



Norwegian Ministry  
of Education and Research

Strategy

# Teacher Education 2025

National Strategy for Quality and Cooperation in Teacher Education



# Overview Teacher Education Institutions in Norway

## ● University of Tromsø -The Arctic University of Norway (231)

**Campus Tromsø** BLU, GLU 1-7 and 5-10, Lektor, PPU

**Campus Alta** BLU, GLU 1-7 and 5-10 (Hammerfest, Kirkenes, Storslett), PPU-Y

## ● Sàmi University of Applied Sciences (17)

BLU, GLU 1-7 and 5-10

## ● Nord University (433)

**Campus Bodø** BLU, GLU 1-7 and 5-10, Lektor, PPU, PPU-Y

**Campus Levanger** BLU, GLU 1-7 and 5-10, Lektor, PPU, PPU-Y

**Campus Nesna** BLU, GLU 1-7 and 5-10 (Mo i Rana, Namsos, Vesterålen)

## ● Norwegian University of Science and Technology (593)

GLU 1-7 and 5-10, Yrkesfaglærer, PPU, PPU-Y, Lektor

## ● Queen Maud University College (220) BLU

## ● Volda University College (204)

BLU, GLU 1-7 and 5-10, PPU, PPU-Y

## ● University of Bergen (136)

Lektor, PPU

## ● NLA University College (97)

BLU, GLU 1-7 and 5-10

## ● Western Norway University of Applied Sciences (810)

**Campus Bergen** BLU, GLU 1-7 and 5-10, Faglærer, PPU

**Campus Sogndal**

BLU, GLU 1-7 and 5-1, PPU

**Campus Stord**

BLU, GLU 1-7 and 5-10, PPU

## ● University of Stavanger (336)

BLU, GLU 1-7 and 5-10, Lektor, PPU

## ● Inland Norway University of Applied Sciences (361)

**Campus Hamar** BLU, GLU 1-7 and 5-10, Lektor, Faglærer, PPU

**Campus Elverum** Faglærer

## ● Oslo Metropolitan University (968)

**Campus Oslo** BLU, GLU 1-7 and 5-10, Faglærer

**Campus Kjeller** Yrkesfaglærer, PPU-Y

## ● University of Oslo (409) Lektor, PPU

## ● The Norwegian School of Sport Sciences (39) PPU, Faglærer

## ● Norwegian Academy of Music (26) PPU

## ● Rudolf Steiner University College (12) BLU, 3-year teachered.

## ● Oslo National Academy of The Arts (11) PPU

## ● Norwegian School of theology (10) Lektor

## ● Barratt Due Institute of Music (8) PPU

## ● Norges miljø- og biovitenskapelige univ. (91) Lektor, PPU

## ● Høgskolen i Sørøst-Norge (740)

**Campus Vestfold** BLU, GLU 1-7 and 5-10, Lektor

**Campus Ringerike** PPU

**Campus Porsgrunn** BLU, GLU 1-7 and 5-10

**Campus Notodden** BLU, GLU 1-7 and 5-10, Faglærer, PPU

**Campus Kongsberg** Lektor

**Campus Drammen** BLU, GLU 1-7 and 5-10

## ● Østfold University College (262) BLU, GLU 1-7 and 5-10, PPU, PPU-Y

## ● University of Agder (392)

**Campus Kristiansand** BLU, GLU 1-7 and 5-10, Faglærer, Lektor, PPU, PPU-Y

**Campus Grimstad** BLU

### EXPLANATION:

BLU = Kindergarten teacher education

GLU 1-7 and 5-10 = Primary and lower secondary teacher education

PPU = Postgraduate programmes in educational theory and practice for subject teachers

PPU-Y = Postgraduate programmes in educational theory and practice for subject teachers in vocational subjects

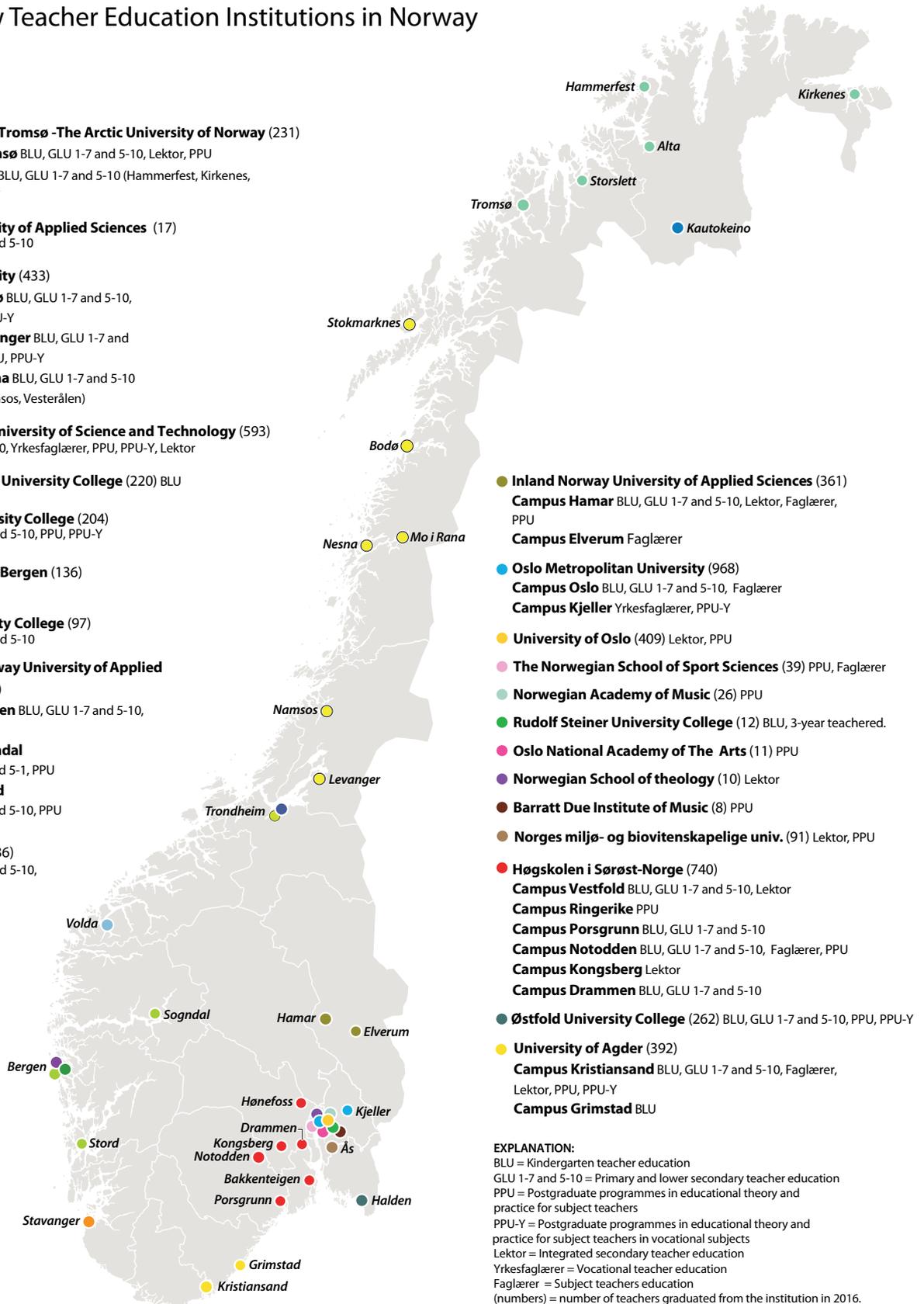
Lektor = Integrated secondary teacher education

Yrkesfaglærer = Vocational teacher education

Faglærer = Subject teachers education

(numbers) = number of teachers graduated from the institution in 2016.

Number of graduated teachers 16.02.17 Source: DBH nyhetsgrafikk.no



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Photo: Yina Chan

# 1

## Teacher education programmes for the kindergartens and schools of the future

Few things have a greater long-term impact on quality in kindergartens and schools than teacher education. Teacher education programmes not only provide teachers with subject knowledge and pedagogical methods; they shape the Norwegian teaching professions' fundamental outlook on learning and formation – and consequently the quality of every activity taking place in our kindergartens and schools. The attractiveness and prestige of teacher education programmes also help determine who seeks to join the profession.

Teacher education has been a subject of debate in Norway ever since the teaching profession rose to become a central vocation during the nation-building process in the 19th century. Since then, different traditions have left their mark on teacher education in Norway. The so-called seminary tradition has been important in training primary and, more recently, lower secondary school teachers, while the academic tradition has given both the lower and upper secondary school teachers university-level qualifications.<sup>1</sup> Kindergarten teacher education in Norway is rooted in a social and pedagogical tradition close to the field of practice.<sup>2</sup> The various educational pathways for vocational teachers have a history that builds on the apprenticeship tradition and the guild tradition, among other things.<sup>3</sup> Each with its own particular traits and strengths, the different traditions have partly existed side by side in separate parts of the education system, partly enriched each other, and in some instances been critically opposed to each other.

