

Ministry of Education and Research

Meld. St. 16

(2016–2017)

Report to the Storting (white paper)

Quality Culture in Higher Education



Introduction – Knowledge is formed in academic environments

Everybody remembers their favourite school teacher. But anyone who has ever set foot in a university or university college also remembers another person: that lecturer who really opened your eyes and helped you to see the world in a new way; who really took you seriously as a student; who introduced you to the academic community.

This is the foremost task of higher education. Knowledge is not a good to be communicated and consumed: it is something that forms and develops when lecturers and students come together; when a student poses a critical question; when a supervisor comments on an argument in a bachelor's thesis; or when students debate amongst themselves in a seminar group.

Every single day, there are excellent teachers standing before their students in lecture halls, seminar rooms and laboratories in Norway's universities and university colleges, bringing knowledge to life. At the same time, we know that everything is not as it should be. We hear of lecture rooms that are packed at the start of the semester but are less than half full by late autumn; that there are some teachers who – rather than having a research-like approach towards their own teaching methods to find out what works – just shuffle their papers a bit and continue to teach in the same way regardless of feedback; and that a large number of students struggle to complete a degree – only four out of ten complete their bachelor's degree within the nominal length of study.

We must have greater ambitions on behalf of our students. We also have to inspire them to live up to their potential. They need to learn what is expected of them and receive support, feedback and challenges along the way. Education of high quality is the key – education that energises and engages students as equal members of the academic community.

The quality in higher education does not come about through resolutions passed by the Storting (the Norwegian parliament) or by the Government. Higher education institutions must take the largest share of the responsibility. With this white paper, the Government will provide more of the tools and guidelines required to raise the quality in higher education.

Most importantly, teaching excellence should not depend on a few individual pedagogical enthusiasts while status and resources are rewarded primarily to the foremost researchers. Rather, educational quality must be the responsibility of the academic environment as a whole, including the academic leadership. Every teacher has the capacity to develop their pedagogical methods and inspire their students. Good teaching is a craft that can be learnt. At the same time, students must be part of a culture and academic environment that focuses on education. It is paramount that students become part of a culture of quality in which there is a common responsibility to continuously look for ways to improve. Together, in collaboration.

There is no simple recipe for developing a quality culture. We propose several ways to make it easier to meet this responsibility: higher education institutions should develop systems for recognising good teachers and promoting their academic careers and for raising the status of teaching; courses should be assessed by peers to a much greater degree than at present; and we will set up a national competitive arena through which academic environments can compete for resources to develop good teaching.

Consequently, we are taking some of the measures used in research and applying them to teaching. The two core activities of higher education institutions will be placed on the same footing, meaning that excellent researchers will no longer be regarded more highly than excellent lecturers.

One of the main objectives of this white paper is for students to receive an education that will be relevant to their working lives. This is perhaps more important than ever as we find ourselves in the midst of a significant transition. Within a short space of time, thousands of jobs have disappeared from the oil and gas sector, so we need employees with ideas on how to create new value in other sectors. At the same time, a study shows that about one third of the employed labour force in Norway could experience automation or digitisation of their current duties. This change will not affect just the low-skilled occupations – all professions will be affected.

This white paper, therefore, is also a clear invitation to higher education institutions to take a leading role. What can they do to ensure that students not only graduate with skills that are in demand in today's labour market, but also have the ability to adapt and renew themselves? How can they guarantee that students will make innovative, attractive and productive employees who will help to shape society for the next 20 to 30 years? Our answer is that programmes of study have to be based on research and developed in close collaboration with the working life and with the students themselves. How this is best accomplished in practice, however, is a task for higher education institutions to take on for themselves.

There has been significant involvement in the preparation of this white paper on quality in higher education. We have received useful contributions from higher education institutions, students and various organisations, and even from a number of interested individuals. We have been inspired by, amongst other things, the exciting work being carried out in centres of teaching excellence. A clear common denominator has been the desire and determination to raise the quality in higher education.

In other words, all of the conditions are in place for us to succeed.

Ministry of Education and Research

The following text is the first chapter of Meld. St. 16 (2016-2017). The text outlines the main objectives, as well as the Government's expectations of higher education institutions concerning their work on raising quality in higher education, and the measures that the Government will implement in order to realise these expectations. The second part of the white paper is only available in Norwegian.

Meld. St. 16

(2016–2017)

Report to the Storting (white paper)

Quality Culture in Higher Education

Recommendation from the Ministry of Education and Research on 27 January 2017, approved by the Council of State on the same date. (Solberg Government)

Part 1

1 Raising quality in higher education

Due to their teaching and research activities, higher education institutions are especially qualified to meet the challenges of society. Students have an important role to play in the future development of society; therefore, higher education institutions must offer updated and relevant study programmes that encourage learning and completion.

1.1 A rapidly changing world demands a high level of competence

‘To tackle our global challenges – from water and food scarcity and climate change to digital learning, innovation, and human health – we need ambitious new answers from science and engineering. But because these challenges are rooted in culture, economics, and politics, meaningful solutions must reflect the wisdom of these domains too.’

MIT president L. Rafael Reif

Climatic, demographic and technological developments are changing people’s living conditions all around the world. The global, financial and political centre of gravity has shifted in the direction of emerging economies, and the world is more closely connected through the flow of goods, services, information and people than ever before.¹ Society is forced to deal with security challenges in the form of cross-border criminality, terrorism, extreme weather and cyberattacks. The pace of change is high and its impact is, in part, unpredictable.

These global challenges affect all areas of society, including higher education. They are large and complex social challenges and must be met with knowledge from different spheres within research and education. Many countries outside of Europe and North America are focusing their efforts on

¹Dobbs, Manyika, and Woetzel 2015; Baldwin 2016

higher education and research to develop their society and strengthen their competitive ability.² Our capacity for continuous skills upgrading and realignment will be decisive for future social development and the preservation of our standard of welfare.

Now more than ever are we in need of a well-educated population that has the ability to reason and analyse, identify relevant questions and use scientific methods and ways of thinking to solve problems and assess the validity of information and arguments. Education must help students to develop skills and attitudes that enable them to contribute to sustainable development as well as to see themselves as global citizens. This entails a responsibility to think and act on behalf of a community that goes beyond the familial, local and national.

Migration is one of the most far-reaching trends of the 21st century. Such large movements of people lead to changes and create challenges, not only in the abandoned country but also in the receiving one. Higher education's role as civilising developer and guardian is important in the tension between regard for one's own safety and welfare on the one hand and regard for human rights and global citizenship on the other. Students and researchers are therefore part of, and are responsible for upholding, an international academic community that also includes students and researchers in flight or in situations of crisis.

Today's students will, in the years to come, experience the effects of raised carbon dioxide levels in the atmosphere, ocean acidification and biodiversity loss; problems that we can currently only sense the contours of. It will demand hard work to hold back and deal with the consequences of climate change. The whole breadth of the natural sciences will need to be applied to understand the Earth's climate system and organic carbon cycle, however the upheavals will also raise problems of an ethical, philosophical, financial and juridical nature. Should we act to avoid the South Pacific Island nation of Vanuatu from disappearing into the sea? Can ecosystems or future generations become legal entities?

