

Report No 14 to the Storting (2022–2023) Outlook on the skills needs in Norway

Summary

1.1. Government policy for meeting future skills needs

Education is crucial for creating a good life for individuals and a good society for all of us. For individuals, education is important for quality of life, through factors such as health, income, and participation in social and working life. The education system is a cornerstone of our democratic society. Its goal is to contribute to creating knowledgeable, open, independently thinking, and conscious citizens who actively participate in democracy.

The population's competence is Norway's most important resource. A well-educated and skilled population contributes to increased workforce productivity and fosters economic growth. Human capital accounts for 74 percent of Norway's national wealth. Good access to a skilled workforce is crucial for businesses to create value in all parts of the country, and for public institutions to provide good and equal services to citizens. Education and competence are key to development in regions and municipalities, contributing to high-quality public services throughout the country and promoting necessary innovation in the private sector.

Good access to training and education throughout the country is an important prerequisite for preserving the best aspects of Norway: the high trust we have in each other and the strong sense of community that binds us together. The Norwegian education system is characterized by values such as openness, human dignity, diversity, and active citizenship. A well-educated population is a defence against totalitarian and undemocratic currents, racism, extremism, discrimination, and intolerance. Education contributes to giving individuals broader perspectives and the ability to think critically. This is a benefit for both the individual and society – especially in times when fake news and alternative facts are a growing problem.

Inequality and exclusion are among the major challenges of our time. Being excluded from working life presents significant social and economic challenges for individuals. For society, exclusion also creates several negative consequences and places demands on significant human and economic resources. Increased employment provides corresponding societal benefits and increased fiscal flexibility. Although measures to integrate more people into the labour market will involve increased public spending on various initiatives, integration will also generate tax revenues and reduce welfare expenses. For example, it is estimated that exclusion due to dropout from upper secondary education costs the Norwegian society NOK 73 billion per year.

As a society, we face several long-term and complex challenges: known ones, such as climate and environmental changes, inequality and exclusion, polarization, and demographic

changes, as well as unknown ones. At the same time, we are in the midst of a transition driven by both digitalization and sustainability. Common to the long-term societal challenges is that addressing them requires significant skills, knowledge, and innovation. This demands a thorough transformation in Norwegian working and social life and places increased demands on the education sector.

Having a well-educated population is part of our insurance for the future. Today's students, apprentices and learners are future employees, employers and job creators. As a society, we must educate people who can participate in and contribute to the development of future working life and society. We need candidates with interdisciplinary knowledge and generic skills that can both develop throughout their careers and handle transitions while also contributing to necessary changes. At the same time, research and innovation are essential for addressing challenges and driving society forward. A breadth of research communities closely linked to both education and innovation is important to strengthen our readiness to meet future skills needs.

In the government's long-term plan for research and higher education (2023-2032), there are three overarching goals: to strengthen competitiveness and innovation capacity, to strengthen environmental, social, and economic sustainability, and to increase the quality and accessibility of research and higher education. Research, innovation and education are fundamental to value creation in society. The ability to develop new knowledge and apply it is one of the most important competitive and value-creating factors for Norwegian businesses.

The workplace is the most important arena for lifelong learning. It is where the majority of skill development takes place. Skill enhancement throughout working life is becoming increasingly important. The workplace, therefore, plays a central role in contributing to employees having the skills needed to cope with the changes we face. This happens in collaboration between business owners, the company's management, and employees. Employers and employees have the main responsibility for learning and skill development in the workplace. At the same time, the state also has a role in facilitating a learning-intensive working life. A well-functioning tripartite collaboration is therefore essential.

Norway's stock of skills is not unlimited. Not since before the financial crisis has there been greater demand for labour, and especially in rural areas, there are significant unmet needs for skills. An important part of educational institutions' mission is to contribute to students, employees, and businesses regionally and nationally getting the skills they need. A prerequisite for this is an accessible and flexible education system that allows people to receive education where they live and strengthen their skills throughout their lives, regardless of their life situation.