One common denominator for all teacher education programmes covered by this strategy is that they

educate professional practitioners. Teachers need to acquire solid, research-based skills and to have access to continued professional development within a professional learning community in order to make informed decisions in their day-to-day work in kindergartens and schools. It is the duty of teacher education providers to give teachers a good grounding as they set out to practise their profession.

It is the government's ambition to permanently strengthen the Norwegian teaching professions. The investments being made now are important in order to prepare for a future in which knowledge and competencies will become increasingly important. The aim is for kindergartens and schools to draw on the teaching professions' own professional strengths to enhance quality.

The impact of teacher education on the teaching professions has been highlighted in several policy documents, in particular in the strategy *Promotion of the Status and Quality of Teachers*. The government has addressed the major challenges in this area through improvement of the institutional structure, elevation of primary and lower secondary teacher education (GLU) to the master level, large investments in a robust national system for continuing education, introduction of more rigorous entry requirements for teacher education programmes for both the primary and the secondary level, as well as the requirement, effective from 2019, that candidates for the 1-year programme in educational theory and practice (PPU) must hold a master's degree.<sup>4</sup> The advisory committee on the kindergarten teacher education programme (BLU) will publish its final report in 2017. The report will be an impor-

1 Dahl et al. 2016

2 NOKUT 2010

3 Skagen 2004

4 Except for vocational and arts subjects

tant source of information in the effort to improve the quality of this programme.

This strategy continues and reinforces established policies in the field. The quality improvements being made to primary and lower secondary teacher education programmes also continue to build on initiatives introduced by past Ministers of Education and Research. One important step was the division of the former general teacher education programme into separate programmes for years 1–7 and 5–10. Increased funding has also been provided.

The strategy brings together central themes from ongoing processes in different parts of the education system, sets out long-term goals for the continuing process to develop teacher education programmes, and launches measures in key areas in which the government continues to see challenges and possibilities. The strategy also responds to recommendations made by the expert panel on the role of the teacher appointed by the Minister of Education and Research in 2015.<sup>5</sup>

The aim of this national strategy is to lay the basis for attractive teacher education programmes of high quality. It is a goal to have academically strong and well organised teacher education providers. The study programmes must be perceived to be academically challenging and rewarding by both staff and students. In line with White Paper No. 16 (2016–2017) *Quality Culture in Higher Education*, the strategy expresses an ambition for less micromanagement by central government, focusing instead on setting out clear expectations and establishing relationships of trust. One goal for the period up until 2025 is that the combined quality processes taking place in relation to the teacher education programmes – which include good central co-ordination and improved cooperation with the field of practice – should lead to a reduction in the use of national curriculum regulations to a minimum level, something that the expert panel on the role of the teacher and others have recommended.

The strategy places particular emphasis on the way in which the quality of teacher education relies not only on the efforts made by the education providers themselves but also on quality contributions from the kindergartens and schools that provide supervised professional training for student teachers and where they will later take up employment. These institutions must be conscious of their role as teacher educators and possess the necessary

expertise – both as arenas for practice and as employers of newly qualified teachers.

A central measure in the strategy is to establish partnerships between teacher education programmes and school and kindergarten owners in order to create *teacher education schools* and *teacher education kindergartens*. A national framework for these partnerships will be developed. Investment in *teacher education schools* and *teacher education kindergartens* will ensure practice training of a high standard, improved cooperation in the field of research and development, increased use of dual positions (experienced teachers lecturing part-time on campus, and academic faculty working part-time in kindergartens or schools), and continuing quality development of the teacher education programmes based both on research and on the long-term needs of the kindergartens and schools. This measure will build on existing partnership models such as university schools and training kindergartens. Improved cooperation will also help ensure that teacher education providers offer relevant in-service training and continuing education.

A main aim of the strategy is to unite and mobilise everyone involved in teacher education. The Norwegian government has therefore been committed to involving the most relevant stakeholders in drawing up the strategy. These stakeholders all stand behind the long-term goals for teacher education in the period leading up to 2025 (see Chapter 2). There is also broad recognition of the need for a close and constructive dialogue between the national education authorities, teacher education institutions, kindergarten and school owners, the teaching profession and other stakeholders to ensure that the various strategies and measures underpin each other.

5 Dahl et al. 2016

# 2

## Overarching goals for the year 2025

The expert panel which published the report *On the Role of the Teacher* in 2016 recommended that Norwegian education policy formulate “a few good and consensual goals”.<sup>6</sup> For several reasons, including the large number of actors involved in teacher education, it is especially important in this field to adopt a long-term approach and to establish a set of overarching goals that have broad support.<sup>7</sup>

In the process of developing this strategy the Ministry has therefore involved relevant stakeholders in the higher education, kindergarten and school sectors. The strategy sets out four main goals with

associated descriptors for the period leading up to 2015. These are long-term and general goals in that they are designed to provide guidance for the stakeholders adopting them while also leaving room for creativity and local adaptation. The goals apply to every Norwegian teacher education programme regulated by national curriculum regulations. They will be reached through measures instigated by the universities, university colleges, kindergarten and school sectors themselves and through the politically initiated processes described in Chapter 3 as well as the new focus areas described in Chapter 4.

### 1. Academically challenging and rewarding study programmes

- a. Well qualified and motivated applicants
- b. Improved gender balance among the students
- c. A diverse student population that better reflects outside society
- d. Less detailed national curriculum regulations than is currently the case
- e. Teaching based on high-quality research which is relevant to the teaching profession
- f. Teaching methods that involve the students actively in the learning process
- g. Experience-based and research-based practice training as an equally important part of the study programme
- h. Professional orientation and coordination between the different elements of the study programme

### 2. Academically strong and well organised teacher education providers

- a. High level of academic expertise in relevant areas – on a par with highly regarded teacher education institutions internationally
- b. Teacher education staff with a high level of professional expertise and up-to-date experience from the field of practice
- c. Improved digital skills relevant to the profession and increased internationalisation
- d. Clear leadership and functional organisation suited to the objectives of the education programmes

6 Dahl et al. 2016

7 EU 2015

### 3. Knowledge-based and involved partners in the kindergarten and school sectors

- a. A high level of expertise in research-based development for the education sector among kindergarten and school owners, leaders and teachers
- b. Active professional learning communities in kindergartens and schools that work systematically on professionalization, including adequate induction of all newly qualified teachers into the professional communities
- c. Comprehensive and competent representation of the kindergarten and school sectors in the development of national policy for teacher education

### 4. Stable and mutually beneficial cooperation between teacher education institutions, the kindergarten sector and the school sector

- a. Cooperation with particular focus on the core tasks and societal mandate of the teaching profession
- b. Regular research and development collaboration between teacher education institutions and the kindergarten and school sectors
- c. Systematic cooperation regarding the students' bachelor and master theses
- d. Structures and arenas for long-term cooperation on all levels
- e. Mutual commitment and respect for each other's contributions to the partnerships



Photo: Benjamin A. Ward / HiOA

# 3

## Developments and challenges

### A period of transition

Teacher education programmes in Norway have seen many changes since the 2003 Quality Reform. The changes have been driven partly by new research, partly by political ambitions and partly by development initiatives instigated by universities and university colleges. Teacher education programmes must reform in step with developments in both kindergartens and schools, as well as in higher education. The programmes therefore have to be ready to change almost continuously.<sup>8</sup>

The reforms were also the result of low quality in many programmes – as uncovered by several evaluations.<sup>9</sup> Opinions vary on the reasons behind these quality challenges. Political decision-making, disagreements on academic and professional issues, and various organisational and cultural aspects have all played a part. In order to meet the challenges a number of measures have been taken. For several years now, these measures have put teacher education programmes under considerable pressure. For instance, entry requirements have changed, and standardised national exams have been introduced in part of the mathematics curriculum to assess the mathematics level and comparability of the grades awarded at the different institutions. At the same time, many of the institutions are preparing to offer primary and lower secondary teacher education programmes at master level. Each of these measures has been deemed to be necessary, but taken together they put a great deal of pressure on the teacher education programmes to reform. This strategy aims to set out a consistent framework for teacher education programmes over time.

The institutions are now working resolutely to raise the quality of their teacher education programmes. Many of the programmes have gained valuable experience through various pilots, and there are high ambitions for improved quality and relevance across the board. The current government has taken several major, structural measures in order to help create a lasting quality boost. In the following a brief account is given of some of the most important reforms, emphasising the relevance of each process to the teacher education programmes. A more detailed description of the processes and relevant documents can be found in Appendix 3.

### Changes in higher education

Mergers in the higher education sector have concentrated resources in fewer, but stronger academic entities.<sup>10</sup> The number of teacher education institutions has been reduced from 28 to 18. The mergers mean that teacher education providers and programmes now have access to more academic staff within their respective institutions, and they are better placed to see different study programmes in relation to each other.

