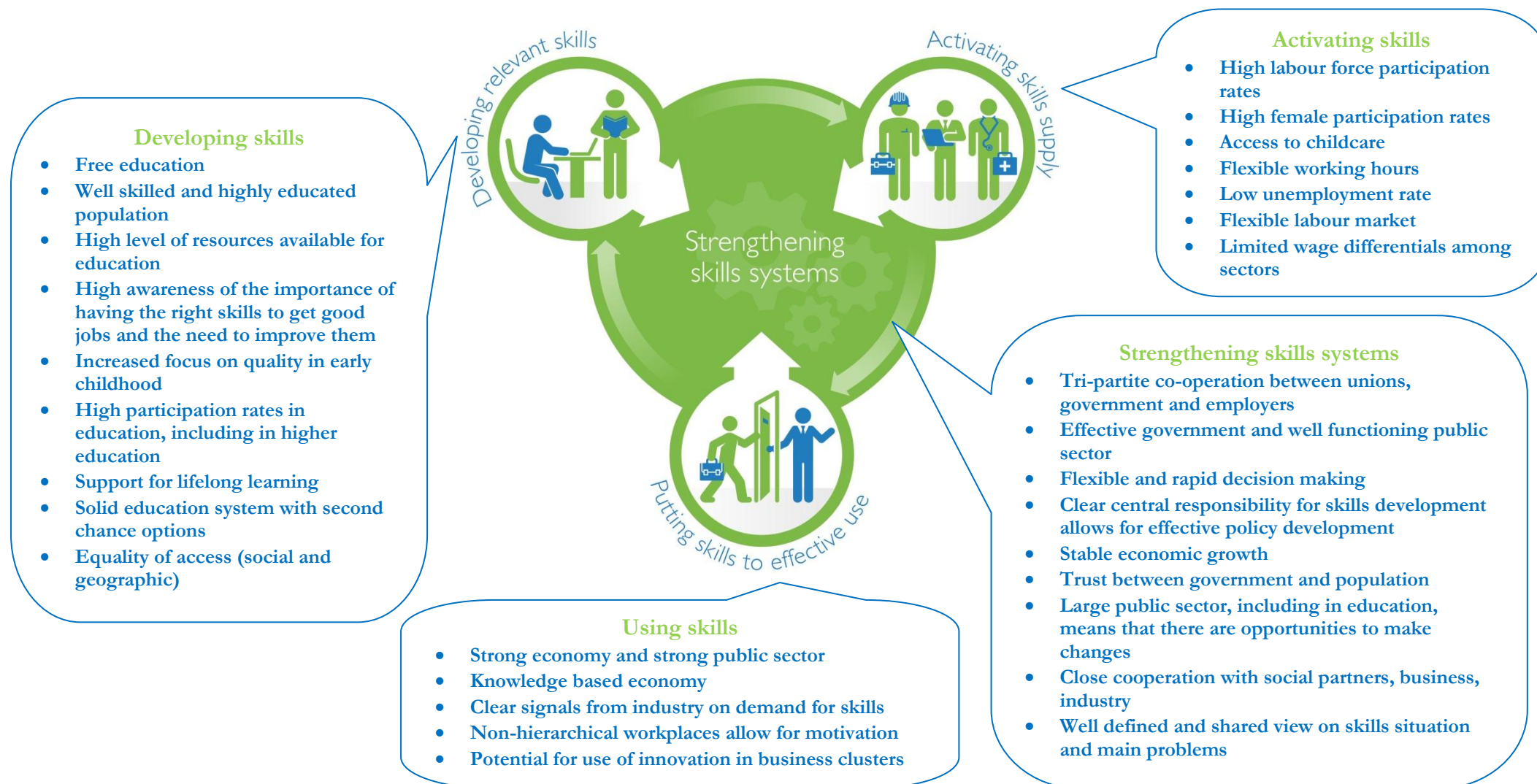
What happens next?

The national diagnostic workshop will be followed by two regional diagnostic workshops, the first of which will be held on 17 September 2013 in Drammen. Following this the prioritization phase will begin with an online survey instrument which will enable a wider cross-section of stakeholders to engage with the issues identified in the national and regional diagnostic workshops.



STRENGTHS

What are Norway's most important strengths (or assets) in developing more effective skills policies?



CHALLENGES

What are the biggest challenges that Norway faces in seeking better skills outcomes?

Developing skills

- Many youth and adults without upper secondary school education
- High drop out rates from upper secondary
- Low motivation among students
- Lack of skills in science and technology
- Educational choices are not matched with labour market needs
- Generous funding increases the use of tertiary education for sorting purposes rather than for gaining useful skills
- Quality of basic education
- Lack of system to evaluate quality
- Education field is highly politicised with compromise solutions involving everybody (trade unions, business) leading to suboptimal outcomes
- Education policy pays little attention to future skills demands
- Intergenerational transfer of disadvantage
- Difficulties in recruiting adequately qualified teachers
- Low unemployment levels undermines motivation for employers and employees to focus on skills development



Activating skills

- Vulnerable groups get trapped in the benefit system
- Many people on disability pensions
- Too many NEETs and rate is increasing
- Too many low qualified people outside the labour market
- Women in part-time work
- Immigrants lack knowledge of Norwegian language

Using skills

- Limited flexibility in the workforce
- Skills mismatch
- Limited rewards for better skills of the individual
- Poorly functioning immigration system for high-skilled workers
- SMEs lack tradition of seeking workers with formal education
- As new forms of employment, entrepreneurship increase, traditional employee-employer relationships lose their role
- Ageing will reduce labour available for productive sectors
- Chronic shortages of certain types of (high skilled) labour may dissuade employers from entering value-added sectors
- Low skilled people struggle to find a job
- Concentration of workplaces requiring HE in the bigger cities

Strengthening skills systems

- Strong sectoral government ministries have conflicting goals, undermining policy coherence and limiting action
- Limited cooperation between education system and public services, business, industry
- Lack of whole-of-government approach
- Lack of coherence between the education system and the system for social benefits
- Countering current bottlenecks with longterm sector changes
- Lack of coordination among regional agencies
- Balance between regional coverage of higher education establishments and quality of institutions
- Lack of a system to forecast skills needs & disseminate information

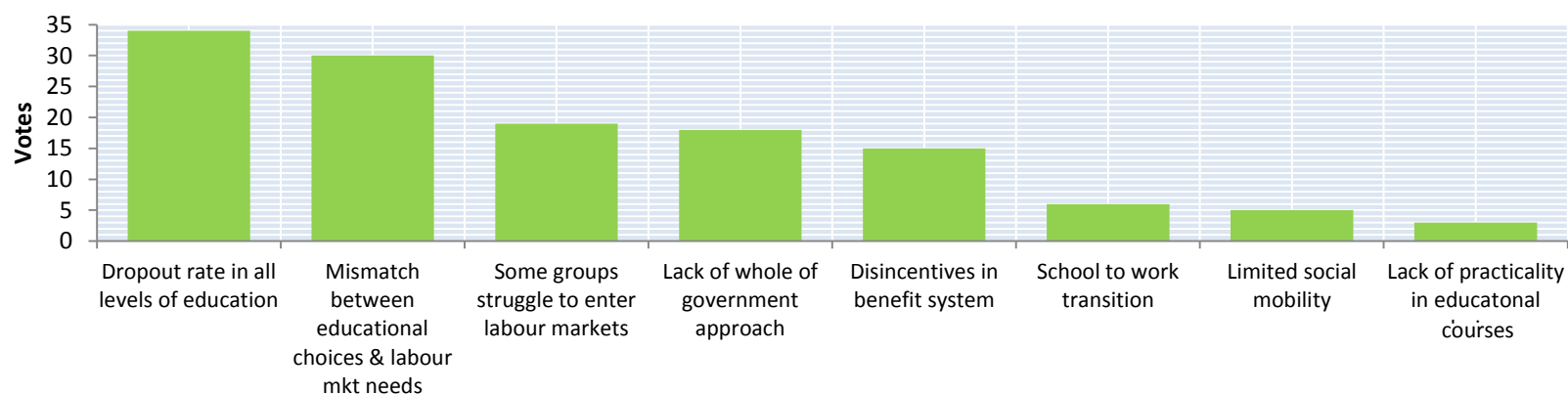
VISION OF NORWAYS SKILLS SYSTEM

Participants' Assessment of Norway's Strengths & Challenges

Figure 1: What are the most important strengths of Norway's skills system?



Figure 2: What are the most important challenges that Norway faces in strengthening the skills system?



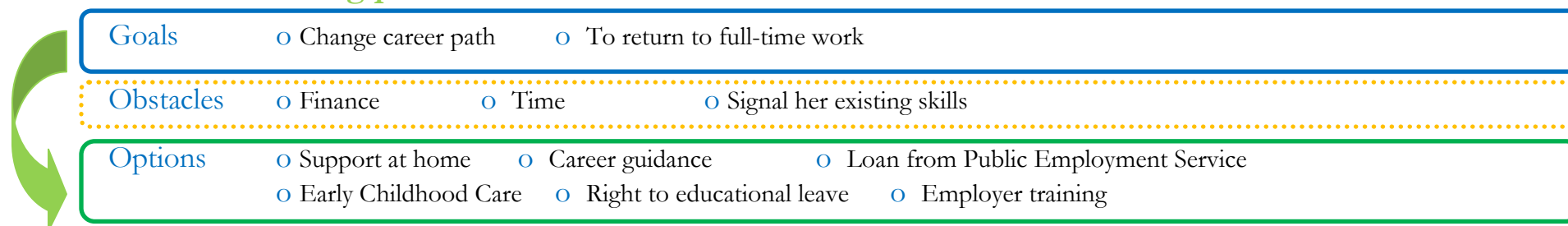
THE FUTURE OF NORWAY'S SKILLS SYSTEM

Describe three criteria you would use in 5 and in 20 years time to assess whether a “skills strategy” has enabled Norway to achieve the vision