Just as the world is in transition, there are changes for those of us living here as well. The UN anticipates that by 2050 there will be more than nine billion people on the planet, partly due to increasing lifespans. More people need to be raised out of poverty and given a stable food supply. New sources of food are required as well as new sustainable methods of producing it. There is a need for fundamental changes in production and consumer systems if Europe is to live within the world's ecological limits.³ The needs of an ageing population must be met using a combination of knowledge and solutions delivered by the health-care science, technology and social science disciplines. Students have to be prepared to collaborate across professions and interact with machines and robots in new ways.

Technological changes will be able to transform the way in which we work, live and interact. The development will lead to the disappearance of many routine tasks and a shift from a low-skilled to

²Wildavsky 2012; Altbach and Salmi 2011; Rumbley et al. 2014

³The European Environment Agency (EEA)

a highly qualified work force.⁴ Consequently, investment in skills development is necessary in order to take advantage of new technology as well as to prevent it from creating and reinforcing social inequality.⁵ One study shows that roughly one third of the employed labour force in Norway could experience automation or digitisation of their current work tasks.^{6,7} These changes could also affect traditional professions such as doctors, legal practitioners and accountants.⁸ The question at hand will be what kind of new occupations and work tasks that will emerge. Big data architects, cloud services specialists, solar engineers and bioinformaticians are examples of new professions that have evolved in recent years. Education and students drive society forward by introducing new perspectives and creating new jobs.

Society and working life are increasingly influenced by technological change. The use of digital technology has led to changes in almost every sphere of modern society and has, in a short space of time, overturned the rules of the game for a number of business sectors. We are only just starting to sense the impact that digitisation will have on higher education.⁹ It is creating new conditions and opportunities for teaching and learning and in the content and organisation of subjects, as well as in communication and organisational methods. In addition to academically relevant digital skills and advanced ICT proficiency, there is a demand for more overarching information skills, or digital judgement, that are relevant across disciplines.¹⁰ Our everyday lives are increasingly governed by algorithms and data, and this affects the manner in which we make decisions.¹¹ In an information landscape that is becoming increasingly complex, the ability to evaluate sources and apply critical thinking is becoming correspondingly important. Students need to be able to reflect upon problems of an ethical, security and legal nature using data and technology. They must be able to pose new kinds of critical questions: Could somebody hack into my pacemaker? Could the use of big data reinforce social inequalities? Is it acceptable that Facebook filters news stories for me? How can you distinguish between real and fake news stories on social media?¹²

The declining oil and gas industry has led to a particular need for readjustment in our society and challenges Norwegian competitiveness. A society with high knowledge capital is a prerequisite for innovation and the adoption of new technology. As the Productivity Commission concluded, our

⁴OECD 2016 a; Brynjolfsson and McAfee 2014

⁵Goldin and Katz 2009; Lipsey, Carlaw and Bekar 2005

⁶Pajarinen, Rouvinen and Ekeland 2015

⁷For more detailed analysis of the situation in Norway, for example, see SINTEF 2015

⁸Susskind and Susskind 2015

⁹Bowen 2015; NOU 2014: 5

¹⁰Digital proficiency is one of the eight key competences outlined in *A European reference framework: Key competences for lifelong learning* prescribed by the EU in 2006.

¹¹O'Neill 2016

¹²'Post-truth' was chosen as Oxford Dictionaries' word of the year.

competitive ability will reside in a labour force with a high level of relevant expertise, good adaptability and the ability to participate in future technological development.¹³

1.2 Higher education for the future

‘But a University training is the great ordinary means to a great but ordinary end; it aims at raising the intellectual tone of society, at cultivating the public mind, at purifying the national taste, at supplying true principles to popular enthusiasm and fixed aims to popular aspiration, at giving enlargement and sobriety to the ideas of the age, at facilitating the exercise of political power, and refining the intercourse of private life.’¹⁴

John Henry Cardinal Newman, 1854

Universities and university colleges are especially qualified for assisting with major social challenges due to the breadth of their academic disciplines and education. Research develops new knowledge and finds solutions to unresolved issues. Researchers have the ability to comprehend, further develop and use research from the best international research groups. Furthermore, given their fundamental norms concerning critical and honest debate, higher education institutions have a responsibility to participate in public debate and setting social agendas. Universities and university colleges are essential players in the knowledge-based society, ensuring that social debate is grounded in knowledge, facts and honesty.

In a volatile age lacking predictability and demanding social change, higher education institutions can add stability by interpreting complex information and events and rendering them comprehensible to the public debate. At the same time, they can assist with the inevitable changes by contributing knowledge, innovation and new ideas.

The core activities of higher education institutions, in the form of research, teaching, knowledge transfer and innovation, each have their own intrinsic worth, but can result in contradictions and conflicting aims.¹⁵ These can come to light when a core activity is viewed in isolation with regards to its own optimal organisation and expertise.¹⁶ Higher education institutions must continually modernise and adapt to society’s constantly evolving demands and expectations, at the same time as their unique contribution to society is rooted in centuries of tradition.¹⁷

Higher education institutions play a crucial role in society by providing highly qualified graduates. The transition from a resource-based economy to a more knowledge-based one, and increasing globalisation and technological development all heighten demand for a highly qualified labour

¹³NOU 2015: 1; NOU 2016: 3

¹⁴Newman and Turner 1996

¹⁵Clark 1995; Kerr 2001

¹⁶Larsen and Stensaker 2003. An institute that offers teaching alone without carrying out research will be organised quite differently and demand a different kind of expertise to one that simply carries out research without offering teaching.

¹⁷Boulton and Lucas 2008

force with the capacity to respond to change and uncertainty.¹⁸ The most important contribution that higher education institutions can make towards added value is to train graduates for working life. This is a pivotal part of Norway's overall lifelong learning policy. Norway's higher education institutions also play a key role in following up on the UN's sustainability goal to 'ensure inclusive and quality education for all and promote lifelong learning'.¹⁹ It is essential to realise equal access to higher education for all regardless of social background. Furthermore, higher education institutions are key to our achieving the other sixteen UN sustainable development goals.²⁰

Box 1.1 The Council of Europe's main goals concerning higher education

The Council of Europe has outlined four main objectives concerning higher education in the European region:

- preparation for sustainable employment
- preparation for life as active citizens in democratic societies
- personal development
- the development and maintenance, through teaching, learning and research, of a broad, advanced knowledge base

Recommendation CM/Rec (2007)6 of the Committee of Ministers to member states on the public responsibility for higher education and research, adopted by the Committee of Ministers on 16 May 2007 at the 995th meeting of the Ministers' Deputies

Box 1.2 Entrepreneurship for the future

ENgage is a collaboration (consortium) between the Norwegian University of Science and Technology (NTNU) and Nord University with several national and international partners. ENgage attained the status of a Centre for Excellence in Education (SFU) in 2016. The centre takes as its starting point that entrepreneurship is essential for meeting global challenges. Its ambition therefore is that entrepreneurship should become a part of every discipline within higher education. Student-engaged learning, in which students work with problems from 'the real world' and take responsibility for their own education, is a core principle of ENgage.