Primary and lower secondary teacher education programmes at master level will be introduced in the autumn of 2017. Academic ambitions are high. The candidates will be better prepared to find and use research-based knowledge. The master's thesis will be professionally oriented, based on experience and relevant for work in schools. Programmes at

8 Dahl et al. 2016

9 Network Norway Council 2002, NOKUT 2006, NOKUT 2010

10 White Paper 18 (2014-2015) *Consolidation for Quality – structural reform in the higher education sector*

the master level mean higher demands for the academic staff than previously, and the government has offered research scholarships to enable staff members to attain the necessary R&D qualifications.

New national curriculum regulations for the 1-year programme in educational theory and practice (PPU) have been adopted, and in 2019 the entry requirements for the programme will change to a master's degree – except in vocational and arts subjects.

White Paper No. 16 (2016-2017) *Quality Culture in Higher Education* paints a picture of the broader challenges in higher education that is very much consistent with what faces teacher education providers: It is necessary to have much higher ambitions for the students, to boost completion rates, to improve consistency and coherence in the programmes, and to place greater emphasis on making necessary pedagogical adjustments. The main recommendations of the white paper will also have a direct impact on teacher education programmes. High-quality teaching will be rewarded through the development of new academic merit systems. The quality of the education programmes will be enhanced by way of peer reviews and peer learning. A national competitive arena for funding of excellence in education will help enhance knowledge, expertise and innovation in the education programmes. Setting up a portal with competence descriptions for the candidates will also contribute towards quality development and help generate trust in the system.

## Changes in the kindergarten and school sectors

New national curriculum regulations for kindergartens are coming into effect in the autumn of 2017. A revision of the subjects in primary and secondary education is under way, and new curricula will be adopted in 2019. Both these processes will have an impact on the content of teacher education, continuing education and in-service training programmes.

The government is looking to introduce a new model for quality enhancement in schools through upgrading of competencies.<sup>11</sup> Government funding for quality enhancement will increasingly be channelled through local authorities rather than government schemes. In this way, the initiatives can be better adapted to suit local needs and capacity.

Teacher education providers will play an important role in developing content for quality enhancement initiatives in close and long-term cooperation with school owners and professional learning communities in schools and in dialogue with the county governor. The provision should be school-based wherever possible. The Ministry is currently reviewing the competence strategy for kindergartens and will assess how workplace learning in kindergartens is organised in light of the decentralised arrangement that exists in schools.

One important initiative in recent years has been increased funding for continuing and further education for teachers and other employees in both kindergartens and schools. Through the strategy *Competencies for Tomorrow's Kindergartens 2014-2020*, the government has redoubled its efforts to enhance the qualifications of all categories of kindergarten staff. In schools, the number of continuing education places has trebled thanks to the *Competencies for Quality* strategy.<sup>12</sup> New continuing and further education programmes have been developed through the *Vocational Teacher Promotion* strategy, and a dedicated programme to train specialist teachers has been launched.

Teacher education institutions are the biggest providers of competency development services in schools and will be important partners when developing new services in both continuing and further education. Together with other actors in the higher education sector they must ensure that the provision is of a high standard and that content is updated when major changes occur in kindergartens or schools.

## Remaining challenges

Together, the processes described above represent a significant boost for teacher education in Norway and for the Norwegian teaching profession. If the potential inherent in the high ambitions of the institutions and the policy processes mentioned here is successfully realised, it is not an unrealistic goal that Norwegian teacher education programmes should be able to compete with the country's most attractive, respected and demanding professional study programmes. This will have a major impact on professional development in Norwegian kindergartens and schools. When overseeing

11 White Paper 21 (2016-2017) *Wanting to Learn – early intervention and quality in schools*

12 Ministry of Education and Research 2013 and Ministry of Education and Research 2015a

the various processes, it is important to look out for opportunities to improve coherence and coordination – both institutionally and within the individual study programmes. It is particularly important to view the entire education system as a whole – from kindergarten to higher education.

Although the higher education institutions are working hard to improve quality, it takes time to implement reforms in practice, and there will be obstacles along the way. There are challenges in several areas, partly because of inherent tensions as described in international literature on teacher education.<sup>13</sup> The expert panel on the role of the teacher has recommended that policy design in the field should aim to be candid about such tensions and the challenges they pose, in order that they may be dealt with as constructively as possible.<sup>14</sup> Recognising this, the strategy pays particular attention to three important areas where there are still challenges to overcome:

### **1. Relevance for professional practice**

A recurring question for most teacher education programmes has been their relevance for professional practice.<sup>15</sup> Campus-based education and practice training in the workplace have unfortunately been treated as two unconnected domains. Academic staff at the teacher education institutions have not been sufficiently focused on the actual challenges that exist in kindergartens and schools. Two quantitative studies on the perceived quality of teacher education programmes have shown that school leaders and training supervisors in the workplace rate the teacher education programmes lower than do the teacher training institutions themselves.<sup>16</sup>

In a new qualitative study on the same topic, many of the informants working in kindergartens and schools assert that students and newly qualified teachers have insufficient knowledge about cooperation between school, home and other institutions, adapted learning and assessment, motivation, group processes and management and organisational development.<sup>17</sup> There is also a need for more advanced digital skills in the profession to enable teachers

to assess and exploit the new working and learning methods offered by digital tools.<sup>18</sup>

The teacher-pupil relationship is one of the factors with the greatest impact on pupils' learning outcomes.<sup>19</sup> This relationship is also important when dealing with bullying, mental health issues and pupils dropping out of school. Such relational skills are especially difficult to acquire theoretically in a teacher training programme. The practice period and good mentoring in the early stages as a newly qualified teacher are therefore important for strengthening these skills.

While many teachers and heads of schools and kindergartens feel that they are not sufficiently involved in the design of study programmes, several teacher education providers have stated that it is sometimes difficult to get them involved. The BLU and GLU advisory groups point to a positive trend in terms of interaction in recent years, including pilot university schools, training kindergartens and dual positions at some institutions.<sup>20</sup> With regard to PPU, no up-to-date research-based evaluations exist, but there are indications that the quality of the practice training and the relevance of the teacher education programmes to professional practice need to be bolstered.<sup>21</sup> The gap between campus and the world of work generally remains too wide.

### **2. Research basis**

Like other higher education programmes, teacher education shall be research-based. Among other things, this implies that the teaching and teaching materials must be based on recent national and international research in the subject disciplines, pedagogy, didactics and teaching practice. The teacher education institutions must possess a high level of research expertise to be able to contribute to more R&D in kindergartens and schools. At the same time it is important to acknowledge the value of structured, experience-based knowledge.

Norwegian teacher education institutions have a relatively short tradition of conducting research. The level of research qualifications among the

13 Hammerness and Klette 2015

14 Dahl et al. 2016

15 NOKUT 2006, NOKUT 2010, Finne et al. 2011, Finne, Mordal and Stene 2014, Dahl et al. 2016

16 Finne et al. 2011, Finne, Mordal and Stene 2014

17 Finne, Mordal and Ullern 2017

18 Tømte, Kårstein and Olsen 2013

19 Hattie 2009

20 Munthe et al. 2015, Bjerkestrand et al. 2016

21 NOKUT 2013

staff has been improved in recent years, partly through programmes such as PRAKUT and FINNUT and partly as a result of preparations for the GLU master programme.<sup>22</sup> Master's theses produced in the GLU programme will also broaden the scope for more and better research taking place in the teacher education institutions. This will require both good research-based supervision of the students and practical and professional cooperation with the kindergartens and schools about which the students will be writing their theses. It will also be important to involve students in larger research projects – both for academic reasons and in order to better co-ordinate the students' interaction with kindergartens and schools.

The effort to enhance research qualifications among the staff of teacher education institutions is a long-term process. Surveys have found that there is insufficient research taking place in, and centred on, the teacher education institutions, and some of the research that exists has methodical weaknesses.<sup>23</sup> Furthermore, existing research is not sufficiently linked to the field of practice and is therefore not always as relevant as it should be. The quality of the applications submitted to the Research Council of Norway has improved in recent years, but many of them are still inadequate.<sup>24</sup> There is a potential for more international cooperation and publishing. There are differences between the programmes in terms of the degree of research-based curricula. The master programmes for teachers at the secondary level and PPU are more receptive to international academic literature than BLU and GLU.<sup>25</sup>

### 3. Cross-disciplinary cooperation

In order to enable their students to acquire the required professional competence, teacher education providers must themselves possess a high level of knowledge and expertise in subject disciplines, pedagogy, didactics and teaching practice. Staff must maintain high standards in all areas, but it is also important that teacher education programmes are organised and managed so as to draw on the full spectrum of knowledge available and place it in context. One characteristic of professional education programmes is that the students will experience

and understand the relationships between different subject areas when practising the core tasks that they will be performing once they join the profession.<sup>26</sup> This requires cross-disciplinary cooperation, which can be a challenge. The BLU reform resolved this issue by organising the programme in cross-disciplinary subject areas which integrate pedagogy and practice. Other teacher education programmes must find their own solutions, adapted to the way in which the students' competencies will be applied at the relevant level of the educational system.