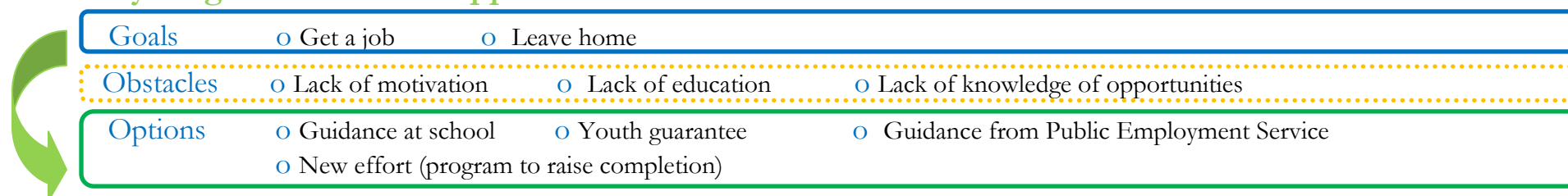


SKILLS OBSTACLE COURSE

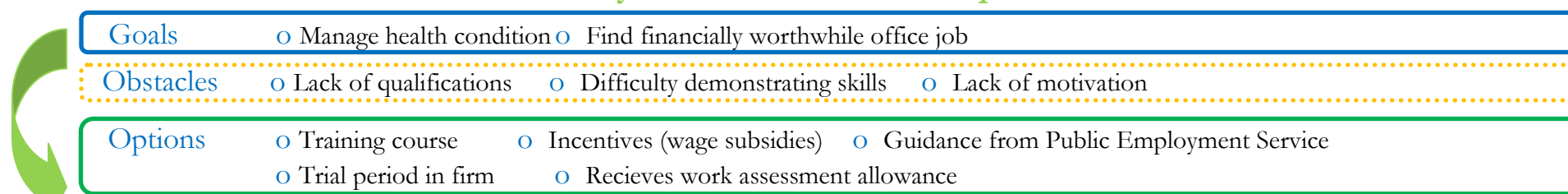
Path 1: A mother working part-time



Path 2: A young woman who dropped out of VET

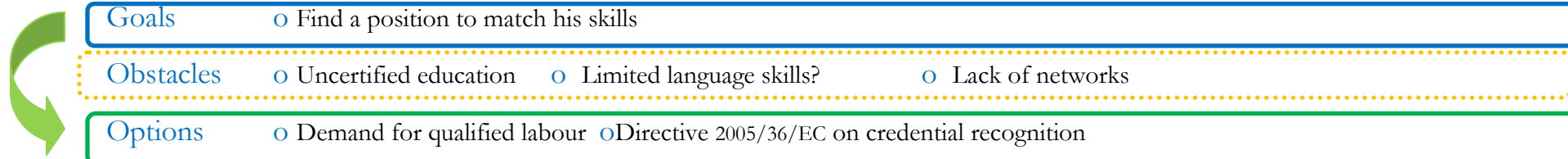


Path 3: A mid career mechanic on disability allowance due to back pain

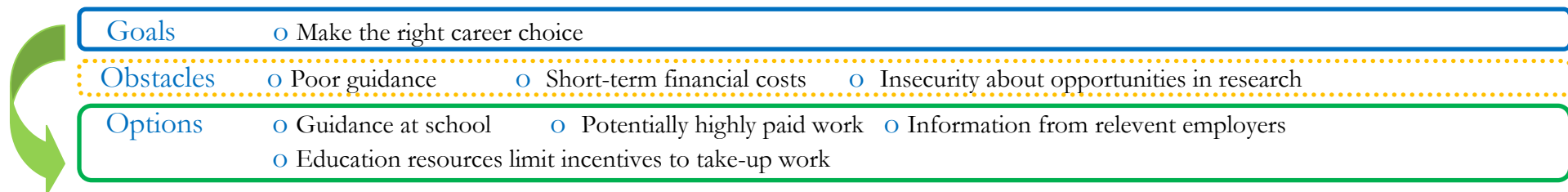


SKILLS OBSTACLE COURSE II

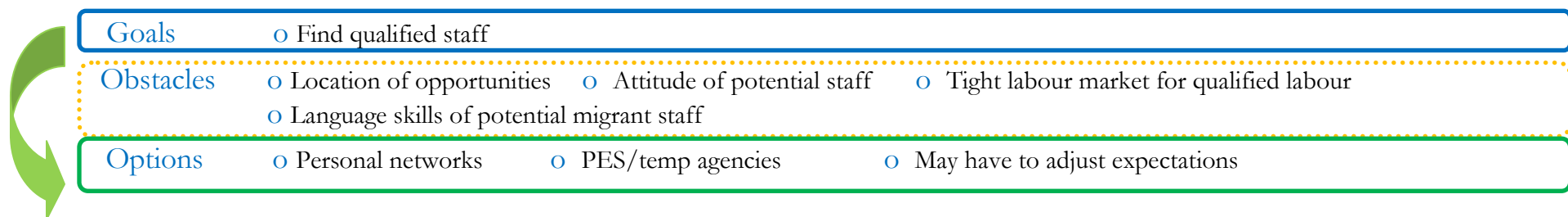
Path 4: A technically trained migrant working in an unskilled position



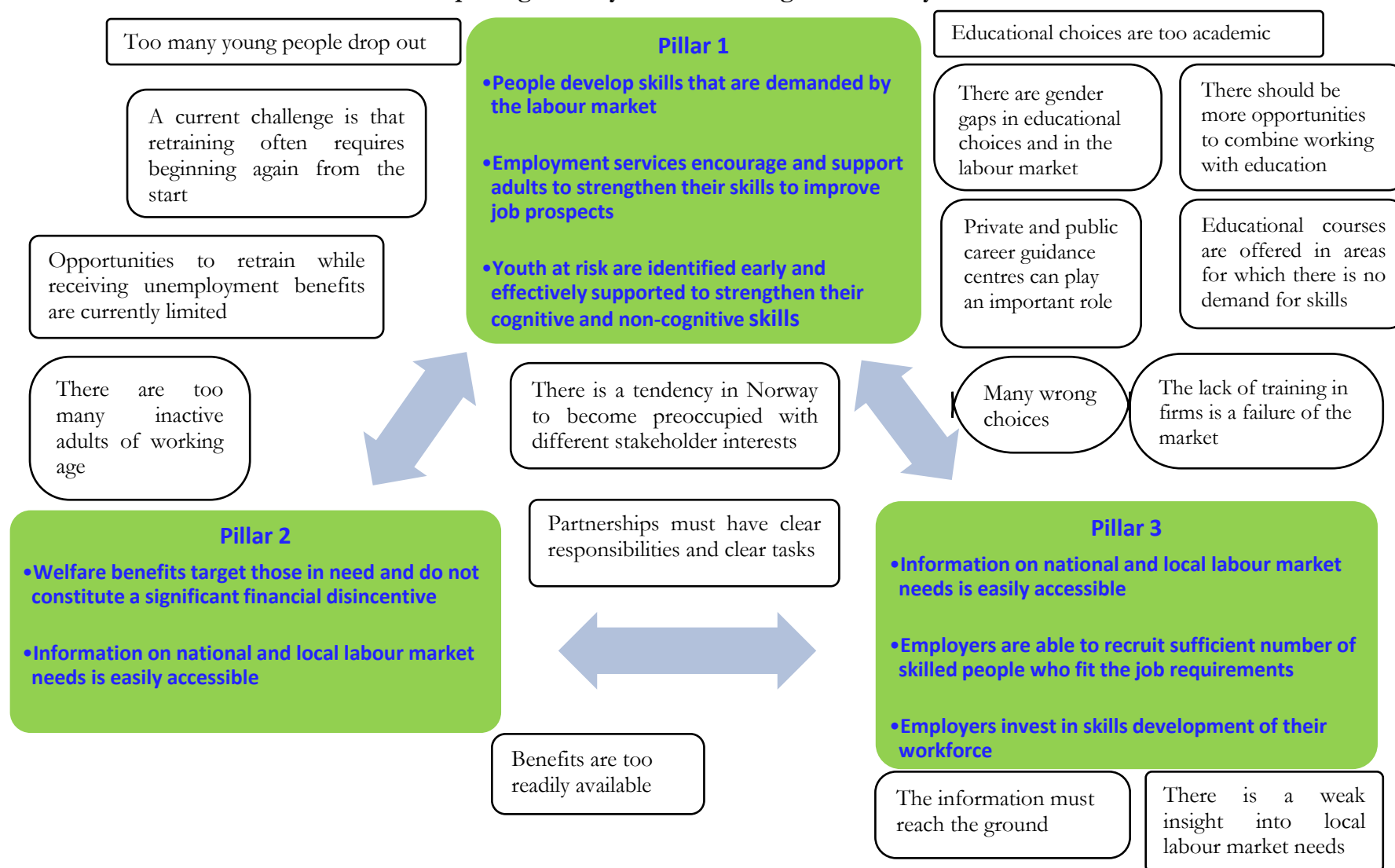
Path 5: A young graduate considering further education or direct labour market entry



Path 6: A small business owner



Exploring skills system interlinkages in Norway



EFFECTIVE SKILLS SYSTEMS I

Goal: Strong partnerships between government and non-government actors deliver better skills outcomes

Main obstacles:

- Need for body with overview and responsibility
- Non-public actors lack real influence on policy development and are limited to advisory role
- Poor co-operation between authorities and industry
- Poor co-operation between ministries
- Many individual measures are weakly co-ordinated
- Study programs are easy to establish but impossible to remove
- Long-term skill needs often lose out to wages in social partners' negotiations

Actions taken to date:

- Creation of the national council for tertiary vocational education
- Consensus-driven process through tripartite co-operation between Government, industry and social partners
- Common agreement on apprenticeships
- Regional partnerships
- Agreement on inclusive work life (IA-avtalen)
- Co-operation on enhancing the flow of information
- Competence reform
- Co-operation on career guidance

Goal: Co-ordination mechanisms across the public sector ensure policy coherence

Main obstacles:

- Lack of co-operation between welfare administration and education
- Limited co-operation between ministries
- Prevalence of thinking in silos
- Block grant financing
- Fragmentation and multiple governing bodies
- Need for clearly defined responsibilities
- Lack of common understanding of challenges
- Municipalities have responsibility for primary and lower secondary while counties responsible for upper secondary education

Actions taken to date:

- National curriculum in basic education
- Co-operation within Public Employment Service between welfare and labour
- Groups for co-operation across sectors locally
- Regional partnership for career education
- Co-ordination is better when there is cross-ministerial involvement in an early phase (as is the case in the Skills Strategy, the forecast of skills by Statistics Norway, the Strategy for Sciences, and VET)

EFFECTIVE SKILLS SYSTEMS II

Goal: Information on national and local labour market needs is easily accessible

Main obstacles

- Information is not easily accessible
- There is no systematic and cross sectoral approach
- Councillor competence is uneven
- There is more information on skill needs of the public sector than the private sector

Actions taken to date:

- Forecast models developed
- Career centres established
- Websites created with information and advice

Goal: Employers are able to recruit sufficient numbers of skilled people who fit their job requirements

Main obstacles

- Employers have narrow requirements
- Educational choices and labour market needs are not matched
- Mobility is low
- Information does not flow between work seekers and employers

Actions taken to date:

- Co-operation between school and business
- Specialised recruitment firms have been established
- Arrangements for foreign students to stay on allows for immigration of qualified labour

Goal: Welfare benefits target those in need and do not constitute a significant disincentive to work

Main obstacles:

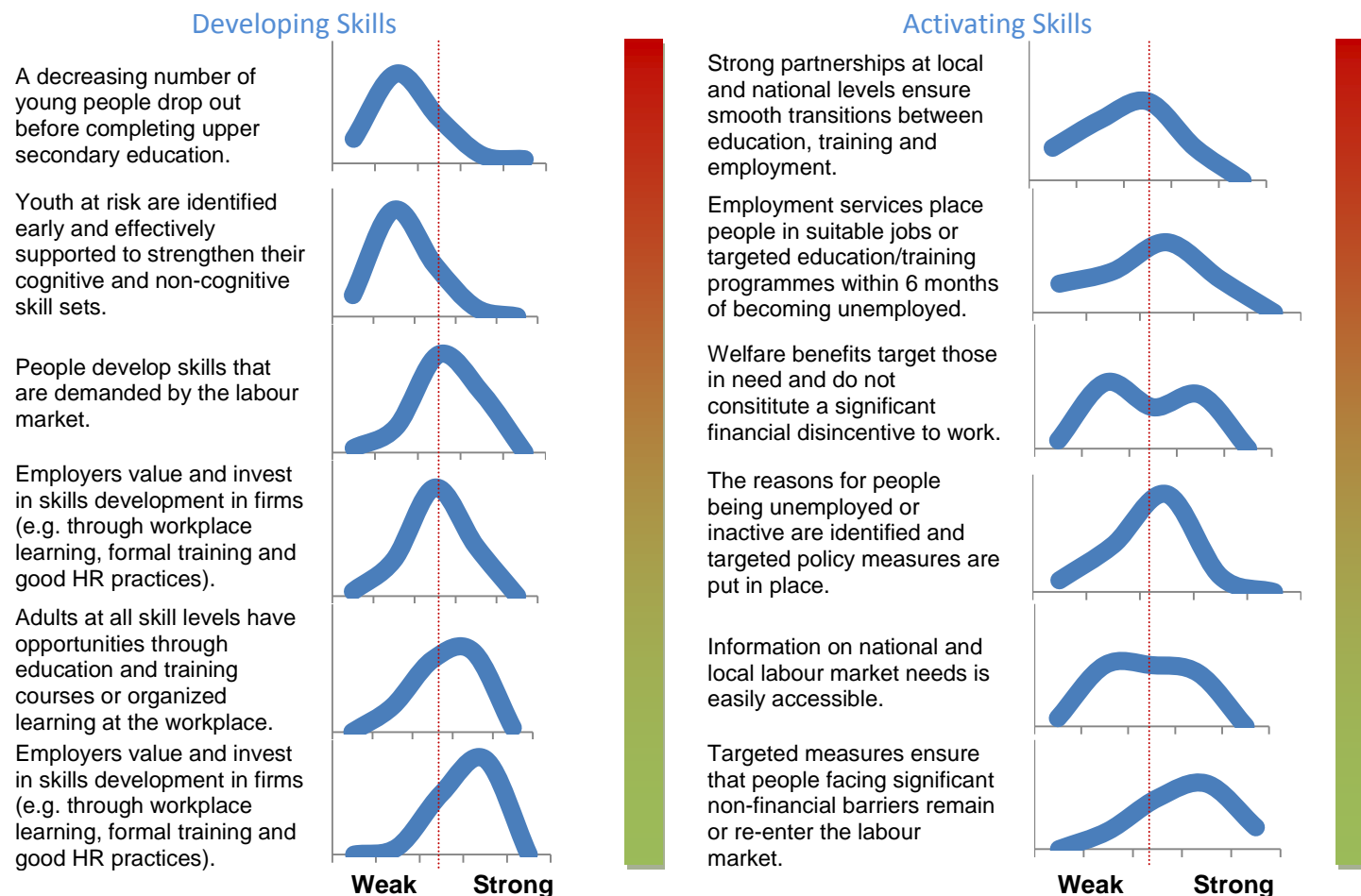
- Work does not always pay
- Difficulty transitioning from full disability to work
- Lack of flexibility

Actions taken to date:

- New disability pension offers opportunity to combine disability benefit with work
- Activity requirements

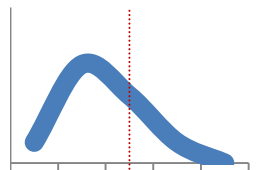
DIAGNOSING NORWAY'S SKILLS: PARTICIPANTS' PERCEPTIONS OF CRITICAL AREAS

Participants were asked to rate, from 1 (weak) to 5 (strong), Norway's performance in a number of critical areas

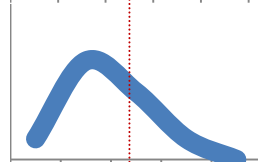


Using Skills

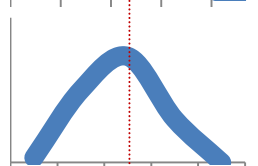
Employment services & businesses cooperate to fill vacancies in one region with skilled people from another.



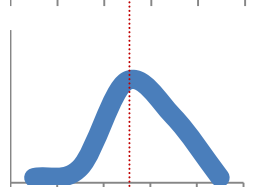
Employers are able to recruit sufficient numbers of skilled people who fit their requirements.



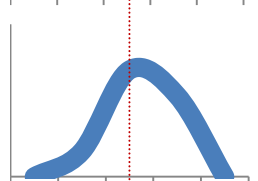
Labour market information and forecasts are easily accessible.



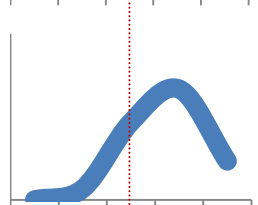
Employers' strategic business plans account for their future skills needs.



Employers invest in the skills development of their workforce in line with their medium/long term strategies.



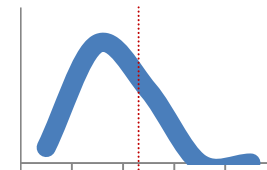
Innovative industries and businesses are growing and providing opportunities for skilled workers.



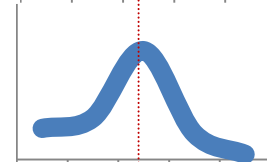
Weak Strong

Skills Systems

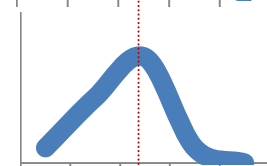
Coordination mechanisms across the public sector ensure policy coherence when designing new skills policies, legislation and regulations.



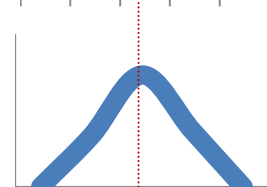
Tax treatment of skill investments & the return to skill investments do not discourage investment from individuals or enterprises.



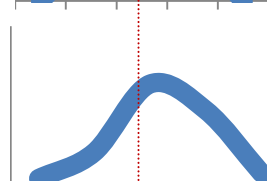
Local needs are catered for through flexibility in skills policy design and implementation.



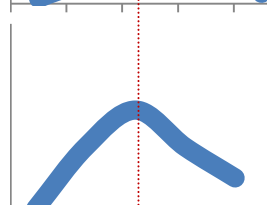
Public sector institutions gather/publish data and policy-relevant evidence about skills demand and use it when designing skills policies.



Strong partnerships between govt & non-govt actors support the design, delivery and funding of skills policies, education and training.



Public sector institutions have the resources to design future skills policies, legislation and regulations (including expertise, forecasting, financial and human resources).



Weak Strong

TO FIND OUT MORE

OECD Skills Strategy

OECD Survey of Adult Skills

by the OECD Programme for the International Assessment of Adult Skills (PIAAC)

OECD powerpoint presentations on skills

<http://skills.oecd.org>

www.oecd.org/piaac

<http://www.slideshare.net/OECD/EDU/tag/skills>

Diagnostic Workshop Participants (23-24 May 2013) :

Governmental:

- Ministry of Education & Research ○ The Directorate of Labour
- Ministry of Finance ○ The Directorate of Education
- Ministry of Trade & Industry ○ The Directorate of Health
- Ministry of Labour
- Ministry of Local Government & Regional Development
- Ministry of Children, Equality & Social Inclusion
- The Sami Parliament
- Innovation Norway
- SSB Statistics Norway
- The Norwegian Labour and Welfare Administration (NAV-kontor)
- Norwegian Agency for Lifelong Learning (VOX)
- Equality and Anti-discrimination ombud

Private Companies:

- DNV ○ NODE AS
- Nortura ○ Adecco
- Manpower ○ DNB

Experts and stakeholders:

- Employer organizations
 - The Confederation of Norwegian Enterprise (NHO)
 - The Employers' Association Spekter
 - The Enterprise Federation of Norway, Virke
 - KS
- Trade Union
 - The Federation of Norwegian Professional Associations (Akademikerne)
 - The Norwegian Confederation of Trade Unions (LO)
 - The Confederation of Vocational Unions (YS)
 - Unio
- Other stakeholders
 - The Norwegian Association for Adult Learning (VOFO)
 - National council for tertiary vocational education (Fagskolerådet)
 - The Norwegian Association of Higher Education Institutions (UHR)
 - The National Union of Students in Norway
 - South-Eastern Norway Regional Health Authority