The international committee of experts assessing the application made particular note of the important position given to students and student organisations within ENgage. The centre also has a number of expert partners with extensive experience in various areas of entrepreneurship education.

¹⁸Bandura 1995; Nowotny 2015

¹⁹This is UN sustainable development goal number 4.

²⁰<http://www.fn.no/Tema/FNs-baerekraftsmaal/Dette-er-FNs-baerekraftsmaal> (Norwegian only)

Education can have several welfare-related effects on individuals and society. A number of studies show that education is positively associated with health, social trust, appreciation of democracy, social engagement and the prevention of criminal behaviour.²¹ It is therefore essential that higher education institutions facilitate good access to courses, including access for students from diverse backgrounds who have the requisite qualifications. The financial returns of higher education for both the individual and society as a whole are substantial, making it one of the best investments that either can make.²² However, the role of higher education institutions is even broader than this.²³

‘Higher education and research should contribute to creating independently thinking, open-minded, knowledge-oriented, reasoning and emotionally mature individuals who can participate in democracy as players and opinion formers in an authoritative manner.’

Hagtvedt and Ognjenovic 2011

Box 1.3 Action-oriented education for sustainable development

The master’s programme in agroecology at the Norwegian University of Life Sciences (NMBU) received the Educational Quality Award (Utdanningskvalitetsprisen) in 2016. It has achieved international success with its innovative teaching model that prepares students for solving complex, global challenges by means of participation, reflection and dialogue. The educators on the course involve students in international arenas, include public utility perspectives in their syllabuses and adopt a knowledge-based approach to their own education. The results of implemented measures are systematically investigated.

The study programme links theoretical knowledge and specific challenges with finding sustainable solutions. The learning takes place in collaboration with participants who work in the areas of food production, processing, distribution and consumption. The action-oriented learning and the fact that the students encounter the field where they will work at an early stage of the programme serve to create engagement in complex situations and help to establish good links between the university and the society.

The programme was developed by a Nordic agroecology network that collaborates with academic environments elsewhere, for example in the US. It is also part of a joint-degree collaboration with a university consortium based in France. The agroecology group at NMBU has contributed to the development of corresponding study programmes in Italy, the US, Ethiopia, Uganda, and India. The students originate from every continent and have backgrounds in a range of disciplines.

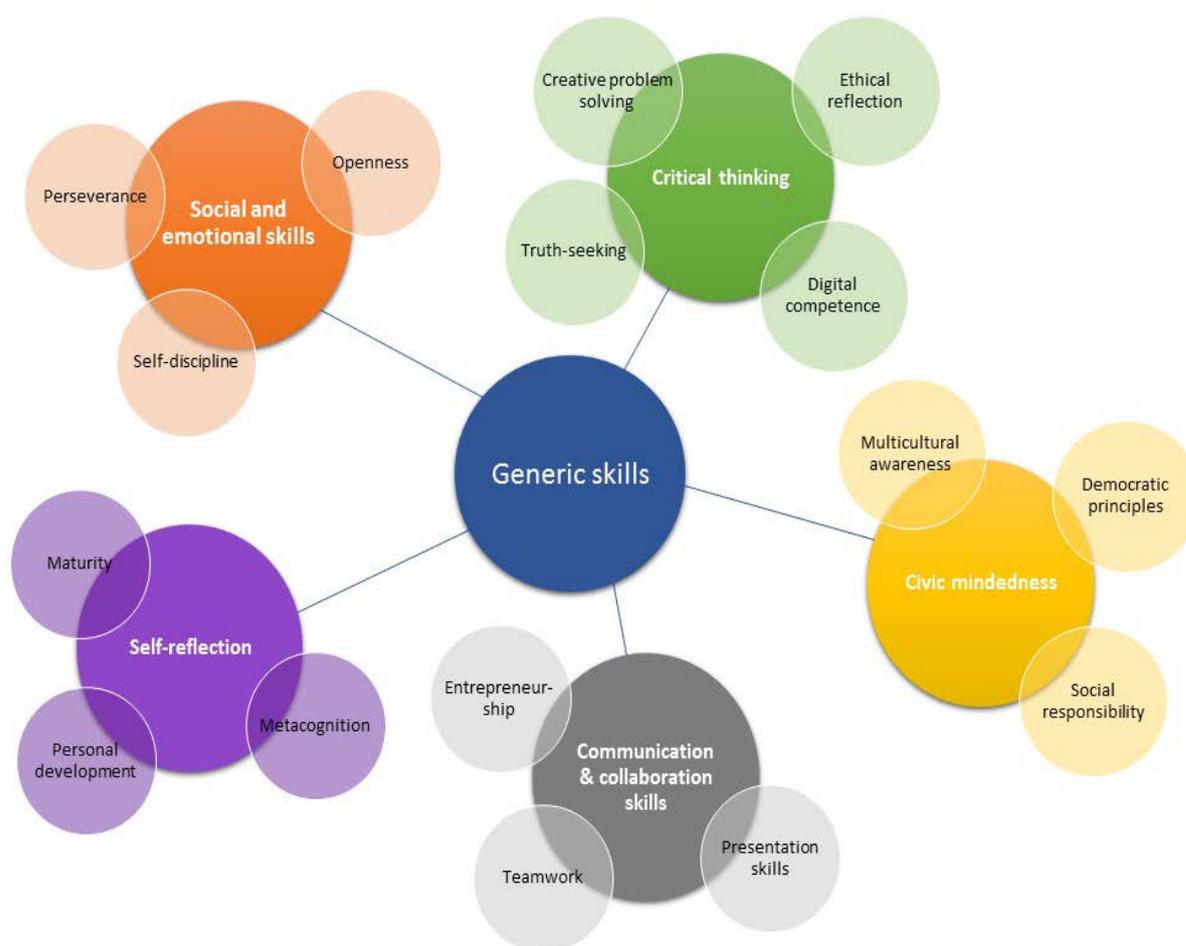
²¹Oreopoulos and Salvanes 2011; OECD 2016c

²²Cohn and Geske 1990; Barth 2005; OECD 2016c; McMahon 2009

²³Collini 2012; Nussbaum 2010

According to the report *The Future of Jobs*, the majority of occupations in 2020 will require expertise that is not considered crucial in today's world.²⁴ In a labour market that is increasingly characterised by higher competence levels and less routine work, there is a need for professionals capable of exercising ethical reflection, creative problem-solving and critical thinking, who are able to manage complex and ambiguous information at the same time as collaborating across geographical, academic and cultural boundaries. These generic competences correspond well with the classical educational ideals held by universities.²⁵ Education must put an emphasis on learning that stimulates such skills (see Figure 1.1). It will render the students better equipped for a social and working life that demands constant readjustment.