Historically, teacher education in Norway has been riven by tensions between subject disciplines and pedagogy. These tensions have probably eased somewhat since the 1970s, but they are still noticeable in places.<sup>27</sup> They resurfaced again in 2016 during the consultation on the national curriculum regulations for the GLU master programme. There are also tensions between academic disciplines and corresponding didactics and between the practical and theoretical aspects of pedagogy. Academic disagreement can often be productive, but prolonged disputes may prevent balanced progress from being made.<sup>28</sup>

As mentioned, many of the challenges and tensions described in the preceding three paragraphs – sometimes referred to as tensions between theory and practice – are intrinsic to teacher education, both in Norway and internationally.<sup>29</sup> The question, therefore, is not how to eliminate all tensions but how to deal with them in the most productive way. One approach is to formulate overarching goals for teacher education, as explained in Chapter 2. In addition, specific measures must be taken. They are described in the next chapter.

22 Munthe et al. 2015

23 Research Council of Norway 2013, Gunnes and Rørstad 2015

24 Research Council of Norway 2015

25 Caspersen, Bugge and Oppegaard 2017

26 Grimen 2008

27 Helsvig 2005, Dahl et al. 2016, Caspersen, Bugge and Oppegaard 2017

28 See also White Paper 25 (2016-2017) *The Humanities in Norway*

29 Hegggen and Raaen 2014, Hammerness and Klette 2015

# 4

## Priority areas and measures

The goals set out in Chapter 2 are ambitious and require high quality from the teacher education institutions as well as the kindergartens and schools offering supervised practice training. Not least, they will require cooperation between all parties involved. At the same time, the challenges described are real and must be taken into account. The dialogue between those involved in teacher education – the dialogue on which this strategy is based – has shown that even though many processes are already

underway, additional efforts are still required in some areas.

This strategy covers the period up until 2025. Some of the measures described here can be implemented relatively quickly. Others will take time to prepare. The implementation must also be adjusted to the available capacity in the different sectors. Additional government funding will depend on the annual government budget.

### **A. Better practice training and R&D cooperation through teacher education schools and teacher education kindergartens**

Most teacher education institutions currently cooperate with a relatively large number of kindergartens and schools to offer the volume of practice training stipulated in the national curriculum regulations. Experience shows that it is difficult to maintain stable and mutual relations with all these partner schools and kindergartens. Cooperation between different sectors is frequently formalised through partnership agreements. One key objective of using partnerships in teacher education as an element in this strategy is to ensure that all students are given the opportunity at some point during their studies to practise in selected institutions – teacher education schools and teacher education kindergartens – specially equipped for R&D-based (“clinical”) practice training. These teacher education schools and teacher education kindergartens shall have qualified training supervisors who work closely with the teacher educators from the

teacher education institutions. This requires clear commitment by the management at the teacher education institutions and by the owners and leaders of the kindergartens and schools involved.

There are already many examples of Norwegian teacher education institutions working constructively with kindergartens and schools, but generally speaking it has proved difficult to forge lasting, integrated partnerships. One underlying challenge for existing partnerships is conflicting goals. Students are the responsibility of the higher education institutions, while kindergarten and school owners are primarily responsible for the children and pupils in their care. Kindergartens and schools often do not feel part of the teacher education programme and therefore choose not to allocate resources and skills to the partnership with the teacher education institution. Some practice training

supervisors also take the view that academic staff from the universities and university colleges do not spend enough time in the kindergartens and schools where practice is taking place.<sup>30</sup>

One consequence of this is that it has been difficult to develop “clinical” practice training where the students are able to develop their teaching practice under qualified mentoring. The lack of collaborative arenas has also made it difficult to form the kinds of R&D partnerships that kindergartens and schools need now that they are increasingly introducing systematic measures for quality development. Weak collaborative models also mean that teacher education institutions do not receive sufficient feedback from the field of practice to enable them to further modify their study programmes in response to the challenges faced by the kindergartens and schools. Structural remedies are therefore necessary in order to improve the terms of cooperation.

As part of a reorganisation of teacher education in Norway, parliament decided in 2009 to introduce a “system with obligatory partnership agreements between teacher education institutions and kindergarten/school owners which clarify roles, responsibilities and mutual obligations with regard to the practice training”.<sup>31</sup> However, partnerships have to date been developed primarily at the initiative of the institutions themselves. The universities of Oslo and Tromsø have set up a number of university schools, partly in order to boost the quality of the practice training. The Norwegian University of Science and Technology has also gained useful experience of R&D collaborations at its two university schools. Oslo and Akershus University College of Applied Sciences

has strengthened its collaborations on practice and research in selected training kindergartens, and university/partner kindergartens have been established by the University of Tromsø and the University College of Southeast Norway, among others. In this way, some of the institutions have gained valuable experience on which we must build in the future.

At the same time, it has also become clear that many partnerships appear to rely on the commitment of individuals and on vulnerable, project-based resources. A research summary of partnerships in teacher education has concluded that there is generally speaking “still a need for innovation, more attention to structures, and better coordination of the partnerships”.<sup>32</sup> One important recommendation made by the expert panel on the role of the teacher is indeed that further work is needed to strengthen partnerships on teacher education between higher education and schools.<sup>33</sup>

On that basis, the government intends to develop a national framework for partnerships between teacher education institutions and kindergarten and school owners regarding *teacher education schools* and *teacher education kindergartens* as described in this strategy. The framework will be based on experience gathered to date, and will facilitate the continued operation of existing partnerships. The specifics of the organisation and academic content must be decided by the relevant local partners. Hence, this strategy document deliberately does not expand on details. However, it is appropriate for the national education authorities to set out a few overarching goals, since the partnerships involve multiple partners in the education sector.

30 Heggen and Thorsen 2015, Munthe et al. 2015, Bjerkestrand et al. 2015 and 2016, Dahl et al. 2016

31 Cf. White Paper no. 11 (2008-2009) *The teacher – role and education* and Recommendation no. 185 (2008-2009)

32 Lillejord and Børte 2014

33 Dahl et al. 2016

## Objectives for 2025

1. Agreements should have been signed between every teacher education institution and local kindergarten/school owners on a specific number of *teacher education kindergartens* and *teacher education schools* characterized by:
  - “clinical practice”, i.e. systematic piloting and modelling of teaching practices in schools and of pedagogical practices in kindergartens
  - competent practice training supervisors
  - active participation by faculty from the teacher education institution in the supervision of students during practice training
  - widespread use of dual positions and teachers with PhDs
  - teacher education institutions and their teacher education schools/kindergartens constituting knowledge-generating partnerships that continue to make progress by using shared professional terminology
  - stable and long-term cooperation between the parties
  - equity and balance in the respective parties’ influence in the partnership
  - relevant research carried out to meet challenges and provide solutions in the kindergartens and schools
- the study programmes and campus lectures and seminars receiving continuous feedback from the field of practice, partly by having the teacher educators work in the field of practice and partly by involving representatives from the schools and kindergartens in quality development at the teacher education institutions
- the partnerships sharing information through a dedicated national partner forum, and experiences being disseminated and applied in all kindergartens and schools offering practice training
2. Each teacher education institution should also have a number of agreements with owners of ordinary practice schools and kindergartens to enable them to offer the volume of teaching practice required by the national curriculum regulations. The bulk of the practice training takes place here. It is crucial that ordinary practice schools and kindergartens should not be given lower priority in favour of *teacher education schools* and *teacher education kindergartens* and that the former continue to benefit from the partnerships. Arrangements must be made to enable teacher education institutions, kindergartens and schools to share experiences.

### The government will:

- put into effect a national framework for partnerships between teacher education institutions and kindergarten/school owners for creating *teacher education kindergartens* and *teacher education schools* in order to boost the quality of practice training and R&D-based professional development
- work with the stakeholders to assess the need to use legal regulations to specify overall responsibilities, roles and duties within the partnerships and, if necessary, discuss the content of such regulations
- strengthen the work towards the establishment of new *teacher education schools* and *teacher education kindergartens* based on capacity, quality and past experiences
- start the expansion by allocating development funding to teacher education partnerships for primary and lower secondary teacher education programs (GLU) in 2017



Photo: Benjamin A. Ward



## B. High standards and cross-disciplinary cooperation among academic staff at the teacher education institutions

The quality of Norwegian teacher education very much depends on the competencies of the staff and their ability to cooperate. Teacher education programmes comprise four key areas: disciplinary subject knowledge, subject-specific didactics, pedagogy and practice.<sup>34</sup> The weighting, order and co-ordination of these areas may vary from programme to programme.

These variations between study programmes are partly related to differences in the way academic staff at the teacher education institutions are organised. Three organisational types can be identified.<sup>35</sup> In *matrix-organised* teacher education programmes, many of the academic staff are employed by other, often discipline-specific, academic units, while a smaller unit co-ordinates the programme. In *unitary* institutions, most of the teacher educators are employed by the teacher education unit itself. A *hybrid model* contains elements of both of the above, e.g. by using teachers from other academic units while also maintaining a large and diverse faculty within a central, co-ordinating unit. Matrix organisation has traditionally been associated with universities, while unitary organisation has been more common at university colleges. Following a number of mergers in recent years, this pattern is showing signs of change.