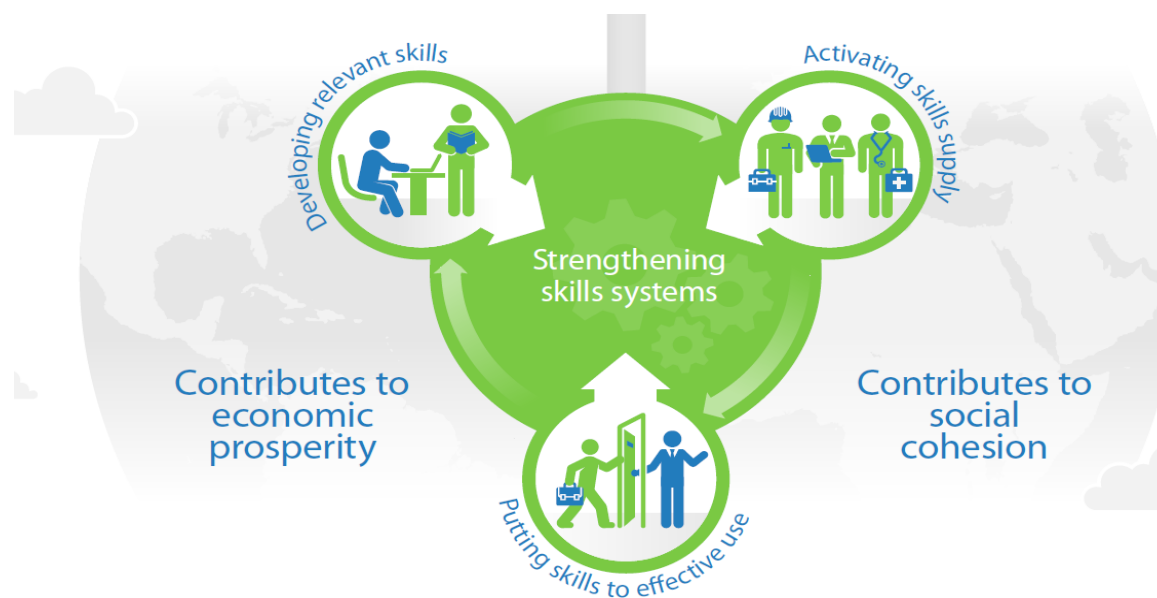


OECD Skills Strategy

Building an effective skills strategy for Norway

Regional Diagnostic Workshop Highlights

17 September 2013 – Drammen, Buskerud County



BACKGROUND

What is the OECD Skills Strategy?

The OECD Skills Strategy provides a framework for countries to analyse their skills systems and to apply a whole-of-government approach to find better ways to develop, activate and use skills to boost employment and growth while promoting social inclusion.

What is the goal of this project?

Building an effective Skills Strategy for Norway is a joint project between the OECD and the Norwegian government the main goal of which is to provide a strategic assessment of the national skills system in Norway. The results will help build an effective skills system able to meet Norway's current and future skill needs through harnessing the potential of the whole society and improving the match between supply and demand for skills. The project is designed to be cross-sectoral, involving a wide range of ministries and benefiting from the engagement of a range of relevant stakeholders – including employers, trade unions and civil society organisations.

Why was the Diagnostic Workshop held?

Norway is the first country to undertake the full project cycle of the OECD Skills Strategy. This Diagnostic Workshop is part of the second phase of the project building upon the Scoping Workshop that took place in January 2013. Diagnostic workshops identify the strengths and challenges facing the Norwegian skills system including the challenges facing vulnerable groups in the development, activation and use of their skills. The workshop involved structured small group discussions and a series of exercises, the results of which have helped to inform the focus of the project. This workshop report summarizes the results of exercises of the workshop and should not be construed as representing the views of the OECD.

Who participated in the Diagnostic Workshop?

This workshop was conducted on 17 September 2013 with over fifty participants from 6 Norwegian ministries and a range of stakeholders (see page 188).

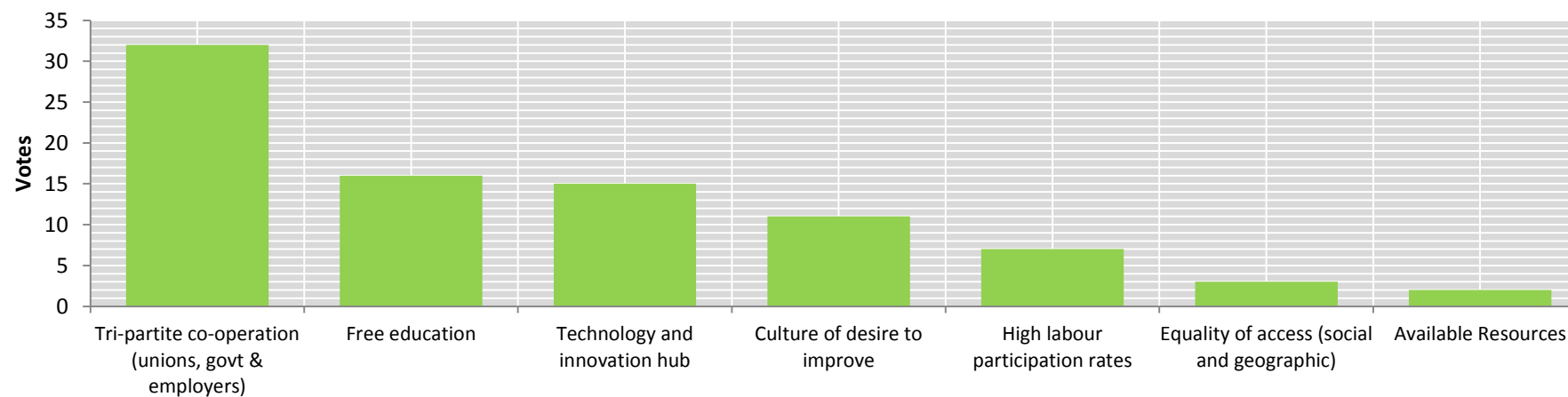
What happens next?

The regional diagnostic workshops will be followed by the launch of an online survey instrument which will enable a wider cross-section of stakeholders to engage with the issues identified in the national and regional diagnostic workshops. Building on this a prioritisation workshop, to which regional participants will be invited, will be held in Oslo in October. Following this the action plan phase will begin in early 2014.

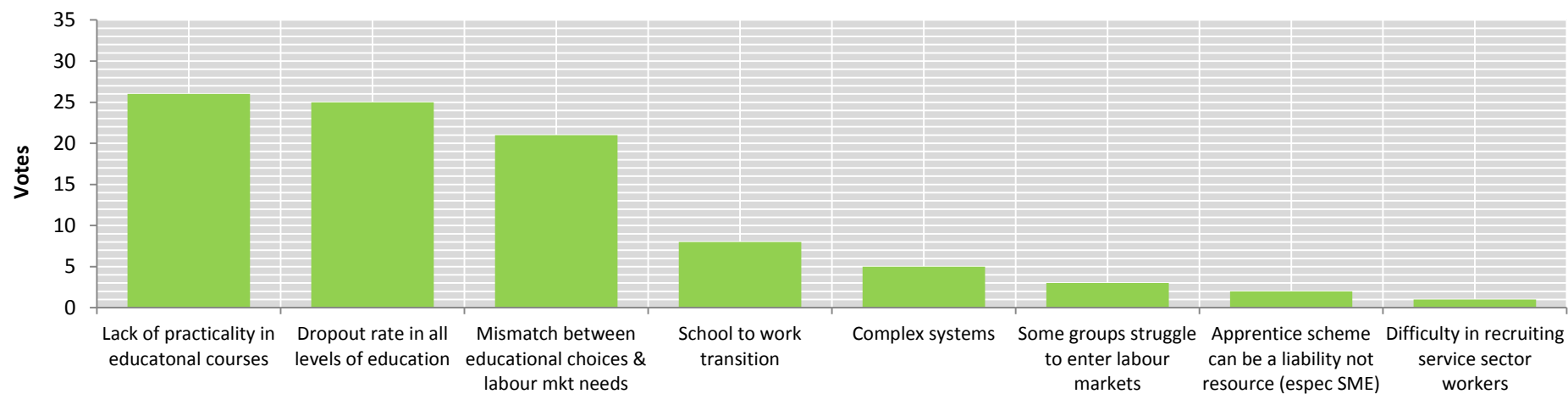


PARTICIPANTS' ASSESSMENT OF NORWAY'S STRENGTHS & CHALLENGES

What are the most important strengths of Norway's skills system?



What are the most important challenges that Norway faces in strengthening the skills system?