Figure 1.1 Generic skills



The terms appear in various sources, including: NOU 2015: 8; Center for Curriculum Redesign 2015; OECD 2016d

²⁴World Economic Forum 2016

²⁵Bok 1986; Kerr 2001; Whitehead 1929

1.3 What is quality in higher education?

Quality, as defined by the literature, is a multifaceted concept. A range of definitions and understandings exist for the term ‘quality’. Quality is about maintaining standards and meeting expectations and demands. However, it also encompasses excellence, variation, diversity, development and innovation, effectiveness and relevance.²⁶ It has been traditional in Norway to demonstrate how many factors are crucial for determining quality in higher education. Terms that have been employed include ‘framework quality’, ‘admission quality’, ‘procedural quality’, ‘programme quality’, ‘results quality’, ‘teaching quality’, ‘management quality’ and ‘relevance quality’.

All of these approaches to quality are relevant in Norway’s higher education system. Higher education institutions should provide an education that meets prescribed standards and demands for quality and that continually seeks to evolve and improve. At the same time, the Government requests a diverse sector that clearly prioritises excellent environments with the potential to participate and assert themselves, particularly in collaboration with strong academic environments in other countries. Not everyone can be equally good at everything, but everyone can be very good at some things and sufficiently good at the rest. This also means that institutions should avoid those academic fields where they fail to perform to an adequate standard.

Quality involves setting ambitious goals and working continuously and effectively to achieve them. In a diverse sector, ambitions, as well as challenges and solutions, can vary from one institution to another and similarly from one academic environment to another. There is diversity amongst educational and teaching traditions in the same way as there are different research traditions between disciplines.

The overarching aims of the Ministry of Education and Research include: knowledge for new understanding, social development and competitiveness, as well as expertise, development and active involvement in society.²⁷ In addition to the aims for the higher education sector, there are some ambitions that are common to all academic environments to ensure that we achieve these overarching aims.²⁸ The Government relies on these as the basis of its understanding of quality.

Students shall

- achieve the best possible learning outcomes and personal development
- have access to the relevant education to prepare them sufficiently for active participation in a democratic and diverse society and for a future professional career
- complete their education as efficiently as possible

High-quality education will lay the groundwork for achieving these ambitions.

Learning outcomes

Students will be able to develop and exploit their own learning potential and acquire useful knowledge, skills and all-round competence based on the latest international research. This means that students will acquire knowledge, skills and analytical frameworks of understanding specific to

²⁶Cf. Harvey and Greens (1993) often referenced definition of quality

²⁷Prop. 1 S (2016–2017)

²⁸Act Relating to Universities and University Colleges § 1

their subject of study, but also that they will develop more generic skills, such as the ability to apply critical thinking, analytical evaluation and continuous learning (ref. Figure 1.1). In-depth and transformational learning must be facilitated whereby students, through the acquisition of new perspectives, qualitatively develop a new understanding of phenomena and connections and develop knowledge-based and critically evaluative opinions.^{29,30} Furthermore, students must gain understanding of how new knowledge evolves and is validated within the various disciplines, and of the characteristics of recognised academic and scientific practice as opposed to various forms of pseudoscience.³¹

Relevance

The study programmes must be relevant insofar as they prepare students for the work they will encounter and the society they are part of, and allow students to use their academic skills in their working lives. Valuable experience is gained through practice in and interaction with the working life.

The employability relevance of education cannot simply be assessed on the basis of its connection with the working life that students will immediately enter into. Equal importance should be assigned to the long-term perspective of equipping students for a future characterised by lifelong learning, change and readjustment; a future which they will also play a hand in shaping.

Completion

One ambition is that students should complete their education in the most efficient way possible. Poor completion results are a waste of resources for both the individual and society. Good education succeeds in motivating and engaging students so that as many as possible complete within the nominal length of study. With an increasingly complex student population, on the other hand, it is natural that some will be in higher education for a shorter period of time or will change study programmes on the way. However, the proportion of students completing within the nominal length of study should be higher than it is today.

How can we attain good learning outcomes, relevance and completion?

Very little research has been carried out, either nationally or internationally, on the factors influencing the students' success in achieving the best possible learning outcomes and personal development, to meet relevant study programmes that prepare them for a future profession, and to complete their education in the most efficient way. There is some research, however, that shows some factors that are especially significant for the quality in higher education. Figure 1.2 illustrates these factors.

²⁹Meyer, Land and Ballie 2010; Mezirow 2000

³⁰Cowan 2010, Davies 2015

³¹See for example: Goldacre 2008; Lakatos 1970; Lamont 2009; Lewens 2015; Whitley 2000

Figure 1.2 Factors for quality in higher education



The most important factors determining a student's success are student engagement, the amount of time spent on their studies and how they use that time.³² It is critically important for learning that students spend their time on good learning activities. Motivated students, who spend time reflecting on subject matter and discussing it with teachers and fellow students, develop the ability to apply their knowledge and skills to overcome challenges, solve exercises and critically evaluate and analyse the issues confronting them.

The level of student engagement is not altogether dependent on the students themselves. Higher education institutions must have high ambitions for their students and be explicit about what they can offer them and what they expect from them in return, as this has a positive effect on learning.³³ Institutions should therefore convey clear expectations to applicants and students: before they apply, upon entry and during their studies.

Learning is a subjective process that occurs through activity and reflection in the meeting space between student and teacher; it is not about students passively receiving information.³⁴ Various forms of active learning and participation in research activities have been shown to give good results.³⁵ Students should, furthermore, receive feedback and evaluations that give them clear guidance for self-improvement.³⁶ Technological tools can assist in delivering student learning and feedback that are as customised as possible, even where students are in a large group. Education should be based on knowledge on how students learn most effectively and should be constantly evolving.

The academic environments have a responsibility to develop integrated study programmes with good progression and cohesion. Every programme must build on the latest research within the academic discipline. Descriptions of learning outcomes should give meaningful information outlining what the students will learn. Good study programmes are developed in partnership with working

³²Gibbs 2010; Trowler 2010; Pascarella and Terenzini 2005; Damen, Bakken and Hauge 2016a; Carinin, Kuh and Klein 2006

³³Weinstein 2004

³⁴Bransford 2000; Sawyer 2014

³⁵Biggs and Tang 2011; Damşa et al. 2015; Freeman et al. 2014; Gibbs 2010; Pascarella and Terenzini 2005

³⁶Evans 2013; Hattie and Timperley 2007

life, and internationalisation should have a natural place within them. Furthermore, the higher education institutions should offer useful opportunities for lifelong learning.