There is no one perfect model for how best to organise teacher education. It depends to some extent on the type of education and which level in the education system the students are training for.<sup>36</sup> However, the different models have been considered to have different strengths and weaknesses. A recently published study concludes that unitary models often rely more on competencies drawn from practice and have a clearer professional orientation, while matrix-organised programmes tend to employ more people with a research background and are oriented more towards international research literature.<sup>37</sup>

The various organisational models are linked to different recruitment patterns and consequently to the presence of different academic positions. Generally speaking, Norway has seen an increase in formal qualifications among teacher educators

### Objectives for 2025

- Teacher education institutions have both high-quality researchers and staff with up-to-date practical teaching experience
- Teacher education institutions have systematic recruitment policies comprising all staff groups
- Teacher education institutions are organised in such a way as to promote cross-disciplinary cooperation internally and ensure fruitful and mutually beneficial partnerships with the field of practice
- Teacher education institutions should be characterised by high-quality teaching, varied teaching methods and academic merit systems that value teaching experience

in recent years.<sup>38</sup> When the five-year GLU master is introduced in 2017, at least 10 per cent of the academic staff that teach in the programme must be professors/readers (*dosenter*), and at least 40 per cent must be qualified for the position of associate professor or senior lecturer. There are also variations in the distribution of different categories of positions across the various teacher education programmes. University/university college lecturers are in a majority among teaching staff on BLU, GLU, subject teacher education programmes and PPU.<sup>39</sup> Most teaching staff in the upper secondary master programmes at the universities are senior lecturers/associate professors or readers/professors.

Studies show that recruiting a teacher education collegium which, as an ensemble, has a high level of expertise within all the four core areas of teacher education, can be a challenge.<sup>40</sup> Although the level of research qualifications in teacher education has increased, it still needs to be further enhanced. In order to create research-based teacher education programmes – in line with the goals of the strategy *Promotion of the Status and Quality of Teachers* – the main path to a permanent position in teacher

34 Hopmann 2006, Dahl et al. 2015

35 NOKUT 2006, Caspersen, Bugge and Oppegaard 2017

36 Dahl et al. 2016

37 Caspersen, Bugge and Oppegaard 2017

38 Ibid.

39 Ibid.

40 Ibid. and Frølich et al. 2016

education during the strategy period should be PhD programmes in specialist subjects, pedagogy or didactics. In line with White Paper No. 16 (2016–2017) *Quality Culture in Higher Education*, teaching experience will also count in the assessment of qualifications for academic employment. Hence, research experience can more easily be combined with the development of good teaching practice. A report from the Knowledge Centre for Education based on input provided by the teacher education institutions describes the goal as follows: “Teacher education programmes need to be research-based, which requires teacher educators to be active researchers involved in publishing, supervising candidates and in research groups.”<sup>41</sup>

The question is how this goal can be reconciled with the need for a staff with practical experience from kindergartens and schools. Kindergarten and school teachers with master’s degrees and/or PhDs are one important target group for recruitment. The practical experience and competency of this group will be difficult to maintain over time, however.<sup>42</sup> Another recruitment pool is those without a teaching qualification but with an academic master’s degree and a PhD. Additional efforts must be made to ensure that both these groups of teacher education staff have access to up to date experience-based knowledge. Based on experience from recent years, the expert panel on the role of the teacher has therefore recommended that dual positions between the teacher education institutions and kindergartens/schools should be a central measure.<sup>43</sup>

Dual positions can work both ways. Teacher educators may spend some of their time working in a kindergarten or school, while kindergarten and school staff may dedicate part of their time to working in a teacher education programme. Admitting temporary visiting lecturers or teachers from other institutions is another practice that could be used more widely both by teacher education institutions and by schools and kindergartens. The public sector PhD scheme will help boost research expertise in the teaching profession and give the PhD programmes and teacher education institutions fresh impulses from the field of practice.

One important objective for the partnerships described above in relation to *teacher education schools* and *teacher education kindergartens* is to enable a lasting arrangement with dual positions,

visiting lecturers/teachers, and cooperation on public sector PhDs.

The issue of organisation and cross-disciplinary cooperation between different academic groups in the teacher education institutions also poses certain challenges. Relationships have over time been strained between several disciplinary groups.<sup>44</sup> The choice of organisational model has also sometimes caused controversy. For these reasons, it will be crucial that over the next decade the top management at the institutions work proactively to organise teacher education in a way that enables involvement of and cross-disciplinary cooperation between all relevant academic groups.<sup>45</sup> A national development initiative will also be necessary in addition to the work being done at the individual institutions.

#### **The government expects:**

- the boards of the institutions offering teacher education to take responsibility for managing and organising the teacher education programmes in ways that promote cross-disciplinary cooperation and teacher education of a high standard
- all teacher education institutions to draw up long-term recruitment strategies for relevant disciplines and fields of study
- teacher education institutions to make use of visiting lecturers/teachers, dual positions, and public sector PhD opportunities together with their partner kindergartens and schools
- the National Council for Teacher Education to discuss experiences with and principles for well-functioning organisation of the various types of teacher education

#### **The government will:**

- strengthen the knowledge base regarding management, organisation and skills in Norwegian teacher education as part of a national development process

41 Lillejord and Børte 2014

42 Caspersen, Bugge and Oppegaard 2017

43 Dahl et al. 2016

44 Helsvig 2005, Dahl et al. 2016, Norwegian Association of Researchers 2016

45 Norwegian Association of Researchers 2016

## C. Research and development

Research and development is key to quality development in teacher education, kindergartens and schools. The success of this strategy therefore relies on high-quality, relevant R&D being conducted by the institutions. This is necessary for research-based teacher education to develop further and to ensure a solid knowledge base for kindergartens and schools. Integration of education and research is a core task for the teacher education institutions. With the introduction of five-year primary and lower secondary teacher education programmes at master level, it is important that school owners and teacher education institutions work together to enable candidates to produce theses that are relevant to professional practice and to help co-ordinate R&D activities that involve kindergartens and schools. This requires them to allocate time, resources and expertise. Involvement in the above-mentioned partnerships may help facilitate this.

Studies have found that the level of R&D expertise in teacher education in Norway varies from programme to programme.<sup>46</sup> There is considerable disparity in terms of framework conditions, research expertise, publishing, international cooperation and relevance to professional practice in kindergartens and schools. There are also differences with regard to the level of success in attracting funding from the research programmes in education operated by the Research Council of Norway. This is in part due to the relatively short research traditions of teacher education institutions in Norway. In order for teacher education institutions to carry out high-quality R&D, they must increase their R&D expertise. They must recruit talented researchers and ensure stable recruitment to management positions.

Research in education at the teacher education institutions has made good progress in recent years in terms of volume, quality and relevance. This is due to the institutions' own initiatives as well as research programmes operated by the Research Council of Norway, including graduate researcher schools and other schemes.<sup>47</sup> The research has become more wide-ranging and varied in terms of both methodology and theory. The use of quantitative research methodologies has increased.<sup>48</sup> The research has provided new insights and a better understanding of kindergartens, schools and higher education. This trend must be continued and reinforced in line with the ambitions of the ministry's

### Objectives for 2025

- Stable recruitment of talented researchers and applicants to executive positions
- High quality, relevance and innovation in R&D relating to kindergartens, schools and teacher education institutions
- A high degree of international publishing and robust peer review of the research
- An increasingly R&D-based professional practice and practice-oriented research

strategy for education research, the white paper on quality in higher education, the white paper on compulsory education, and various kindergarten initiatives.

Knowledge about the education sector has increased in volume in recent years. We know more than we used to, but increased knowledge and a faster pace of change have also made evident the complexity of the challenges faced by kindergartens, schools and teacher education institutions. In order to find better answers and more insightful solutions, we need new knowledge and insight, new methods, and new forms of cooperation. There are growing expectations to the teacher education institutions with regard to research, especially when it comes to identifying best practice in teaching and learning situations. We need more empirical research, more research on subject didactics, and more research involving impact studies, interventional studies and experimental studies.<sup>49</sup>

Research into the teaching practices in the teacher education programmes is particularly important. The design of the new master's theses will determine whether they can be developed into insightful research papers and contribute to increased research volume and knowledge development. There is a potential for close collaboration between research, education and practice. One of the reasons for forming partnerships in establishing *teacher education schools* and *teacher education kindergartens*

46 Nordic Institute for Studies in Innovation, Research and Education 2013. R&D expertise has increased since 2013, partly thanks to the development of master programmes

47 Ministry of Education and Research 2014

48 Research Council of Norway 2013 and Gunnes and Rørstad 2015

49 Ministry of Education and Research 2014

is to ensure cross-disciplinary cooperation and involvement in R&D.

Surveys of Norwegian education research have found that there is insufficient international focus.<sup>50</sup> Research groups – including at teacher education institutions – are only involved in international networks to a limited degree. There is little international cooperation on education research, and the majority of publications are in Norwegian. Only a very limited share of Norwegian education research receives EU funding. Our Nordic neighbours are among our most important partners in education research. Joint Nordic initiatives have been launched through the “Education for Tomorrow” programme of the Nordic Council of Ministers.