THE FUTURE IN BUSKERUD'S HEADLINES

5 years from today

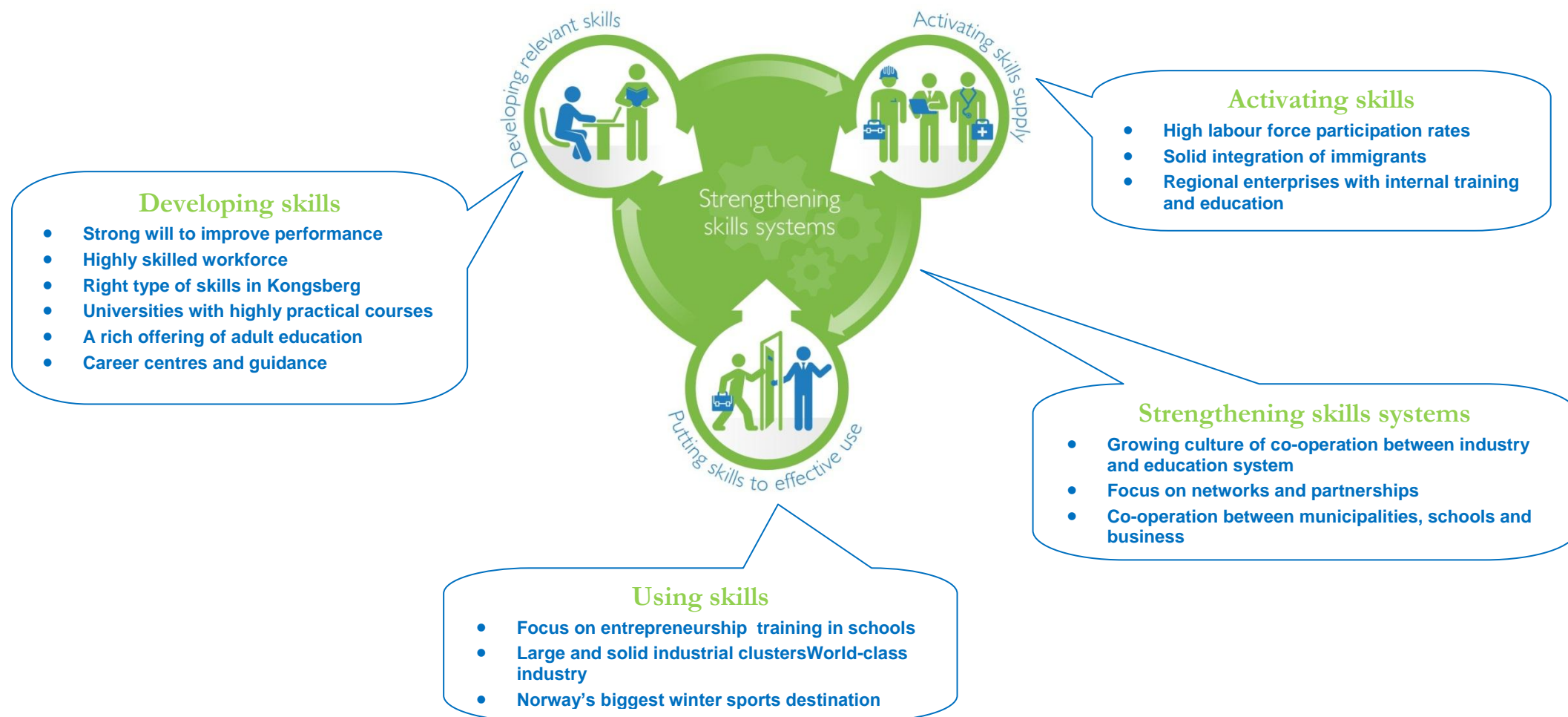
- Buskerud leads Nordic countries in project-based learning
- Increase in apprenticeships both in private and public enterprises
- Drop-out from upper-secondary halved in just 5 years!
- Strong talent development results from
- Improved information to inform career choices
- Buskerud leads the country in labour market integration

20 years from today

- Drop-out falls from 30% to 3%: Business celebrates 97% completion rate in upper-secondary
- Buskerud's world class education system serves a world leading industry
- Buskerud named 'County of Innovation'
- Strong entrepreneurship and human capital in Buskerud
- Buskerud is a global leader in educational achievement
- Buskerud education system a global magnet

STRENGTHS

What are Buskerud's most important strengths (or assets) in developing more effective skills policies?



CHALLENGES

What are the biggest challenges that Norway faces in seeking better skills outcomes?

Developing skills

- Insufficient student places in county universities
- Weak incentives to choose vocational training – need more flexible courses
- High number of drop-outs
- Large number of immigrant drop-outs
- Insufficient opportunities for learning on the job
- Uneven level of education
- Little use of education and training strategy for teachers
- Out dated equipment and technology used for teaching in schools
- Financing system in which finance follows student makes it difficult to offer new courses in rural areas
- Lack of skills for co-operation
- Lack of opportunities for top talents
- Weak demand for some courses
- Different municipal policies concerning pathways



Activating skills

- The skills of seniors are insufficiently exploited
- Recruitment problems in the health sector
- Apprenticeships are poorly financed and inflexible
- Immigrant skills supply inhibited by lack of language skills
- Policies for getting NEET into work are poorly co-ordinated

Using skills

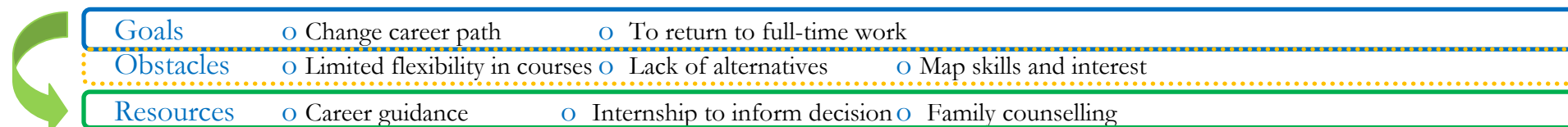
- Innovation, entrepreneurship and commercialization are insufficiently developed
- Mismatch between skills and business needs
- Limited flexibility in the workforce
- Apprentices are seen as a burden not a resource

Strengthening skills systems

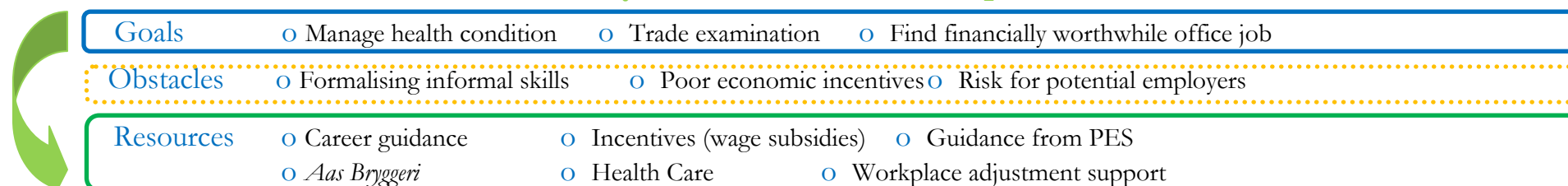
- No overarching strategy or arenas for meeting
- High degree of variety in how municipalities are organised
- Barriers separate public and private sector
- Limited cooperation between education system and public services, business, industry
- Lack of whole-of-government approach – horizontally (between municipalities) and vertically (different levels of government)
- Transitions are poorly co-ordinated
- Regulations and laws are complicated and not always aligned – for example relating to immigrants
- Too many points of contact
- NAV system is not adapted to those who want to return to education
- Poor cooperation across sectors within the county administration
- Fragmented responsibilities for adult education (espec minorities)

SKILLS OBSTACLE COURSE

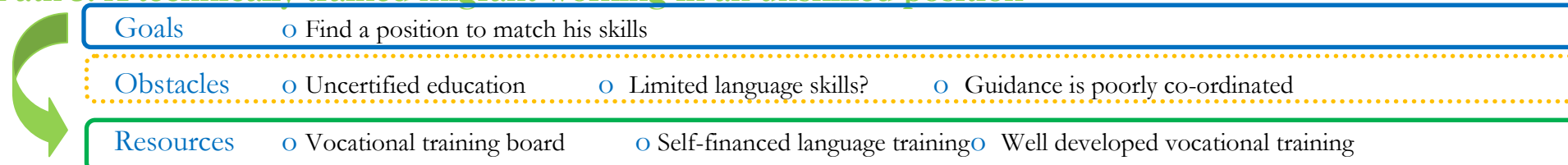
Path 1: A mother working part-time



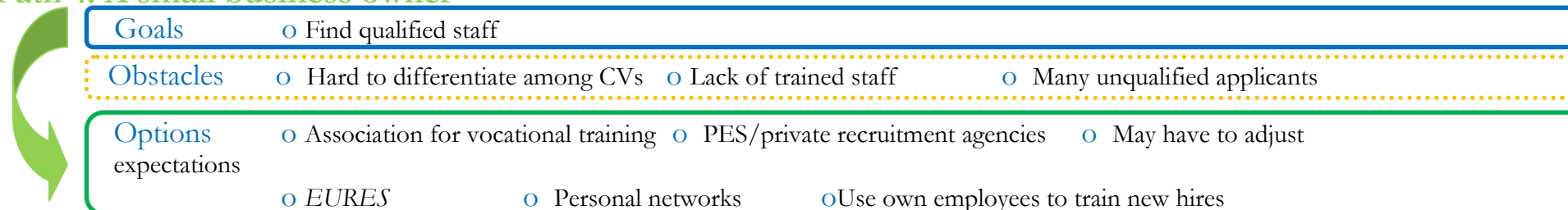
Path 2: A mid career mechanic on disability allowance due to back pain



Path 3: A technically trained migrant working in an unskilled position



Path 4: A small business owner



OBSTACLES TO IMPLEMENTATION AT THE LOCAL AND COUNTY LEVEL

For skills policies to be effective, what needs to change at the local level and county level?

Main obstacles:

- Borders between counties & municipalities hinder flexibility
- Lack of structures for co-operation
- Communities/industries are in separate clusters
- There is a lack of arena's for interaction
- Too little local adaptability of national curriculum
- Teachers lack knowledge of business and industry
- Poor foundation skills
- Incentives facing NEET's
- Poor co-operation between school and business
- Many individual measures are weakly co-ordinated
- Transport from rural areas
- Lack of entrepreneurial culture

What needs to change:

- Need for better information on other units/organisations
- Need common goals across different sectors
- Need for shorter and more flexible educational pathways
- Recruit people from industry to teach
- More effort on reading, writing, numeracy and class management
- More internships
- Co-operation on career guidance
- More professional cooperation
- Better infrastructure
- Include entrepreneurship education at all levels

OBSTACLES TO IMPLEMENTATION AT THE NATIONAL LEVEL

For skills policies to be effective, what needs to change at the local level and county level?