Teacher engagement has a significant influence on student learning.³⁷ Developing excellent study programmes, however, demand a lot from the academic staff. Those who excel at teaching tend to have positive interactions with their students, have high expectations of them and create effective learning environments. They are willing to incorporate changes, adopting a research-like approach towards teaching and learning. They ask themselves: What is the best way for students to learn this material? Could the teaching take place in a working life situation? What are the best academic environments doing and what can we learn from them? Moreover, they are well prepared and present their material clearly. Also, they make it possible for students to handle knowledge which, in the first instance, can prove problematic because it challenges familiar beliefs and ways of thinking.³⁸ They will also prepare students for the fact that learning may be demanding, but can be accomplished just the same.³⁹ This requires teachers to have good professional expertise, good knowledge of subject didactics and good teaching competence.

Higher education institutions that succeed in developing high-quality teaching and research tend to be permeated by a culture of quality at every level and typically have management teams that clearly prioritise educational quality. A quality culture involves students, academic environments and management sharing a common understanding of the meaning of quality, and involves management laying the groundwork for academic staff becoming more engaged in education and learning.⁴⁰ This type of quality culture demands a shared understanding of practice, common norms and quality standards, supported by formal sanctions and incentives around conduct.⁴¹ It is important for strong academic environments to develop education on the basis of scientific and pedagogical debates. Furthermore, education should have good contact with the society within which it functions. Education environments must be characterised by strong collegial fellowships and teaching teams with collaborative cultures. Institutions successful in developing quality cultures attract employees who are more interested in developing and improving teaching, and their employees and students are more contented.⁴²

1.4 The time is ripe for a white paper on quality in higher education

The Government is concentrating on quality throughout the whole of the learning sector – from kindergartens to higher education and research – and has submitted a series of reports and strategies that will contribute to this work and has plans for further reports and strategies (see Box 1.4). The aim is to prepare the country for the future and provide the means for useful learning through-

³⁷Brew 2006; Gunn and Fisk 2013; Hattie 2015; OECD 2016b; Morgan 2014

³⁸Meyer, Land and Ballie 2010; Land, Meyer and Flanagan 2016

³⁹Shulman 2005; Solve 1933; Bandura 1997

⁴⁰European University Association 2006

⁴¹The trio of common understanding, norms and sanctions is taken from Giddens's theory of structuration, in which 'sanction' is used to denote both positive and negative sanctions. Giddens 1984

⁴²Kottman et al. 2016; Bendermacher et al. 2016; Gibbs, Knapper and Piccinin 2009

out life. High-quality education is a fundamental prerequisite for Norway achieving essential expertise.

The quality within the Norwegian university and university college sector is generally respectable, and our best practice compares well with the best practice found internationally. Nevertheless, there is room for improvement.

Several major strategies and reforms within the last fifteen years have led to considerable change in educational activity.

As a result of the Quality Reform of 2003, higher education institutions were given greater autonomy in managing their own activity and taking responsibility for quality in their own teaching and research.⁴³ The Quality Reform was basically an academic reform aimed at increasing the success rate amongst students. Active learning and assessment methods were to be used to a greater extent, and new grading schemes and individual education plans were introduced, enabling student progress to be followed more closely. As part of the Quality Reform, Norway implemented the key elements of the Bologna Process within its higher education system. Nearly fifty different degree designations were replaced with bachelors', masters' and PhD degrees, which were to be offered as contiguous courses of study. Furthermore, in 2002, legal requirements in line with the Bologna Process were introduced for quality assurance systems at institutions.⁴⁴ Increased internationalisation of Norway's higher education system was also an important part of the reform. In addition, the reform led to the establishment of the Norwegian Agency for Quality Assurance in Education (NOKUT) to accredit and inspect quality in education and at institutions receiving greater academic autonomy. The Regulations concerning academic quality in education, first introduced in 2003, have been amended several times, and the current regulations were revised in 2016.⁴⁵ NOKUT set out supplementary requirements for these regulations in the Regulations concerning academic provision.⁴⁶

The National Qualifications Framework for Lifelong Learning (NKR) of 2011 aimed to introduce a fundamental change in the perspective on educational activity. Study programmes would now be described in terms of their learning outcomes – in other words, the kind of knowledge, skills and general competency that students are expected to acquire during the programme. This placed the emphasis on learning rather than teaching, said in another way what are the graduates' competency at the end of their programme rather than what they would do to get to that point (see Chapter 3). Even now this change has not been fully implemented to the extent that it pervades planning and implementation of all education.

Following the introduction of the Quality Reform, higher education institutions did a formidable job of developing new programmes of study. They offered more teaching in smaller groups and

⁴³St.meld. nr. 27 (2000–2001)

⁴⁴Universities and university colleges should have quality assurance systems that ensure continuous improvement, provide satisfactory documentation of work and expose declining quality. See Regulations concerning quality assurance and quality development in higher education and tertiary vocational education

⁴⁵Regulations concerning quality assurance and quality development in higher education and tertiary vocational education (Forskrift om kvalitetssikring og kvalitetsutvikling i høyere utdanning og fagskoleutdanning)

⁴⁶Regulations concerning quality provision in higher education (Forskrift om tilsyn med utdanningskvaliteten i høyere utdanning)

ensured that students received more instruction in writing skills and more frequent feedback.⁴⁷ As a consequence of the National Qualifications Framework, all institutions described learning outcomes for their programmes between 2009 and 2012. In addition, internationalisation is used to a much greater extent than previously as a strategic measure for raising quality in education.⁴⁸ A number of higher education institutions now have their own strategies or plans for international collaboration, and this activity is increasingly connected to quality development work at these institutions.

The Government has been paving the way for increased quality at higher education institutions for a number of years. Report to the Storting No. 7 (2014–2015) *Long-term plan for research and higher education*, Report to the Storting No. 18 (2014–2015) *Konsentrasjon for kvalitet – strukturreform i universitets- og høyskolesektoren (Concentration of quality – structural reform in the university and university college sector)*, adjustments in the financial system for higher education institutions, simplified goal-oriented management and revised regulations for academic quality, are all examples of this.

In 2015, the Government submitted its Report to the Storting No. 18 (2014–2015) *Konsentrasjon for kvalitet (Concentration of quality)*. Its aim is to augment quality in education and research by laying the groundwork for stronger academic environments. The reform has two main strategies. The first is to tighten the requirements for setting up masters and doctoral programmes to ensure they are broader and rooted within stronger academic environments.⁴⁹ The second is to change the structure of the university and university college sector by concentrating resources into fewer, but stronger, institutions. The merging process has led to many institutions becoming more complex and assuming control of larger workforces and higher government grants. This gives institutions greater strategic capacity and a broader scope of action, putting them in a better position to evaluate overall student and societal needs and make strategic priorities at the institution level. Furthermore, the change of structure paves the way for consolidating academic environments that were previously small or inappropriately competing for resources. Hence, the education can then be based on even stronger academic environments and a broader pool of expertise. The boards at merged institutions are responsible for ensuring that mergers create new constellation-style collaborations, result in consequences for the merged academic portfolio and provide openings for innovative and original thinking around content in individual study programmes.