Given the significance of international knowledge development, cooperation between Norwegian teacher education institutions and their counterparts in other countries must be strengthened. Individual projects and researchers must be able to draw on the best available international expertise. Norwegian teacher educators must publish more internationally and participate actively in different types of networks together with outstanding teacher education institutions in other countries. In order to strengthen the international aspects of the teacher education programmes, it may be appropriate for the institutions to recruit researchers from other countries. At the same time the students should read more international academic literature in English.

#### **The government expects:**

- teacher education institutions to strengthen cooperation with their counterparts abroad
- an increase in the proportion of EU-funded educational research
- Norwegian education researchers to publish more in internationally recognised journals
- the institutions to support smaller R&D-driven projects initiated by kindergartens and schools

#### **The government will:**

- strengthen the research programmes relevant for teacher education in the Research Council of Norway
- stimulate empirical and subject-specific didactic research and dedicate the FINNUT programme to research projects involving teacher education institutions, kindergartens and schools
- introduce an innovation programme whereby kindergartens, schools and local and county authorities can team up with researchers to apply for funding for pilot schemes and evaluation of the results
- step up and extend the Norwegian National Research School in Teacher Education initiative
- encourage the participation of teachers in research projects, i.a. through increased mobility between teacher education institutions and kindergartens/schools
- evaluate Norwegian educational research



Photo: Kim Ramberghaug



## D. Professional development for newly qualified teachers

The early phase of working as a newly qualified kindergarten or school teacher is important to subsequent professional practice and development. Initial teacher education programmes alone cannot prepare the candidates for every aspect of the teaching profession, and newly qualified teachers should be able to rely on their employers to have a system in place to support them in the transition between education and practice and to include them in the professional learning community. This understanding is made explicit in the 2014 Quality Agreement between the Ministry of Education and Research and the Norwegian Association of Local and Regional Authorities.<sup>51</sup>

Evaluations of the induction programmes for newly qualified teachers suggest that they help ensure a better transition between education and professional practice in that the teachers gain more confidence and awareness of their own competence and become more comfortable in the teaching role.<sup>52</sup> In addition, the evaluations have also found that a good working environment with support from colleagues and management along with opportunities for professional cooperation are key factors in making newly qualified teachers confident in their new role. Newly qualified teachers also bring knowledge to the table that can instigate innovation in the professional learning community. The induction scheme should therefore be seen in a wider context in which both the transition from education to professional practice and inclusion in a professional learning community are key aspects.

The evaluation of the induction programmes shows that newly qualified teachers who receive guidance are satisfied, although there are significant variations in terms of the scope, content and quality of the support being offered. Responsibility for looking after newly qualified teachers, including mentoring and competency development, rests with the local employer. Section 4-2 of the Working Environment Act describes the employer's responsibility for making arrangements for each employee,<sup>53</sup> that is, adapting the work to their skills and needs. This also includes newly graduated employees. However, the evaluation also found that four in ten newly qualified teachers working in kindergartens and schools say they have not been offered mentoring.<sup>54</sup>

### Objectives for 2025

- Teacher education institutions offer courses aimed at the various mentoring roles in kindergartens and schools
- The institutions are conscious of the students' transition from initial education to professional practice and prepare them for contributing to the professional learning community in their place of work
- All kindergarten and school owners operate a mentoring programme that covers all newly qualified teachers
- Professional learning communities in kindergartens and schools help ensure a smooth transition to the teaching profession

In light of this, the government will be working with the stakeholders to draw up a national framework for an induction programme for newly qualified teachers which ensures that they receive mentoring, while allowing for local variations.

The Ministry of Education and Research funds course places for those wishing to qualify as mentors. In order to ensure a shared common ground for all continuing education in this field, guidelines on the outcomes, content and organisation of these courses were issued when the funding scheme was launched in 2010.<sup>55</sup>

Rambøll's evaluation of the courses for mentors found that there are significant variations with regard to target groups, content, the relationship between theory and practice, how the mentor training is organised, and the literature being used.<sup>56</sup> Both mentors and mentees found that the quality of the mentoring improves when the mentor has received training. It also appears that the training helps increase the mentor's understanding of the role.

Rambøll concludes that the competencies acquired by the mentor during training are valuable for developing the institution and the profession in general.<sup>57</sup> It may therefore be beneficial to develop

51 The Ministry of Education and Research and the Norwegian Association of Local and Regional Authorities 2014: "All local and county authorities must work systematically to offer mentoring to all newly qualified and employed teachers in kindergartens, primary and secondary schools."

52 Rambøll 2015, Rambøll 2016

53 Working Environment Act Section 4-2

54 Rambøll 2016

55 Norwegian Directorate for Education and Training 2010

56 Rambøll 2015, Rambøll 2016

57 Rambøll 2016

the guidelines on mentor training to better align them with other types of coaching and professional development in kindergartens and schools. Continuing education in mentoring opens up important career paths and could help ensure that more experienced and talented teachers stay in the profession. It should therefore be considered whether adjustments should be made to the mentoring courses to make the mentors more attractive candidates for a wider range of roles, including that of specialist teacher. One possible model could involve multiple modules, some of which could be designed for all candidates, and others oriented towards particular roles.

State funding for mentoring courses is currently allocated to one central institution in each region. Changing structures in the higher education sector have altered the landscape considerably, and these central institutions do not always serve the same local function in the region as they used to. The government will therefore be allocating funding for mentor training through the Directorate for Education and Training.

**The government will:**

- work with stakeholders to draw up a national framework for an induction programme for newly qualified teachers which ensures that all newly qualified teachers receive mentoring, while allowing for local variations
- follow the development of mentoring in kindergartens and schools through surveys and studies
- further develop the guidelines on mentor training to ensure better coordination and coherence with other professional development initiatives in kindergartens and schools
- coordinate courses aimed at teachers engaged in different forms of coaching and mentoring in kindergartens and schools
- transfer the responsibility for channelling governmental funding for mentoring courses from higher education institutions to the Directorate for Education and Training



Photo: Anne Schjelderup

## E. Attracting students to teacher education

The responsibility for attracting students to teacher education is shared by a number of actors. Central government has overall responsibility for quality and for ensuring that there is sufficient capacity to meet demand. Universities and university colleges are responsible for attracting applicants to their study programmes and for educating students in close cooperation with kindergarten and school owners. Kindergarten and school owners are responsible for stable recruitment of qualified personnel.<sup>58</sup> In addition, it is an aim in itself to achieve a better gender balance and to attract more teachers with multicultural backgrounds to kindergartens and schools.

The demand for teachers varies from region to region. It is crucial, therefore, that kindergarten and school owners work with the universities and university colleges in their region to ensure that the type of education provided corresponds to the qualifications in demand.

Some regions appear to have lasting or recurring recruitment challenges. This is particularly true for Northern Norway. School and kindergarten owners in this region should work to create attractive jobs with good working conditions. This includes developing stimulating professional communities.

When required, central government can also instigate targeted initiatives to help recruit more teachers. For example, the government has occasionally organised national campaigns to attract more kindergarten and school teachers, conducted in partnership with local and regional recruitment drives. Many kindergarten and school owners facing a shortage of qualified teachers also actively recruit students from local teacher education institutions. To meet the challenges we will be facing in the years to come, it will be necessary for central government to work with local stakeholders to recruit and retain more teachers in Northern Norway.

The recruitment challenges in the coming years will be particularly grave in the lower grades of the education system. It is the government's ambition that there should be enough teachers who are experts in teaching beginners to give all children a good start on their path through the system. The aim is for the children and pupils to be supported by ambitious and professionally strong teachers in kindergarten and in the first few years of school.

### Objectives for 2025

- All teacher education programmes have well-founded strategies for attracting a diverse set of students in line with the needs of kindergartens and schools
- Applicant numbers are high, and there is competition for admission to teacher education programmes
- Drop-out rates in teacher education programmes are reduced to an acceptable level
- A sufficient number of students with in-depth knowledge of teaching beginners are trained
- All teacher education institutions work closely with local kindergarten and school owners to highlight the opportunities offered to teachers

One particular challenge is that average grades among those accepted to kindergarten teacher education programmes are lower than among other students training to become teachers. Stricter entry requirements could help improve recruitment of well qualified applicants to BLU. GLU 1–7 has seen fewer applications than other teacher education programmes for some time, and places are left unfilled. There is reason to expect demand for primary school teachers to outstrip current graduate numbers. The ministry will therefore take steps to increase recruitment to GLU 1–7.

In addition to attracting new students it is also important to improve completion rates to ensure that as many candidates as possible join the profession. This is true for all teacher education programmes, but perhaps especially so for the integrated master programmes for secondary school teachers (*lektor* programmes), where drop-out rates have been relatively high.