In the coming years, it is likely that skill shortages will become one of the most important bottlenecks for solving the major challenges we face as a society. Skill shortages can hamper the emergence of new profitable green businesses and industries, delay digitalization in the workplace, and slow productivity growth. It can also make it challenging to provide good services throughout the country.

Norway is to transition to a low-emission society by 2050, and by 2030, Norway will cut emissions by 55 percent. Skills are essential for the transition Norway is going through, which will affect all areas of society. We must also prepare for and adapt to the consequences of climate change. Skills are also important for implementing the global framework for biodiversity adopted in December 2022. The agreement has global goals for protecting nature.

We will have relatively fewer people of working age as the population ages and youth cohorts become smaller. This development has been known for a long time and is now starting to have noticeable effects. Norway has attracted labour through immigration for many years, and during the pandemic, we saw how vulnerable parts of the Norwegian labour market are. Access to labour from abroad is uncertain, and not all skill problems can be solved by bringing in resources from other countries. It is therefore important to expand the workforce by qualifying and educating more of those who are outside the labour market.

At the same time, we are entering a phase characterized by a more limited economic flexibility compared to previous years. The government is keen to reduce pressure on the economy. Therefore, there will be less growth in public budgets in the coming years, and it will be necessary to prioritize what is most important. We must exercise moderation and use resources more efficiently - also in the field of education and skills.

The government aims to provide more welfare and better services to citizens by allowing employees to have greater influence over task-solving. The government will implement a reform with this objective which will be developed from the bottom up. The government wants universities and university colleges to have more freedom to make their own priorities, and that the staff have increased influence on their own workday.

This report points out the most important skills needs moving forward and provides direction for the government's policies in the coming years. A solid knowledge base on the skills needs of today and the future is crucial for making the necessary priorities. We have a relatively good national overview of today's skills needs. It is more difficult to say anything precise about the skills needs in the longer term, but trends such as an aging population, green transition, technological changes, and changes in the division of labour and organization in working life will be significant. Most evidence suggests that a well-educated population provides good preparedness to handle unforeseen changes.

The goal of this report is to contribute to high employment and to cover the most important skills needs in the labour market and society moving forward. The report presents the government's policies in the following areas:

- prioritization in the education system
- education throughout the country
- financing of universities and university colleges
- learning in working life
- qualifying people outside of the labour force
- make use of skills and competences from abroad

1.2. Input from the social partners, county councils, and education providers

The government is committed to shaping its skills policy in close consultation with the social partners and other actors in the skills policy arena. A strong tripartite cooperation is essential for success in achieving high employment and the best possible match between supply and demand for skills.

The government has discussed the policy presented in this report with the Skills Policy Council, which is the government's council for skills policy, where the social partners, representatives of education providers, and regional authorities participate. Members of the council have provided written input for this work.

The government is also concerned that the skills needs are not the same in different regions of Norway and that county councils play an important role in meeting regional needs. County councils have provided input through their representative in the Skills Policy Council. The Ministry of Education and Research has also participated in the Ministry of Local Government and Regional Development's conferences for county councils. The input from the county councils has been useful for the work on this report.

As a preparation of this report, the Ministry of Education and Research set up a working group with representatives from the university and university college sector to obtain advice and input on the dimensioning work at universities and university colleges.

1.3. Summary of the challenges and the government's priorities

1.3.1 The challenges

The education level in Norway is just above the average for OECD countries. There are significant differences in education levels between rural and urban areas. Oslo has a much higher education level than the rest of the country. About 55 percent of young people in Norway start higher education, and almost half of the adult population has completed education beyond secondary education. Norway has relatively few people with higher education in science subjects and many in health and social care and teacher education. Eight out of ten who complete an education go straight into work, or nine out of ten if we exclude those who continue their education. Employment is highest among those who have an education in technology, crafts, healthcare, or teaching. There is a persistent shortage of labour in several of these professions.