⁴⁷Michelsen and Aamodt 2007

⁴⁸Norwegian Centre for International Cooperation in Education 2013

⁴⁹Regulations concerning quality assurance and quality development in higher education and tertiary vocational education (Forskrift om kvalitetssikring og kvalitetsutvikling i høyere utdanning og fagskoleutdanning)

Box 1.4 Quality across the whole education sector

The Government has submitted, and continues to submit, a series of reports and strategies with the aim of raising quality throughout the whole of the education sector, including: kindergartens, schools, vocational colleges, universities and university colleges, and research teams.

- In Report to St. No. 18 (2014–2015) *Konsentrasjon for kvalitet – en strukturreform for høyere utdanning (Concentration of quality – structural reform in the university and university college sector)*, the Government stated its ambition to enhance quality in education and research by laying the groundwork for stronger academic environments. The main strategies involved merging institutions to concentrate resources in fewer, but stronger, academic environments, while at the same time tightening the requirements for gaining university status and setting up masters and doctoral programmes.
- In Report to St. No. 7 (2014–2015) *Long-term plan for research and higher education*, the framework was outlined for how the Government will reinforce research and higher education to meet the challenges and seize the opportunities in the Norwegian knowledge society in the period from 2015 to 2024. The plan will be adjusted in 2018.
- Meld. St. No. 19 (2015–2016) *Tid for lek og læring – Bedre innhold i barnehagen (Time for play and learning – better subject matter at kindergartens)* concerns the content and tasks of kindergartens and contains the Government's proposals for overarching regulations concerning a new framework plan for content and tasks that will come into force in the autumn of 2017.
- In Report to St. No. 28 (2015–2016) *Fag – Fordypning – Forståelse – En fornyelse av Kunnskapsløftet (Subject – Specialisation – Understanding – a renewal of the Knowledge Promotion Reform)*, the Government proposes to renew subjects in schools to give pupils a deeper and better understanding, as well as giving the broad mission statement for schools a more pronounced position.
- In the autumn of 2015, the Government presented *Panorama* – its strategy for co-operation on higher education and research with Brazil, China, India, Japan, Russia, and South America (2016–2020), these being its priority countries outside of the EU and North America.
- In Report to St. No. 9 (2016–2017) *Skilled Workers for the Future – Vocational College Education*, the Government presented measures for establishing a solid basis for developing quality within the vocational college sector. Academic environments should have up-to-date and practical academic and professional expertise, and vocational colleges should offer education that the working life needs and that students want.
- In the spring of 2017, the Government will submit a white paper on quality in schools.
- In the spring of 2017, the Government will submit a white paper on the humanities.

This white paper on quality in higher education is part of the Government's long-term effort towards quality at all levels of the learning sector and addresses how quality in higher education can be improved. The input papers contributing to the white paper show that higher education institutions are working hard to raise quality.⁵⁰ According to NOKUT, many education environments are investing more and more time and resources into developing teaching methods and analysing their

⁵⁰<https://www.regjeringen.no/no/dokumenter/innspill-til-stortingsmelding-om-kvalitet-i-hoyere-utdanning/id2476318> (see also Appendix 1).

results. NOKUT has also recorded that pedagogical competence is being increasingly emphasised in appointments to and promotions within academic positions.⁵¹ There are many examples of good, innovative study programmes in Norway, where active learning is taken seriously, and where academic environments are continuously developing and improving programmes based on surveys of student results, as well as on student and academic peer feedback. The student barometer (Studiebarometeret) and graduate surveys show that students and graduates on the whole are very satisfied with the quality of study programmes. The majority of graduates do well in the labour market and an increasing proportion of students complete within the nominal length of study.⁵² This positive development has come about at the same time as higher education institutions have been coping with a growth in student numbers of nearly 50% since 2000. All of this demonstrates that a formidable effort has indeed been made.⁵³

Drawing attention to the educational activity within the higher education institutions is not intended to imply that the condition of Norway's higher education sector is in any way bad. On the contrary, there is much to indicate that it is, on the whole, good. Nevertheless, quality must be raised even higher to meet the demands of society and working life. Too little research has been carried out on the important aspects of education quality at higher education institutions. The platform of knowledge is, however, sufficient to show that there is undesirable variation in education quality and a worrying gap between the learning outcomes of many study programmes and the future needs of society and working life. Furthermore, we must continue to develop quality so that graduates from Norwegian institutions are able to assert themselves in a changeable and increasingly international labour market.

Generally speaking, there is room for greater ambitions on behalf of our students. Too few students encounter study programmes that motivate them to spend time on their studies, or which encourage them to reflect and debate with their fellow students. In a quality report compiled by a national student body, students express high expectations that quality in Norwegian higher education should increase.⁵⁴

⁵¹NOKUT 2016a

⁵²Støren et al. 2016; Arnesen, Støren and Wiers-Jenssen 2013; Damen et al. 2016b; The Norwegian Association of Higher Education Institutions 2015

⁵³See Ministry of Education and Research 2016 for elaboration on the status of higher education

⁵⁴Norwegian National Union of Students (Norsk studentorganisasjon) 2016

Box 1.5 Government measures for raising quality in primary and secondary school teacher education

- As of the autumn of 2017, the Government is introducing master's level education for primary and secondary school teachers. The education will be offered in all school subjects. The education will be more ambitious, and give the candidates the necessary education to search out and use research-based knowledge. The institutions offering the teacher education will prioritise Norwegian, English, Mathematics, Sami, and Norwegian Sign Language as subject areas. The master's degree content will be profession- and practice-oriented and relevant to work in schools.
- National guidelines for the primary and secondary school teacher education have been drawn up, and will form the basis of the teacher education given by the higher education institutions. The guidelines will provide a national standard for teacher education.
- As part of a pilot project, national examinations in mathematics for primary and secondary school teacher education have been launched. The project will demonstrate the connection between entrance requirements, performance and the student's academic level for the various teacher education courses. The project will provide a basis for further development of education in this area.
- The entrance requirements for primary and secondary school teacher education have been tightened. A minimum upper secondary school mathematics grade of 4.0 has been introduced to qualify for the teacher education. This is based on the connection between student grades on entry, level of ambition and final grade in teacher education courses. The aim is to recruit students with strong academic profiles and reduce the dropout rate.
- Fifty-one dedicated recruitment positions have been assigned to build senior lectureship expertise into teacher education. The NAFOL research school has been augmented to assist with offering high-level research training in teacher education.
- From the autumn of 2019, a requirement for a master's degree for entry into the one-year programme in educational theory and practice will be introduced. The reason for this is the Government's desire to increase the number of school teachers with a master's level education.
- Strategy work involving the kindergarten and school sector as well as teacher education providers has been initiated with the aim of finding a common direction and common measures for enhancing quality in Norwegian teacher education. The strategy has a ten-year perspective and will be launched in 2017.
- Separate national curriculum regulations have been determined for Sami teacher education.