### The government expects:

- kindergarten and school owners facing a shortage of qualified teachers to actively seek to attract teachers to the profession, including initiatives addressed at students enrolled in regional teacher education institutions

<sup>58</sup> Cf. Section 10-8 of the Education Act and Section 17-19(b) of the Kindergarten Act

**The government will:**

- introduce a scheme for writing off student loans in order to encourage as many students as possible to complete their teacher education within the stipulated time frame, make more students enrol in GLU 1-7, and more candidates apply for teaching positions in the northern counties of Nordland, Troms and Finnmark
- work with employers to gain an adequate overview of recruitment needs in kindergartens and schools
- support local recruitment partnerships, especially in areas where the need is greatest
- consider launching a pilot project with minimum entry requirements for kindergarten teacher education at selected institutions
- when necessary, continue compensatory measures relating to stricter entry requirements, such as for instance summer courses

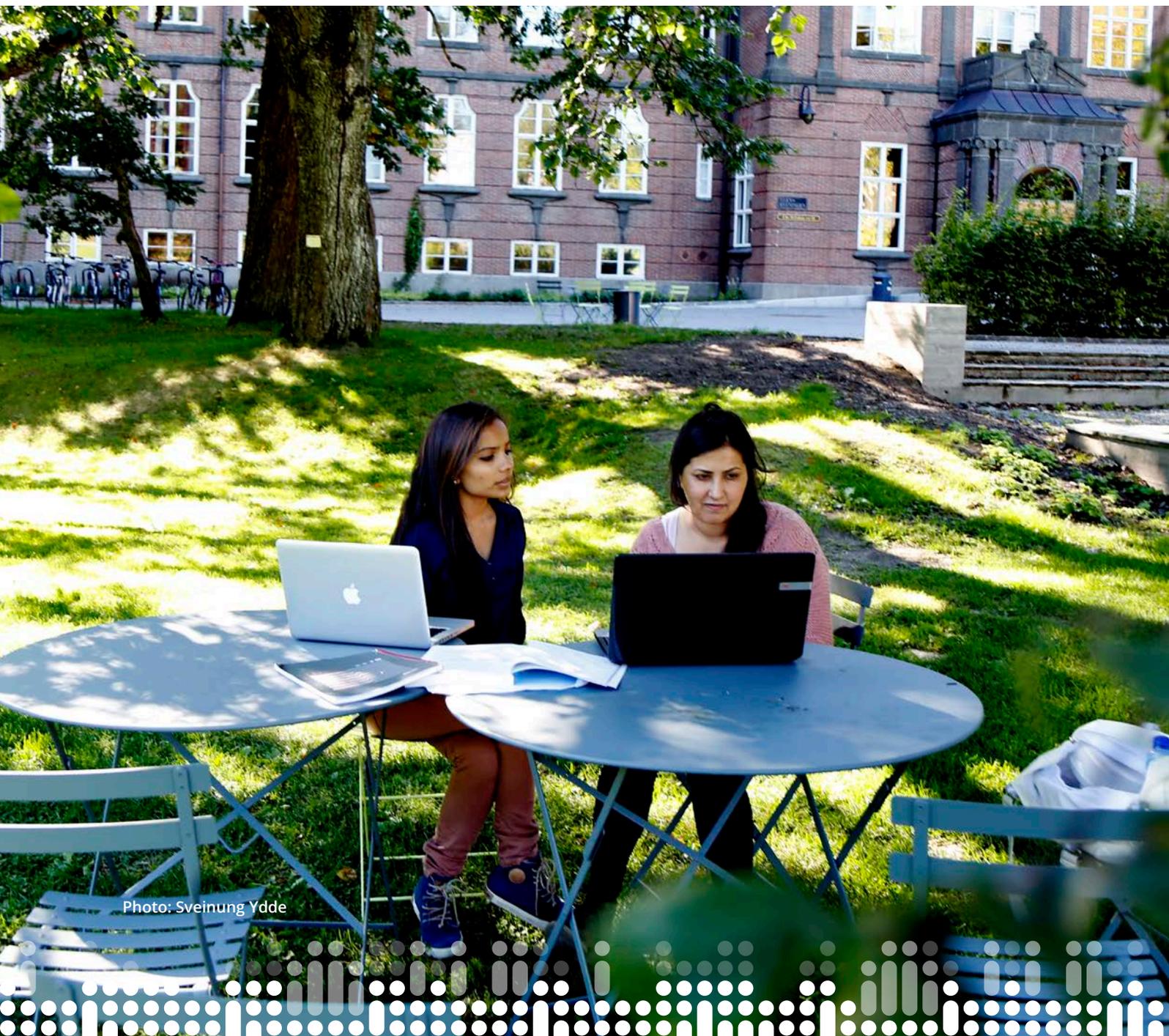


Photo: Sveinung Ydde

## F. Arenas for cooperation and quality development

Developing high quality research-based teacher education programmes that are relevant to the profession requires cooperation between a number of stakeholders. The Knowledge Centre for Education writes in its literature review on the topic of teacher education that “successful implementation of the national education policy requires participation from those who are tasked with realising it”.<sup>59</sup> This means that arenas must be created where both teacher education providers and kindergarten/school owners, management and teachers can participate in developing the teacher education programmes. Such arenas must be made available locally in order to help ensure quality development at each teacher education institution, and nationally to allow them to contribute to various forms of broader policymaking processes.

Partnerships dedicated to *teacher education schools* and *teacher education kindergartens* as described above will be important local arenas for collaboration between individual teacher education institutions and kindergarten/school owners, management and teachers. A close and committed partnership will enable comprehensive discussions on quality development. Ongoing discussions of this kind will help increase the relevance of teacher education and aid research-based practice. Clarifying roles and reaching a consensus on what constitutes good practice are essential preconditions for the partnerships to work.

Another important local arena is the collaborative fora that are to be set up in connection with the new decentralised model for quality development in schools.<sup>60</sup> Here municipalities will be working together to identify the qualifications that they need, and will deliberate how to use governmental funding granted for this purpose. Universities and university colleges will also participate in these fora. By entering into a dialogue with the local authorities in their region, they will be able to identify local skills needs. This information can be used to build capacity and develop expertise in a way that meets the local authorities’ needs in the short and long term.

At the national level, there are several stakeholders involved in the field of teacher education. The National Council for Teacher Education (NRLU) is part of the Norwegian Association of Higher

### Objectives for 2025

- There are well-functioning, local collaborative arenas for teacher education institutions and practitioners across the country
- Kindergartens and schools play a significant part in setting the agenda for the development of teacher education programmes, and initial education, continuing education, and in-service training for teachers are being adapted to meet the competency needs of kindergartens and schools
- There is a national forum for dialogue about teacher education in which central government, educational institutions, owners, management and teachers are all represented

Education Institutions, a membership organisation for Norwegian universities and university colleges.<sup>61</sup> The NRLU is an important arena for quality development and cooperation between the different teacher education institutions. In 2014, the council was given responsibility for overhauling the national guidelines for all teacher education programmes. The new guidelines were drawn up by academics working at the institutions and are designed to develop a common standard for what constitutes good teacher education. The programme groups for the various subjects/areas of knowledge are primarily made up of representatives from the higher education institutions (50 per cent) but also include representatives from professional practice (25 per cent) and the students (25 per cent).

The Norwegian Agency for Quality Assurance in Education (NOKUT) is responsible for accrediting the study programmes. NOKUT serves a number of functions in relation to teacher education. One is to coordinate the expert panel tasked with monitoring the implementation of the new GLUs.

The Directorate for Education and Training is responsible for quality development in kindergartens, primary and secondary education

59 Lillejord and Børte 2017

60 White Paper 21 (2016-2017) *Wanting to Learn – early intervention and quality in schools*

61 The NRLU has 28 members from the higher education sector, 3 student representatives and 4 external members, in addition to observers

and training. The directorate does not hold a formal role in relation to teacher education but maintains extensive contact with the institutions through strategies for continuing education and various national initiatives to promote competency development. Due to the new competency development model and the decentralisation of development initiatives described in White Paper No. 21 (2016–2017) *Wanting to Learn*, there is a need to review the partnership between the Directorate for Education and Training and teacher education providers, as well as other universities and university colleges.

One key objective of this strategy is greater involvement of schools and kindergartens in the quality development of teacher education in Norway. In order to realise this objective, representatives of kindergartens and schools must be assigned a more prominent role both locally and nationally – without changing existing legal responsibilities and lines of authority. Most European countries have mechanisms to ensure this.<sup>62</sup> Finland, for instance, has a long-standing tradition of continuous cooperation between teacher education institutions and kindergartens and schools. At the national level, Finland recently established the *Forum for Teacher Education*, which discusses change and development both at teacher education institutions and in kindergartens and schools.<sup>63</sup>

## G. Implementing and evaluating the strategy

This strategy represents the Norwegian government's long-term plan for quality and cooperation in teacher education for the period until 2025. The strategy has been broadly adopted by relevant stakeholders. It is designed to ensure constructive cooperation in the years to come towards a common goal for teacher education. The collaboration between the stakeholders provides a starting point for successful implementation of the planned measures. Implementation will require active participation and commitment by all parties involved.