Main obstacles:

- Too many drop-outs stay inactive
- The process for developing the national curriculum is too slow and doesn't capture local needs
- Clusters in industry are too dispersed and co-operate too little
- Industry gives too little input and feedback into what needs to change in the education system
- Admission requirements for HE are too stringent
- County borders create problems (for example for those who need to cross borders for apprenticeship places)
- Problems of balance between urban & rural areas
- Mismatch between individual desires and labour market needs
- Many individual measures are weakly co-ordinated
- Transport from rural areas
- Lack of entrepreneurial culture

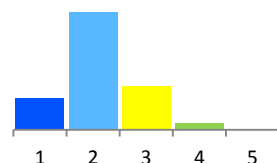
What needs to change:

- Guidance and follow up of students at risk needs to improve
- Need for better information on other unites/organisations
- Increased financing of apprenticeships
- State financing of commercializing products and innovations
- Increased budgets for research and innovation
- Increased financing of teachers from business and industry
- Closer co-operation between ministries
- Resources for entrepreneurship education
- A guaranteed apprenticeship place for those who complete first two years of upper-secondary
- Extend the right to upper secondary education for those adults under 25
- Need for shorter and more flexible educational pathways
- Recruit people from industry to teach
- More effort on reading, writing, numeracy and class management
- More internships
- Co-operation on career guidance
- More professional cooperation
- Better infrastructure
- Include entrepreneurship education both locally and nationally at all levels

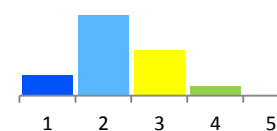
DIAGNOSING NORWAY'S SKILLS: PARTICIPANTS' PERCEPTIONS OF CRITICAL AREAS

Developing Skills

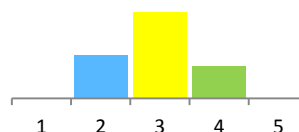
A decreasing number of young people drop out before completing upper secondary education.



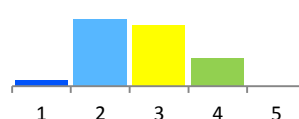
Youth at risk are identified early and effectively supported to strengthen their cognitive and non-cognitive skill sets.



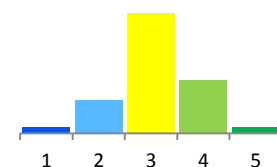
People develop skills that are demanded by the labour market.



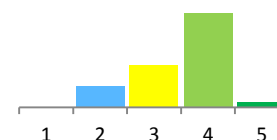
Employment services encourage and support adults to strengthen their skills to improve job prospects.



Adults at all skill levels have opportunities through education and training courses or organized learning at the workplace.



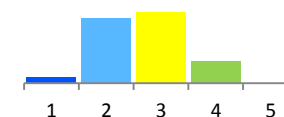
Employers value and invest in skills development in firms (e.g. through workplace learning, formal training and good HR practices).



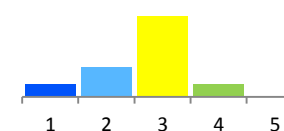
Weak Strong

Activating Skills

Strong partnerships at local and national levels ensure smooth transitions between education, training and employment.



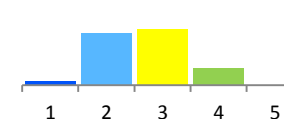
Employment services place people in suitable jobs or targeted education/training programmes within 6 months of becoming unemployed.



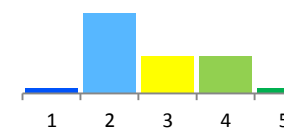
Welfare benefits target those in need and do not constitute a significant financial disincentive to work.



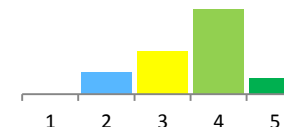
The reasons for people being unemployed or inactive are identified and targeted policy measures are put in place.



Information on national and local labour market needs is easily accessible.



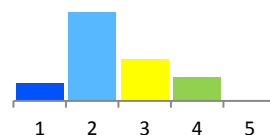
Targeted measures ensure that people facing significant non-financial barriers remain or re-enter the labour market.



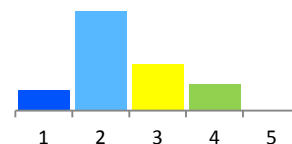
Weak Strong

Using Skills

Employment services & businesses cooperate to fill vacancies in one region with skilled people from another.



Employers are able to recruit sufficient numbers of skilled people who fit their requirements.



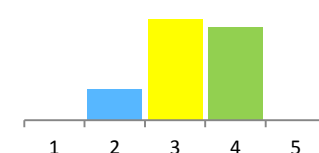
Labour market information and forecasts are easily accessible.



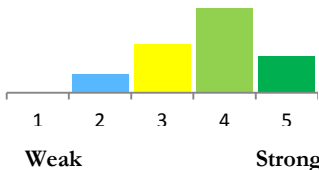
Employers' strategic business plans account for their future skills needs.



Employers invest in the skills development of their workforce in line with their medium/long term strategies.



Innovative industries and businesses are growing and providing opportunities for skilled workers.

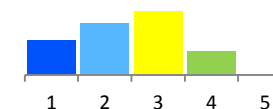


Weak

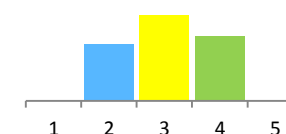
Strong

Skills Systems

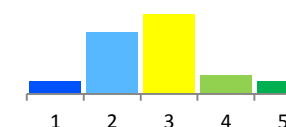
Coordination mechanisms across the public sector ensure policy coherence when designing new skills policies, legislation and regulations.



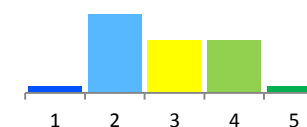
Tax treatment of skill investments & the return to skill investments do not discourage investment from individuals or enterprises.



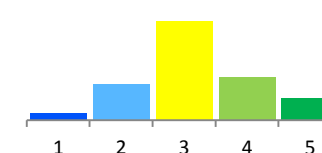
Local needs are catered for through flexibility in skills policy design and implementation.



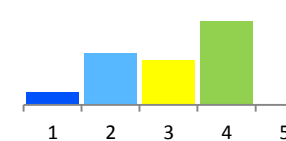
Public sector institutions gather/publish data and policy-relevant evidence about skills demand and use it when designing skills policies.



Strong partnerships between govt & non-govt actors support the design, delivery and funding of skills policies, education and training



Public sector institutions have the resources to design future skills policies, legislation and regulations (including expertise, forecasting, financial and human resources).



Weak

Strong

TO FIND OUT MORE

OECD Skills Strategy**OECD Survey of Adult Skills *by the* OECD Programme for the International Assessment of Adult Skills (PIAAC)****OECD powerpoint presentations on skills**<http://skills.oecd.org>www.oecd.org/piaac<http://www.slideshare.net/OECD/EDU/tag/skills>*Regional Diagnostic Workshop Participants:***Governmental:**

- Ministry of Education & Research
- Ministry of Finance
- Ministry of Trade & Industry
- Ministry of Labour
- Ministry of Local Government & Regional Development
- Ministry of Education & Research
- Ministry of Finance
- Ministry of Trade & Industry
- Ministry of Labour
- Ministry of Local Government & Regional Development

Other stakeholders:

- Employer organizations
 - The Confederation of Norwegian Enterprise (NHO)
 - The Employers' Association Spekter Virke
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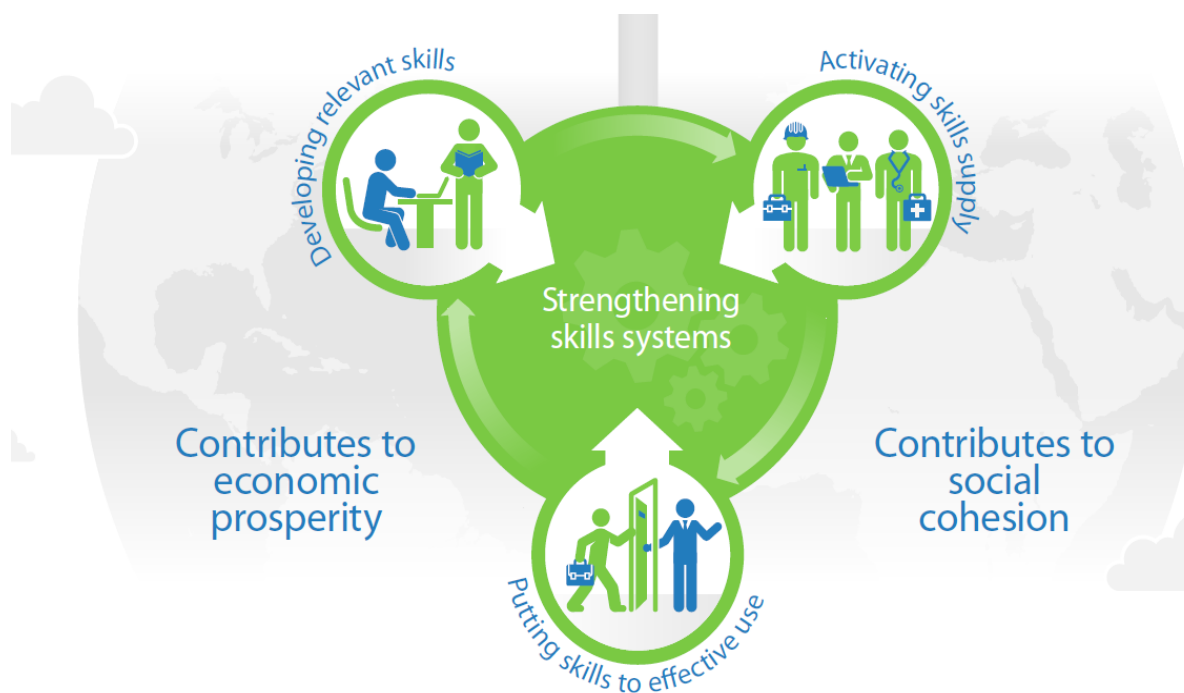


OECD Skills Strategy

Building an effective skills strategy for Norway

Diagnostic Workshop Highlights

1 October 2013 – Mo i Rana, Nordland County



BACKGROUND

What is the OECD Skills Strategy?

The OECD Skills Strategy provides a framework for countries to analyse their skills systems and to apply a whole-of-government approach to find better ways to develop, activate and use skills to boost employment and growth while promoting social inclusion.

What is the goal of this project?

Building an effective Skills Strategy for Norway is a joint project between the OECD and the Norwegian government the main goal of which is to provide a strategic assessment of the national skills system in Norway. The results will help build an effective skills system able to meet Norway's current and future skill needs through harnessing the potential of the whole society and improving the match between supply and demand for skills. The project is designed to be cross-sectoral, involving a wide range of ministries and benefiting from the engagement of a range of relevant stakeholders – including employers, trade unions and civil society organisations.