There is potential for improvement in several areas:

- Students on several study programmes receive good grades in spite of a relatively low time commitment and weak entrance grades, and the students on average spend less than the normally accepted time on their studies. Furthermore, there are significant variations in marking between institutions and subjects, pointing to an inconsistency in academic standards.⁵⁵

⁵⁵Strøm et al. 2013; Hamberg and Tokstad 2015, 2016a, 2016b, 2016c

- Improving completion rates has long been a goal of education policy. So far, this goal has only been partially achieved, even though development within recent years has been positive.⁵⁶
- A number of study programmes lack completeness and coherence. Many consist of dissimilar subjects that appear to have no obvious connection. Study abroad and working life contact are not always well integrated into programmes, and there is evidence to suggest that the mandates of many programme co-ordinators are unclear.⁵⁷
- Active learning methods are not used to a sufficient degree, and plenary lectures and traditional forms of examination continue to dominate. Teaching, tutoring and assessment are amongst the areas attracting the lowest scores from students in the student barometer survey.⁵⁸
- Nine out of ten students report that digital tools are important for supporting their daily studies, but only half believe that they help to improve their learning. There is much evidence to suggest that digital learning support systems are more successful at administering learning than supporting the learning itself. In very few cases are institutions establishing their use of digital tools in programme descriptions, course descriptions and work requirements.⁵⁹
- There is currently too little attention paid to ongoing development of pedagogical competence in academic staff in combined positions. It is more expedient for one's career to concentrate on research than on education and the development of new teaching practices and study programmes.
- Many academic employees are dissatisfied with how institutions accommodate for and encourage education quality. Academic managers generally give little feedback on teaching jobs.⁶⁰

The input papers contributing to the white paper mostly confirm these challenges.

Enhancing quality in higher education demands continuous work over the long term. Now, almost fifteen years after the Quality Reform and six years after the introduction of the National Qualifications Framework, the time is ripe to take the work on education quality a significant step further. This white paper deals with how quality in higher education can be further enhanced.

1.5 The Government's quality initiative

In order for Norway to transition successfully and solve the significant challenges that stand before us, higher education institutions must collectively meet society's higher education needs, both in the short and long term. Ensuring that students get the maximum out of their time in higher education is an important part of that.

⁵⁶Ministry of Education and Research 2016a

⁵⁷Aamodt, Hovdhaugen and Stensaker 2016; Solbrekke and Stensaker 2016

⁵⁸Damen et al. 2016b

⁵⁹Norgesuniversitetet 2015

⁶⁰Aamodt, Hovdhaugen and Prøitz 2014; Haakstad and Nesje 2012

The objectives for this report are that:

- all students should have access to demanding and engaging programmes of study
- all students should be met as responsible participants in their own learning and become well integrated into the social and academic environments
- programmes of study should have clear learning objectives and good completeness and cohesion
- all students should experience stimulating and varied learning and assessment methods that exploit digital opportunities
- programmes of study should be developed in collaboration with working life
- all students should encounter teachers with good academic and pedagogical competence
- academia should place greater value on education and teaching

Education quality comes about in encounters between students and teachers, between teachers, and between the students themselves. If education quality is to be raised, this is precisely where the change needs to take place. The key to raising quality lies in the higher education institutions, together with their academic environments, having ownership of the measures to be implemented, and the authority to customise new measures according to various institutional needs. Therefore, this report builds on a recognition that quality in higher education is, in the main, created at a local level and is culturally dependent, while measures and framework conditions implemented by the government can lay the groundwork for local quality-directed work.

In order to deliver education of high quality, higher education institutions must enjoy academic freedom, and the reforms of recent years have indeed led to greater academic freedom and responsibility for the institutions. According to the Act relating to Universities and University Colleges, institutions may not be issued with decrees or instructions regarding the content of teaching, research or artistic and academic development work. There are two justifications for autonomy and academic freedom: one is ideological and the other instrumental. The ideological justification is based on the recognition that a liberal democracy is inconceivable without academic freedom and academically strong higher education institutions. The instrumental justification is that academic freedom is fundamental for such complex organisations with a diversity of programmes of study being able to drive good-quality development and new thinking.⁶¹ Higher education institutions are organisations of learning, in which academic decision-making authority must be distributed.

With academic freedom comes academic responsibility.⁶² This involves higher education institutions having responsibility for identifying societal needs and responding to those needs, combined with an ongoing critical regard for quality and relevance in their own establishments. Higher education institutions should ensure good access to higher education and facilitate a diverse student population succeeding in their programmes. University and university college boards should ensure that a high level of quality is maintained in academic enterprise, and that educational institutions develop their portfolio of programmes of study in dialogue with society and working life, with an eye to meeting skills demands in the short and long term.

⁶¹OECD 2016b

⁶²Kennedy 1999

The connection between autonomy and academic quality does not release higher education institutions from political responsibility. Management must balance the need for autonomy and academic freedom against its responsibility towards society and towards the sector as a whole. The premise for managing higher education institutions is based on achieving a good balance between trust and control. The Government must have a clear role in developing the overarching objectives for educational activity, and must have the authority to monitor that these objectives are met, to evaluate the need for changes and to make sure that the outcomes for students and society are satisfactory.

In light of the academic freedom and responsibility given to universities and university colleges, this white paper addresses, in the main, specific expectations regarding the work on education quality carried out by universities and university colleges. The Government will actuate the work on education quality by empowering and supporting institutions in their own work.

At an overarching level, the Government expects clear strategic and collegiate responsibility at every level in higher education institutions towards education quality. Quality work must be clearly entrenched across the whole institution from the governing board and rectorate level down to the individual academic programme level. The Government expects more openness and discussion around the development of good education within academic environments and institutions, and more collaboration across higher education institutions. Learning resources should, to the greatest possible extent, be openly accessible by all, including those outside of the institutions. If higher education institutions do more to document and research their own educational activity, the body of knowledge pertaining to quality in higher education will increase.

The Government has outlined four principal approaches in this white paper for encouraging higher education institutions, and their respective academic environments, to reinforce their quality cultures and perform ongoing quality work.

- The Government requires the higher education institutions to develop pedagogical merit systems to encourage more teaching initiatives and to reward important development work. Merit systems should promote education quality by remunerating academic employees according to documented results. One of the goals of this white paper is to raise the status of educational activity and place greater value on teaching competence than it currently enjoys, not just at the appointment stage but from a career perspective.
- The Government expects peer review and peer mentoring of teaching and education to be used to a greater extent than is currently the case, and considers this to be essential for reinforcing a quality culture. The higher education institutions are responsible for facilitating this, but the Government will encourage greater use of peer review across institutions.

- The Government will set up a national competitive arena for quality in education by assembling a portfolio of tools in order to encourage knowledge, competence and innovative work in developing education. In the finance model, education incentives are mainly located at system level. Research incentives are, to a much greater extent, channelled to researchers and research groups through project grants on the basis of peer review, and the Government believes that such incentives play an important role in quality development in research. The Government will therefore employ similar measures in the area of education.
- The Ministry of Education and Research will set up a quality portal to collect indicators and relevant knowledge sources in one place. This will make it easier to find information on activities and results at the programme of study level at higher education institutions. Open and accessible knowledge concerning education quality contributes to quality development and confidence in the education system, and is essential for facilitating more research on what works in higher education.