The Norwegian Labour and Welfare Administration (NAV) conducts an annual survey that calculates the labour shortage in different parts of the labour market. In 2022, the health and social sector reported the largest unmet skills needs, with 22 percent of the total labour shortage. There is a particular shortage of nurses. About 20 percent of the reported labour shortage came from the construction industry. Here, there is the highest demand for concrete workers and carpenters. Other industries experiencing a tight labour market in 2022 include certain parts of the industry and engineering and IT professions. The largest counties have

the most significant labour shortages measured in the number of people. Northern Norway, Møre og Romsdal, and Vestfold and Telemark, however, have a tighter labour market where it is more challenging for companies to recruit the right skills.

Foreign workers cover more than 20 percent of labour market needs in Norway – and much more within crafts and trades and unskilled jobs. Also, the use of foreign labour is increasing in professions that require higher education, particularly IT developers and other technologists, healthcare personnel, and academic staff in the university and university college sector. Most foreign workers come from Eastern Europe and Asia, and these regions have taken over as top regions of origin from the Nordic countries and the rest of Western Europe.

To address the demographic development and the increase in the number of elderly people, and to provide good welfare services throughout the country, there will be a need for more labour with education in health and care. Low birth rates may reduce the need for teachers. It may become more difficult to recruit from abroad because many countries also have an aging population and a shortage of labour.

The need to reduce the number of working-age people who are outside the labour force increases when there is a shortage of labour. Today, 44 percent of adults outside the labour force only have basic education, and such qualification is increasingly insufficient.

In the longer term, there is greater uncertainty about the kind of competence needed for the green transition and to maintain a highly productive and competitive business sector. We know that there is a high probability that technical competence and more technologists will be needed. Education within humanities and social sciences will also be necessary to meet increasingly complex challenges. In addition, it is likely that we will need an even higher level of education in the population in general, in order to take advantage of rapid technological development and to address the climate and environmental crisis. The workforce must be equipped with a broader set of competencies. Social competence is increasingly emphasized in working life, and interdisciplinary and cross-disciplinary approaches may be crucial to address major societal challenges.

The education system is the government's most important tool for meeting society's skills needs. However, there are limits to what governments can achieve through education. The education system alone cannot meet the needs for competence in working life. The workplace is the most important arena for lifelong learning, and it is in the workplace that the majority of competence development takes place. Employers have a significant responsibility to attract, retain, and further develop their employees so that they are professionally up to date. Insufficient recruitment to a profession may be due to factors such as poor working conditions and low pay and a lack of apprenticeships.

The demand for skills in the labour market also depends on developments in other areas and sectors – whether it be demand for labour as a result of major public construction projects or public requirements for the type of competence needed to solve a task.

Although the education system cannot solve all problems related to the shortage of skills, we can still ensure a better match between what the education system delivers and what society needs. There are some fields where both education seekers and the labour market have a high interest, but the capacity of the education system is unable to keep up. Similarly, there are fields with lower demand than supply, and fields where some candidates face challenges in finding relevant work. In times of labour shortage and rapid change in working life, it becomes even more important for education seekers to access in-demand skills and for the capacity of the education system to follow the demand for education in society. When it is difficult to meet the labour market's need for competent labour, it is even more important that the education system can offer a wide range of flexible programs that are easy to combine with work and available throughout the country. It is particularly challenging to access education for people living in smaller places far from a study site or who want to take a course not offered near their place of residence.

Lack of skills, health challenges, or a combination of these are reasons why many people are outside the labour force. A large number of those outside the labour force want to work, either full-time or part-time. Mobilizing this labour reserve is important for those who want and have the capacity to work and for businesses struggling to find people.