Why were the Diagnostic Workshops held?

Norway is the first country to undertake the full project cycle of the OECD Skills Strategy. This Diagnostic Workshop is part of the second phase of the project building upon the Scoping Workshop that took place in January 2013. Diagnostic workshops identify the strengths and challenges facing the Norwegian skills system including the challenges facing vulnerable groups in the development, activation and use of their skills. The workshop involved structured small group discussions and a series of exercises, the results of which have helped to inform the focus of the project. This workshop report summarizes the results of exercises of the workshop and should not be construed as representing the views of the OECD.

Who participated in the Diagnostic Workshop?

The workshop was conducted on 1st October 2013 with participants from across Norwegian ministries and a range of stakeholders (see last page).

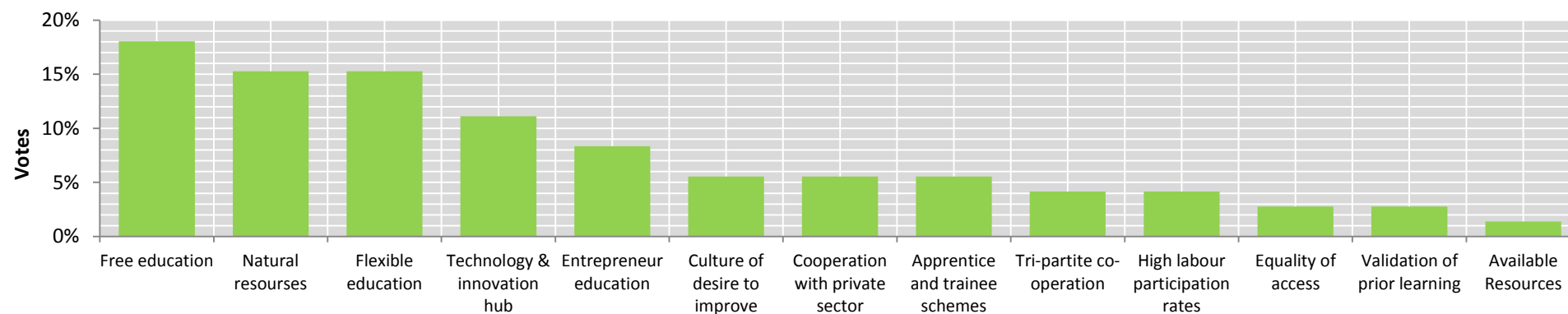
What happens next?

The regional diagnostic workshops will be followed by the launch of an online survey instrument which will enable a wider cross-section of stakeholders to engage with the issues identified in the national and regional diagnostic workshops. Building on this a prioritisation workshop, to which regional participants will be invited, will be held in Oslo in October. Following this the action plan phase will begin in early 2014.

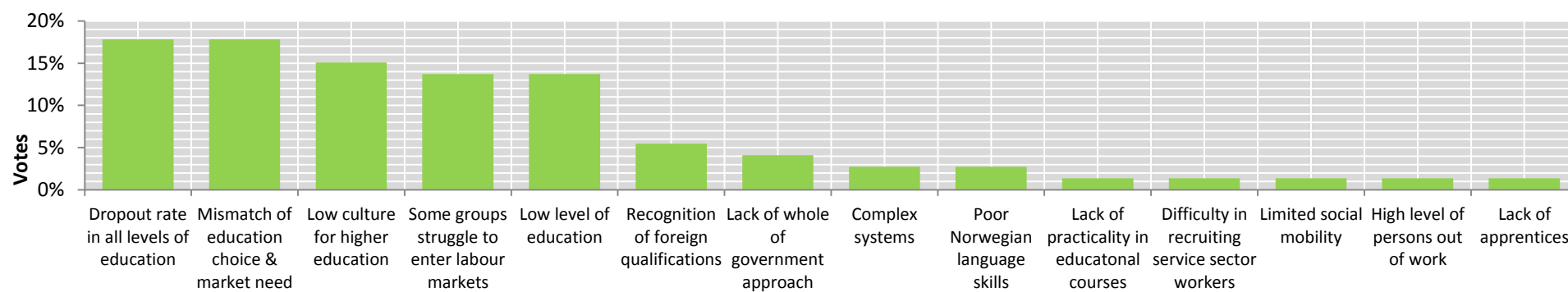


PARTICIPANTS' ASSESSMENT OF NORWAY'S STRENGTHS & CHALLENGES

What are the most important strengths of Norway's skills system?



What are the most important challenges that Norway faces in strengthening the skills system?



THE FUTURE IN NORDLAND'S HEADLINES

5 years from today

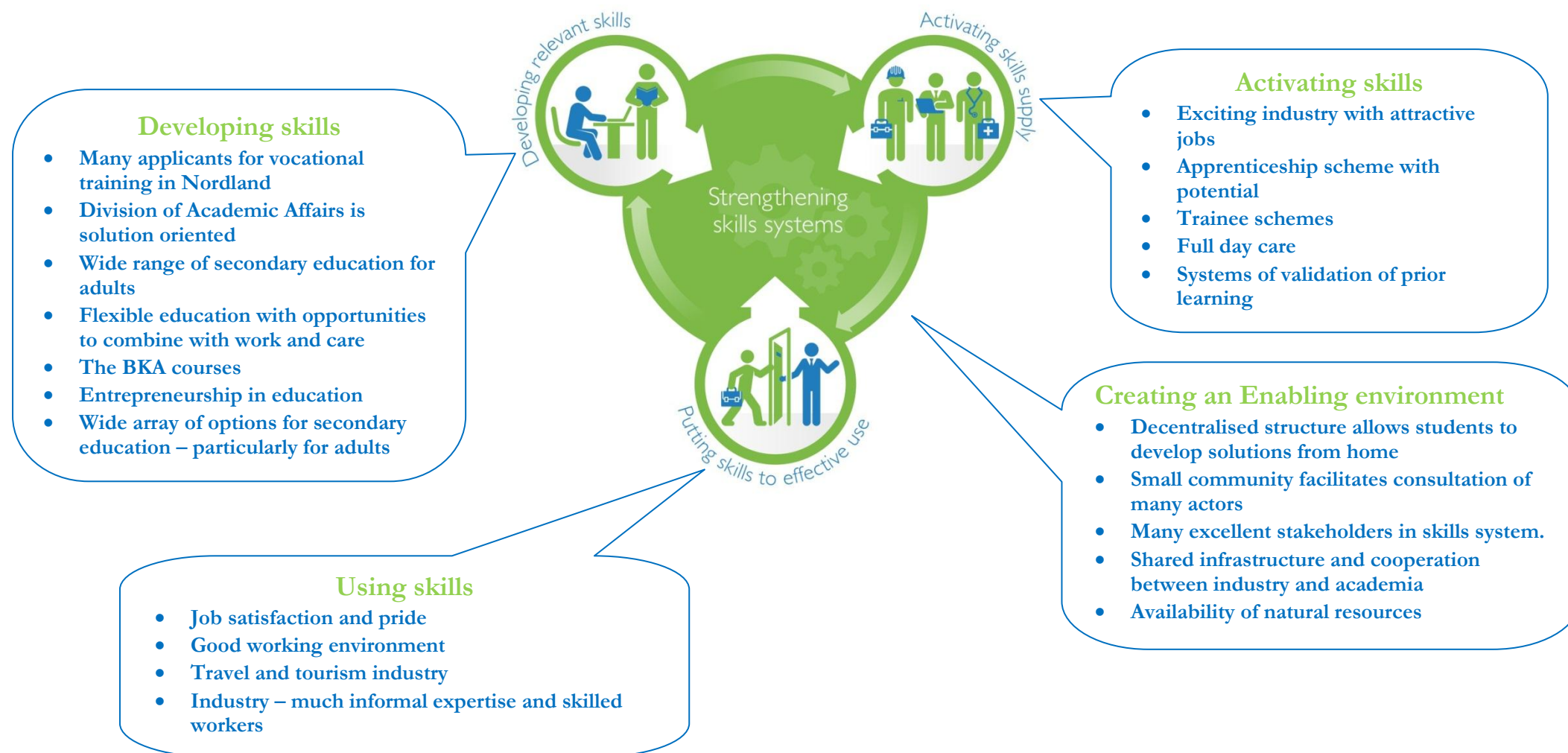
- Dropout rate in Nordland schools experience the greatest drop across Norway
- Nordland the most commercial region in the country! Investment in skills, innovation and infrastructure gives results
Helgeland agree on common knowledge strategy
- 90% employment in Nordland
- 80% have completed secondary school in Nordland
- Engineering campus ensures expertise for Nordland's work place

20 years from today

- Helgeland is Norway's technology hub
- Disabled unemployment reduces by 50%
- Sick leave in Nordland falls under 3.5%
- Nordland becomes Europe's number 1 knowledge region
- Nursing homes close as adults get healthier due to Vega vaccine
- Stor-Rana leads innovation in Norway

STRENGTHS

What are Nordland's most important strengths (or assets) in developing more effective skills policies?



CHALLENGES

What are the biggest challenges that Norway faces in seeking better skills outcomes?

Developing skills

- Low level of competences and skills
- Low level of education
- Low completion rates in upper secondary and especially in vocational education
- Lack of relevant courses
- Poor understanding of the availability of pathways from vocational education to higher education (insufficiently marketed)
- Low flexibility in higher education
- Scarce resources in schools
- Immigrants have insufficient language skills to take advantage of upper secondary courses
- Motivation and attitudes of students are poor
- Insufficient access in research and development in companies



Activating skills

- Pathways from education to employment are insufficiently linked
- Youth are moving away
- Lack of skilled jobs
- High degree of disability
- Many people are out of work
- Lack of apprenticeships
- Gendered education and labour market
- Slow processing of assessment of foreign qualifications

Using skills

- Mismatch between education and skills needed in labour force
- Employers should actively show students the importance of what they have learnt
- Weak culture of training and education
- Poor awareness in the workforce of the importance of skills
- Poor use of foreign expertise
- The labour market lacks access to sufficient skilled workers
- Little planning in skills development and use in companies

Creating an Enabling environment

- Demography and geography
- Weak tradition of partnership between school and industry
- Poor marketing of region
- Poor infrastructure
- State/municipality structure weakens competitiveness

OBSTACLES TO IMPLEMENTATION AT THE LOCAL AND COUNTY LEVEL

For skills policies to be effective, what needs to change at the local level and county level?