In addition to these main approaches, the Government has several expectations and measures that, collectively, will meet the quality demands.

Part two of the white paper gives more detail on the areas that the Government believes to be essential for raising quality in higher education. The following comprises a complete summary of the Government's expectations of higher education institutions concerning their work on raising quality in higher education, and the measures that the Government will implement in order to realise these expectations.

A good study experience: Chapter 2

In order for students to succeed in their studies, they must be happy and enjoy good living conditions and an effective and inclusive learning environment. Recruiting motivated and qualified students is possible if the groundwork is laid for helping them to make informed education choices. In order to facilitate successful transitions along the educational pathway, higher education institutions must communicate what is expected and demanded of students in higher education, and participate in discussions regarding the content of upper secondary education.

Therefore, the Government expects:

- higher education institutions to facilitate a diverse student population succeeding in their studies
- good dialogue, with clarification of expectations, between upper secondary education, vocational colleges, and higher education institutions in order to ensure good education choices and successful transitions between educational levels
- institutions to continue working towards reducing undesirable dropout rates and improving completion rates
- good dialogue between host municipalities, higher education institutions, and student organisations in order to prevent loneliness and mental health problems.

Therefore, the Government will:

- give higher education institutions the opportunity to set special entrance requirements for programmes of study
- make it possible for anybody wishing to continue in education to make good choices by making information on programmes of study and future skills needs easily accessible

- monitor institutions to ensure they are developing long-term strategic plans to future-proof their campuses
- evaluate how subsidy schemes can be set up through the Norwegian State Education Loan Fund to encourage progression and completion of degrees. The Government will also evaluate how schemes can respond to, as far as possible, the needs resulting from future changes in the student population and labour market.

An education that provides good learning: Chapter 3

Study programmes must be complete and cohesive. Integration of working experience, internationalisation and collaboration with the working life must be customised to the specific programme. Students must receive teaching, feedback and assessment that is energising and engaging, that is based on research and that clearly corresponds to the set learning outcomes. The most gifted and motivated students must receive special options to enable them to fulfil their potential.

Therefore, the Government expects:

- university and university college boards to give priority, first and foremost, to develop study programmes in those areas where they have an adequate research base
- academic environments to create effective and binding descriptions of the knowledge, skills and general competence that students will achieve on completion of their programme
- all programmes of study at bachelor's and master's level to give students insight into how knowledge evolves and is validated in the various disciplines included in the programme, and what constitutes recognised academic and scientific practice in those disciplines
- higher education institutions to have good interaction with social and working environments at both programme of study and institution levels, and programmes of study and descriptions of learning outcomes to be designed in collaboration with the working life
- learning and assessment methods to support in-depth learning and enabling students to achieve the set learning outcomes
- institutions to conduct considerably more research into their own education provision and facilitate more collaboration and sharing of learning resources across higher education institutions
- institutions to raise the development of digital solutions to the strategic level and define goals and measures in connection with the digitisation of learning processes
- institutions to set ambitious goals for student exchange opportunities in programmes of study and to follow up on these ambitions in practice

Therefore, the Government will:

- expect institutions to review study programmes to ensure good coherence between learning outcome descriptions and teaching and learning activities, internationalisation options and assessment methods
- make it a requirement to include examiner guidance for all examinations
- encourage the development of options for the most gifted and motivated students, including the incorporation of research options into programmes of study

Placing value on pedagogical competence: Chapter 4

Delivering good education is something that should lead to recognition for academic employees and help strengthen their careers. Higher education institutions must develop systems that help to value good teachers. They must also enhance quality culture and academic fellowship in education. More emphasis should be placed on teaching qualifications and teaching experience when appointing and promoting staff.

Therefore, the Government expects:

- good and effective development and utilisation of the collective competence of employees

Therefore, the Government will:

- revise the regulations concerning appointments and promotions in combined teaching and research positions. Basic pedagogical competence and teaching experience must be taken into account when appointing to all academic positions, and there will be successively greater teaching competence requirements for professor positions
- make it a requirement for all institutions to ensure that new employees, who have not achieved basic pedagogical competence during their education and work experience, are employed on the condition that they acquire the necessary competence within one year
- make it a requirement for all higher education institutions within two years, either alone or in partnership with others, to establish merit systems, which place value on work to develop good teaching
- in partnership with the institutions and organisations, assess the value of a position such as ‘Professor of Practice’
- continue the work on comparing the structure of academic positions and career opportunities with systems in other countries and consider the need for changes within the Norwegian system

Education quality requires academic collaboration and leadership: Chapter 5

Developing good education is the responsibility of management and the academic environments. It requires effective collaboration between academic environments and the will and ability to prioritise education quality at all levels. Quality and quality culture evolve, and are encouraged, through collaboration and competition alike.

Therefore, the Government expects:

- boards and management at all levels of higher education institutions to have high ambitions for educational activity and to prioritise education quality in resource allocation, strategies and communications
- academic environments to develop the education collaboratively and institutions to ensure that peer review and peer mentoring become a normal part of quality work
- study programmes to be administered by management with clear mandates and sufficient strategic latitude to ensure that programmes are complete and coherent.

Therefore, the Government will:

- encourage increased use of peer review across institutions
- develop a national competitive arena for quality in education to encourage knowledge, competence and innovative work in education.

Directing education quality: Chapter 6

The reforms of the last ten years have contributed to greater independence for higher education institutions, and the Government wishes to continue this development. Higher education institutions must collectively meet society's skill requirements in both the short and long term. Autonomy carries with it a significant institutional responsibility for quality in education. Quality work carried out by institutions must involve both academic employees and students. The academic autonomy enjoyed by institutions does not release the managerial boards of higher education institutions from political responsibility. Research, evaluation and good documentation are necessary for ensuring the effective results of initiatives and the transparency of results.

Therefore, the Government expects:

- academic activity and educational provision to maintain an acceptable academic level and boards to ensure the consolidation of academic environments where necessary
- higher education institutions to collectively utilise the opportunities provided by the new institutional structure to co-ordinate and collaborate on educational provision
- higher education institutions to make information on their programmes of study accessible in order to increase transparency
- higher education institutions to make a considerably greater investment in research into and the development of their own education and teaching practice.

Therefore, the Government will:

- use performance agreements to help improve task sharing in the university and university college sector and to support any necessary strategic measures at individual institutions
- gradually reduce the use of national curriculum regulations and hand over the development of learning outcomes to a collaboration between education and the working life
- facilitate a dialogue on and good processes for strengthening collaboration on the collective national education provision
- strengthen the platform of knowledge for quality work using, amongst other things, research on teaching and learning in higher education
- develop a higher education portal providing programme of study level indicators using data from a number of different sources.