1.3.2 Government priorities

The government's priorities for education and skills policy are as follows:

- Skills necessary for a highly productive and competitive business sector
- Skills necessary for the green transition
- Skills necessary for good welfare services across the country and to handle demographic development, balanced against the need for labour in other sectors of society
- Qualifying and mobilizing more people who are outside the labour force

This report primarily focuses on education, learning and qualification, rather than measures to increase labour supply through reduced part-time work or sick leave. The government's education and competence policy cover the following areas:

- prioritization in the education system
- education throughout the country
- funding of universities and university colleges
- learning in the workplace
- qualifying people outside of the labour force
- make use of skills and competences from abroad

Prioritization in the education system

The government will take steps to ensure the education system delivers competence in line with the priorities mentioned. To meet future skills needs, the entire education system must be designed and dimensioned so that capacity follows demand from both applicants and the labour market. This includes the responsibility of county councils to dimension upper

secondary education based on students' preferences, local availability of apprenticeships, and societal and labour market skills needs.

The government, in collaboration with social partners, will consider structural changes in upper secondary education to better meet competence demands. The government will also evaluate measures to better adapt pathways for adults and explore more flexible career options for youth. Additionally, the government will consider initiatives to counteract a decline in apprenticeships during economic downturns and encourage businesses to recruit from the labour force reserve and formalize employees' competence.

Higher vocational education is the responsibility of the county councils, which must ensure growth in capacity where there is the greatest need in the labour market. In future allocations to higher vocational education, the government will prioritize study places in technical fields, healthcare, and areas important for the green transition. Institutional accreditation will be proposed to provide better conditions for creating new relevant programs.

The government and the universities and university colleges share the responsibility for determining the capacity in higher education. The government has the main responsibility for setting the total capacity through the amount of funding, and the higher education institutions have the main responsibility for determining the capacity for individual study programs. The government expects the institutions to prioritize resources for education in healthcare, IT, and areas important for the green transition. Higher education institutions should continuously assess future skills needs and consider measures for more flexible and dynamic utilization of educational capacity. The government will also strengthen the information about skills needs and dimensioning in higher education and evaluate the quality and relevance of IT education.

The government will consider how to better utilize the overall capacity of higher education and higher vocational education.

Education throughout the country

The government aims to facilitate flexible education across the country and take steps to ensure that education and training are accessible to all. It is a goal to preserve academic communities across the country. A flexible education system should counteract centralization and ensure that districts have access to the competence they need. Digitalized study and training programs are essential for achieving this, even in upper secondary education. County councils play a central role in this work through their responsibility for regional skills policies. Universities and university colleges should continue collaborating with county councils and other relevant stakeholders to strengthen decentralized offerings and meet regional skills needs. The government will maintain its focus on flexible and decentralized education in higher vocational education and higher education, ensuring it is an integrated part of the institutions' educational activities. The government will also consider measures to provide study centres with more predictable frameworks.

Funding of universities and university colleges

The government wants the funding of universities and university colleges to contribute to quality in research and education, and that the capacity of the study programs to the greatest extent possible meet the skills needs of individuals and society. Therefore, the government will adjust the current funding system towards more trust, room to prioritize future skills needs in the short and long term and strengthen access to education throughout the country. Although the current funding system has worked well in many ways, there is a risk that many detailed indicators, rates, and incentives may negatively affect the institutions' ability to make their own priorities, by making them spend resources primarily on adapting to the details of the system. In the report, the government presents changes in the funding system for universities and university colleges that strengthen their ability to take even greater responsibility for prioritizing and dimensioning study programs within their budgets and overall objectives. The system is simplified by removing indicators for external income and exchange students and by reducing the number of funding categories for the study credit indicator from six to three. Today's indicator for graduated candidates is replaced by an indicator for completion of study programs, which should take into account the completion of degree programs, but which does not create disincentives for the provision of further education. The new system will take effect from the state budget for 2025 and will be introduced without redistribution between individual universities and university colleges. Changes in the output in the future will be rewarded with other rates than they would have been with today's system. The changes mean that it will be more attractive to prioritize capacity within subject areas such as teacher education, health and social sciences, and mathematical, natural, and technological sciences. These subjects are important for welfare services, a highly productive business sector, and the green transition.