Main obstacles:

- Attracting young people to study in Nordland
- Creating a system linking to links employment requirements with education.
- Migrant integration – particularly language training
- Short term recruitment and human resource management decisions of employers
- Poor attitudes to education
- Insufficient flexibility in education system

What needs to change:

- Experience sharing and co-operation between education and employment
- Create an attractive learning environment for youth
- A programme for flexible learning beyond one that is project based
- A more flexible system for migrant workers to learn Norwegian
- A better human resource development and networking system
- Stronger links between academia and industry
- Culture and attitudes to education
- Encourage private sector development
- More apprenticeships
- Enable business to request research and educational courses
- Enhance co-operation between actors working in further education
- Allow receipt of disability pension while in education

OBSTACLES TO IMPLEMENTATION AT THE NATIONAL LEVEL

For skills policies to be effective, what needs to change at the national level?

Main obstacles:

- Limited knowledge of labour market needs
- Formal education inaccessible without losing benefit entitlement
- Rigid curricula
- Financing of Adult Learning
- A lack of holistic approach
- Lack of research funds
- Limited places in Helgeland Campus
- Higher education system doesn't provide incentives to facilitate courses in the workplace
- Poor co-operation between different ministries
- Limited dialogue between education and labour markets

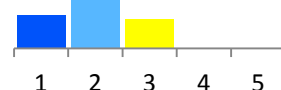
What needs to change:

- Industry oriented research
- Increased opportunities for formal education while receiving benefits
- More flexibility in curricula so programmes can be updated
- Early intervention
- Practical learning through close collaboration with industry
- National programme for flexible learning (e.g. industrial cluster)
- Rights/financing for Norwegian migrant labour
- Increase quality of education
- More resources
- Rights for internships in the public sector
- Research that contributes to private sector development
- Faster assessment of foreign qualifications in NOKUT
- Additional adapted workplaces for people with reduced working capacity

DIAGNOSING NORWAY'S SKILLS: PARTICIPANTS' PERCEPTIONS OF CRITICAL AREAS

Developing Skills

A decreasing number of young people drop out before completing upper secondary education.



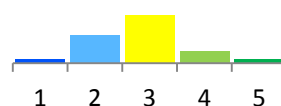
Youth at risk are identified early and effectively supported to strengthen their cognitive and non-cognitive skill sets.



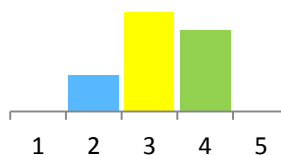
People develop skills that are demanded by the labour market.



Employment services encourage and support adults to strengthen their skills to improve job prospects.



Adults at all skill levels have opportunities through education and training courses or organized learning at the workplace.



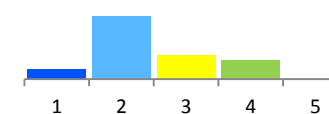
Employers value and invest in skills development in firms (e.g. through workplace learning, formal training and good HR practices).



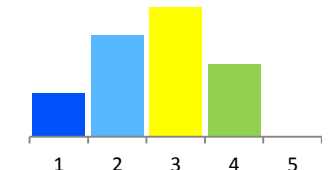
Weak Strong

Activating Skills

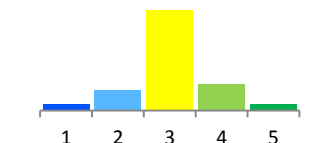
Strong partnerships at local and national levels ensure smooth transitions between education, training and employment.



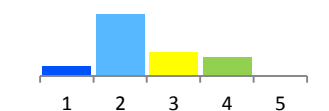
Employment services place people in suitable jobs or targeted education/training programmes within 6 months of becoming unemployed.



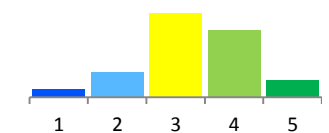
Welfare benefits target those in need and do not constitute a significant financial disincentive to work.



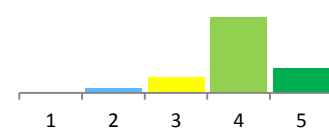
The reasons for people being unemployed or inactive are identified and targeted policy measures are put in place.



Information on national and local labour market needs is easily accessible.



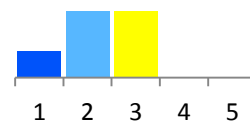
Targeted measures ensure that people facing significant non-financial barriers remain or re-enter the labour market.



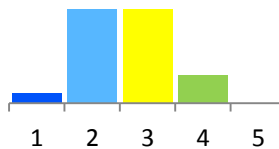
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Using Skills

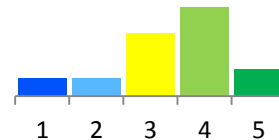
Employment services & businesses cooperate to fill vacancies in one region with skilled people from another.



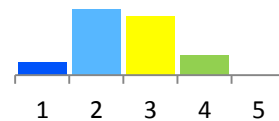
Employers are able to recruit sufficient numbers of skilled people who fit their requirements.



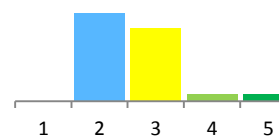
Labour market information and forecasts are easily accessible.



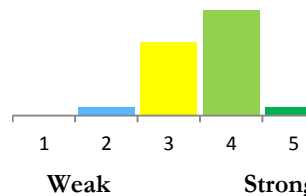
Employers' strategic business plans account for their future skills needs.



Employers invest in the skills development of their workforce in line with their medium/long term strategies.



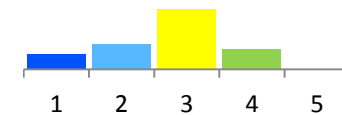
Innovative industries and businesses are growing and providing opportunities for skilled workers.



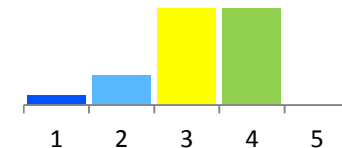
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Skills Systems

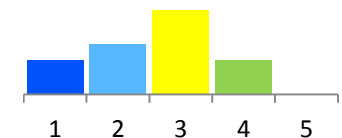
Coordination mechanisms across the public sector ensure policy coherence when designing new skills policies, legislation and regulations.



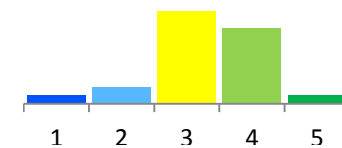
Tax treatment of skill investments & the return to skill investments do not discourage investment from individuals or enterprises.



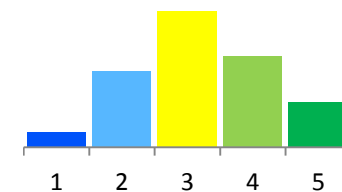
Local needs are catered for through flexibility in skills policy design and implementation.



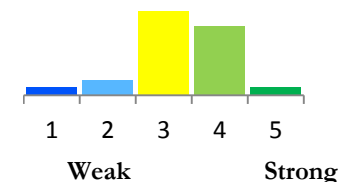
Public sector institutions gather/publish data and policy-relevant evidence about skills demand and use it when designing skills policies.



Strong partnerships between govt & non-govt actors support the design, delivery and funding of skills policies, education and training.



Public sector institutions have the resources to design future skills policies, legislation and regulations (including expertise, forecasting, financial and human resources).



Weak Strong

TO FIND OUT MORE

OECD Skills Strategy

OECD Survey of Adult Skills

by the OECD Programme for the International Assessment of Adult Skills (PIAAC)

OECD powerpoint presentations on skills

<http://skills.oecd.org>

www.oecd.org/piaac

<http://www.slideshare.net/OECD/EDU/tag/skills>

Regional Diagnostic Workshop Participants:

- **Governmental**
 - Ministry of Education & Research
 - Ministry of Trade & Industry
 - Ministry of Labour
 - Ministry Local Government & Regional Development
 - Nordland County
 - Vefsn municipality
- **Skills System Stakeholders**
 - Follow-up service
 - Polarsirkelen Upper-secondary school
 - Career center of Mo i Rana
 - Kunnskapsparken Helgeland
 - Nesna University College
 - Rana adult education centers
 - Regional Study Centers
 - Apprenticeship training office Nord-Helgeland
 - University of Tromsø
- **Social Partners**
 - The Norwegian Confederation of Trade Unions (LO)
 - The Confederation of Vocational Unions (YS)
 - The Confederation of Norwegian Enterprise (NHO)
 - The Employers' Association Spekter
- **Other local and regional stakeholders**
 - The Norwegian National Collection Agency
 - National Library of Norway
 - Celsa Armeringsstål AS
 - NAV Rana
 - Rana Produkter AS
 - Rana Chamber of Commerce

OECD Skills Strategy Diagnostic Report

Norway

Better skills policies help build economic resilience, boost employment and reinforce social cohesion. The OECD Skills Strategy provides countries with a framework to analyse their skills strengths and challenges. Each OECD Skills Strategy diagnostic report reflects a set of skills challenges identified by broad stakeholder engagement and OECD comparative evidence while offering concrete examples of how other countries have tackled similar skills challenges.

These reports tackle questions such as: How can countries maximise their skills potential? How can they improve their performance in developing relevant skills, activating skills supply and using skills effectively? What is the benefit of a whole-of-government approach to skills? How can governments build stronger partnerships with employers, trade unions, teachers and students to deliver better skills outcomes? OECD Skills Strategy diagnostic reports provide new insights into these questions and help identify the core components of successful skills strategies.

This report is part of the OECD's ongoing work on building effective national and local skills strategies.

Write to us

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- www.oecd.org/edu/workingpapers for a series of education working papers,
- www.pisa.oecd.org for the Programme for International Student Assessment (PISA) data, and
- skills.oecd.org/ for OECD work on skills.

Further reading

OECD (2012), *Better Skills, Better Jobs, Better Lives: A Strategic Approach to Skills Policies*, OECD Publishing.

OECD (2013), *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills*, OECD Publishing.