It will also be more attractive to offer flexible and decentralized education, especially further education, compared to today's system. Further education provides formal competence in the form of credits. Such education can be offered full-time on campus but is often offered flexibly because it usually targets adult students who are in employment. There is broad agreement that universities and university colleges should have better and more flexible frameworks so that they can increase their offerings of further education, especially aimed at people in work. The Ministry of Education and Research has made changes in the regulation of tuition fees in public higher education institutions with effect from January 2024, with a transition period to January 2025. The most important change is that universities and university colleges will be able to use content from regular education programs when developing credit-giving education programs with tuition fees aimed at people with work experience. They will also be able to offer full degrees for payment in some cases, such as today's experience-based master's degrees. At the same time, the possibility of charging tuition fees is limited in a way that protects the ordinary degree programs and the principle of free public education by requiring in the regulations that study programs with tuition fees must be specifically adapted to people working and who have work-experience.

Learning in the workplace

The government's goal is for more people in the workplace to acquire up-to-date and formalized competence. Learning in the workplace is necessary for employees to acquire competence so that they can master new tasks and remain in work over time. It is also necessary to achieve high productivity in the Norwegian labour market and to meet demands for change. Tripartite cooperation is key to creating a learning-intensive workplace where workers update their skills. The government will develop a comprehensive skills reform. The government is committed to raising skills throughout the workforce and doing so in collaboration with the social partners. The reform will focus on higher vocational education, which is particularly important for skilled workers. The government will also consider how the education system can contribute to better career paths for skilled workers.

Changes in the funding system for universities and university colleges will make it more attractive to offer continuing education, flexible education, and decentralized services than today. The government will also consider giving institutions the freedom to admit individuals without academic qualifications into shorter studies

In addition, the government, in dialogue with the social partners in wage negotiations for competitive industries (*frontfag*), will assess how the work to meet the skills needs of the industry can be supported, what bottlenecks exist today, and how these can be adapted to better meet the industry's needs. The government will also further develop the tripartite industry programmes and the Industrial Trade School in line with the needs of businesses. The schemes of the Norwegian State Educational Loan Fund (Lånekassen) will be expanded so that shorter education offers can also provide the right to study loans. An important consideration in the skills reform will be ensuring a comprehensive organization of skills policy, across sectors and administrative levels.

Qualifying people outside of the labour force

The government will focus on expanding qualifications to get more people into work. Adults with low education are more often out of work than others. Many also have various health problems, in addition to a lack of qualifications. In order for more recipients of NAV benefits and participants in the introduction program to have the opportunity to qualify for permanent employment, the government will further develop the cross-agency collaboration. The government will, among other things, establish closer cooperation between the county municipalities and the Labour and Welfare Administration so that more people can complete an education leading to a trade or journeyman's certificate. Local cooperation models have already been initiated in several places in the country between the Labour and Welfare Administration, the county municipalities, and employers involved in vocational education and training. Experiences from these will now be used to further develop offers throughout the country. The Labour and Welfare Administration plays a key role in this work. The government will also initiate a trial with a longer duration of the training measure in the Labour and Welfare Administration because the limitation on duration can be a barrier for some users. In addition, the government will consider how the Trade Certificate on the Job scheme can be expanded to also become a scheme for NAV benefit recipients and participants in the introduction program.

At the same time, it is important that the education system is flexible enough to be used by adults in different life situations. This is part of the background for introducing a modular structured education from the autumn of 2024 as the main model for adults in upper secondary education. Uncertainty about livelihood is experienced by many as a barrier to taking secondary education as adults. The government will therefore consider how livelihood for adults in need of education can become more predictable.

Use of competence from abroad

Labour migration has played an important role in meeting the needs of working life since the EU enlargement in 2004. Recognition of education and qualifications from abroad can unlock a skills reserve among foreign workers and can simultaneously give them better opportunities to participate in skill development. The government will continue to develop various recognition schemes to make it easier to use skills acquired abroad in the Norwegian labour market.