The strategy sets out both overarching goals for teacher education and priority areas in which the government intends to take specific measures. The ministry aims to systematically monitor progress towards the goals within some of the most

Norway has several arenas involving key players in teacher education, but lacks a joint national arena in which central government, educational institutions and kindergarten/school owners, management and teachers can discuss and work together to improve quality in teacher education.<sup>64</sup> Establishing partnerships dedicated to *teacher education schools* and *teacher education kindergartens* as well as collaborative fora for competency development will make it easier to ensure comprehensive and highly qualified representation of kindergartens and schools in policy processes at the national level. In other words, there will be improved opportunities for establishing a cross-sectorial, collaborative arena for teacher education. While teacher education programmes aim to meet the observed needs for qualifications in kindergartens and schools, they should also be a source of innovation and help challenge established practices when necessary.

### The government will:

- facilitate local and regional collaborative arenas for quality development in teacher education, and further knowledge-based development in kindergartens and schools
- assess the need for a cross-sectorial forum for teacher education at the national level

important priority areas. NOKUT will also audit the GLU programmes in 2019 and evaluate PPU in 2020. As an extension of this evaluation, NOKUT may consider reviewing the accreditation of individual study programmes. An international, research-based evaluation of teacher education programmes in Norway will be carried out towards the end of the strategy period.

62 EU 2015

63 Lillejord and Børte 2017

64 The Ministry of Education and Research, the National Council for Teachers and Norwegian Association of Local and Regional Authorities have recently established a collaborative forum to improve interaction between teacher education institutions, central government and school and kindergarten owners



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Photo: Benjamin A. Ward /HiOA

# Appendices

## 1. Teacher education programmes – statistics

There were more than 25,000 students training to become teachers in Norway in 2015.<sup>65</sup> Every year, around 6,500 teachers graduate from what since 2017 are 23 state and private teacher education institutions across the country (see map p. 2). This makes teacher education one of the largest fields of study in Norway. Teacher education programmes serve an important role in society by qualifying teachers for work in kindergartens and schools. The programmes are also very important to the

academic communities and to the profiles of the universities and university colleges that offer them.

The different teacher education programmes qualify teachers for different parts of the education system, but partly overlapping qualification requirements mean that graduates from different teacher education programmes often will work together. The present strategy covers the study programmes listed in Table 1.

**Table 1. Norwegian teacher education programmes and the stages they qualify candidates for**

Programme	Kindergarten	Year			Days of practice
		1-7	5-10	8-13	
Kindergarten teachers (3-year bachelor)	X				100
Sami kindergarten teachers (3-year bachelor)	X				100
Primary/lower secondary school teachers 1-7 (5-year master from autumn 2017) <sup>1</sup>		X	X		110
Sami primary/lower secondary school teachers 1-7 (5-year master from autumn 2017)		X	X		110
Sami primary/lower secondary school teachers 5-10 (5-year master from autumn 2017)			X	X	110
Primary/lower secondary school teachers 5-10 (5-year master from autumn 2017)			X	X	110
Integrated secondary master programme 8-13 (5-year master)			X	X	100
PPU (1 year practical pedagogy based on bachelor/master) <sup>2</sup>			X	X	60
Vocational teachers (3-year bachelor)			X	X	130
PPU-Y (1 year practical pedagogy based on bachelor/master, directed at VET)			X	X	60
Subject teachers (3-year bachelor)	X	X	X	X	70

1 Under Section 14-3(d) of the regulations to the Education Act, GLU 1-7 may qualify candidates for employment at the lower secondary stage if they have completed sufficient in-depth study in the subject they teach. This also applies to Sami GLU 1-7

2 Based on master from 2019 with the exception of arts and sports subjects

All teacher education programmes are professionally oriented and research-based, with practice training forming part of the programmes. Practice is an integral part of the subjects / subject areas for the kindergarten, primary/lower secondary school, integrated secondary school master, 3-year subject teacher and vocational teacher programmes. Students in the 5-year programmes must complete a professionally oriented master's thesis. Students

in the 3-year programmes must complete a professionally oriented bachelor's thesis. Applicants to the PPU programmes must have completed either a bachelor or master thesis in their field before being admitted into the programme (primarily master's theses from 2019). Students in the PPU programme will study pedagogy and subject didactics, and undergo practice training in their chosen subjects.

## 2. Demand and supply of teachers

In 2015, Statistics Norway projected that Norway will face a shortage of school teachers, while the supply of kindergarten teachers will probably meet the minimum teacher to child ratio for the next few decades.<sup>66</sup> This assumes that the trend from 2013, the base year, continues. However, there are considerable regional differences as regards oversupply or undersupply of kindergarten and school teachers. The largest recruitment challenge at present concerns teachers for the primary stage (years 1–7) and especially years 1–4, which are only covered by the GLU 1–7 programme. There is also reason to expect

Northern Norway to continue to experience recruitment problems with regards to teacher education programmes and to the profession itself.

The ministry assumes that it will be necessary to work actively to recruit well qualified applicants to teacher education programmes and to the profession in the years to come. The demand for school teachers must be met, and we need enough kindergarten teachers to exceed the minimum teacher to child ratio.

**Table 2. Teachers graduating in the last three years**

Programme	Graduated 2014	Graduated 2015	Graduated 2016 <sup>3</sup>
Kindergarten teachers <sup>4</sup>	1,831	2,082	1,893
Primary and secondary school teachers <sup>5</sup>	1,614	1,772	1,699
Integrated secondary school master programme 8–13	260	371	426
PPU and PPU-Y	2,050	1,942	1,956
Vocational teachers	159	158	120
Subject teachers	241	282	312
Total	6155	6607	6406

Source: Database for Statistics on Higher Education 16.02.2017

<sup>3</sup> As at 16.02.2017

<sup>4</sup> 2014 graduates were given the title preschool teacher. The 2015 figures include a small number of kindergarten teachers

<sup>5</sup> Includes general teachers, GLU 1–7 and GLU 5–10

<sup>66</sup> Gunnes and Knudsen 2015. The report substantially downgraded projected future teacher shortages compared with the previous report, which used 2010 as its starting year. See Roksvaag and Texmon 2012

### 3. Ongoing processes of significance for teacher education

#### **Structural reform in higher education**

The main objective of the structural reform was to encourage voluntary mergers in the higher education sector in order to concentrate resources in fewer but more robust units.<sup>67</sup> During 2015 and 2016, the number of state-owned institutions was reduced from 33 to 21. The number of teacher education institutions was reduced from 28 to 18. The mergers mean that teacher education providers and programmes now have access to additional academic staff within their respective institutions, and they are better placed to see different study programmes in relation to each other.

#### **Introduction of 5-year primary and lower secondary teacher education programmes at master's level**

One key measure of the strategy *Promotion of the Status and Quality of Teachers* from 2014 was to expand the teacher education programmes for primary and lower secondary school to full-blown masters. The master programmes will be introduced in autumn 2017. Academic ambitions for the new programmes are high. The study programmes aim to prepare candidates better for seeking and using research-based knowledge. The master's thesis will be professionally oriented, based on examples from experience, and it will be relevant to working in schools. The master's programmes place greater demands on academic staff than previously, and the government has funded recruitment positions to help increase formal and actual R&D qualifications among the teaching staff.

#### **The white paper on quality in higher education**

White Paper No. 16 (2016-2017) *Quality Culture in Higher Education* paints a picture of the broader challenges in higher education which is highly consistent with the situation in teacher education: We need to have much higher ambitions for the students, to boost completion rates, to improve consistency and coherence in the programmes, and to place greater emphasis on making continual pedagogical adjustments to the teaching. The main recommendations of the white paper will also have a direct impact on teacher education programmes. Academic meriting systems will be developed in such a way as to reward high-quality teaching. The quality of the education programmes will be enhanced by way of peer review and peer learning. A national competitive arena for quality in education will help enhance knowledge, expertise and innovation in the

education programmes. Setting up an online skills portal for the study programmes will also contribute towards quality development and help generate trust in the education system.

#### **Continuing education**

An important government initiative has been the provision of continuing education and in-service training for both kindergarten and school employees. With the strategy *Competencies for Tomorrow's Kindergartens 2014-2020*,<sup>68</sup> the government has doubled its efforts to provide skills development for all categories of kindergarten staff. The number of continuing education places in schools has trebled, and more than 6,000 teachers and 500 school managers are now being offered continuing education courses every year through the *Competencies for Quality*<sup>69</sup> strategy. Continuing education and in-service training for vocational teachers are described in the *Vocational Teacher Promotion*<sup>70</sup> (see below).

Teacher education institutions are the largest providers of continuing education in the country and will be important partners when developing new competency services. Together with other faculty in the higher education sector, they must ensure that the provision is of a high standard, that it is research-based, and that content is updated when new initiatives are launched or major changes occur in kindergartens or schools.

#### **Teacher specialists**

The piloting of new career paths for teacher specialists is part of the government's education platform and a key element in the strategy *Promotion of the Status and Quality of Teachers*. Since the autumn of 2015, 205 teachers have been appointed teacher specialists in schools. Teacher specialists are tasked with keeping colleagues up to date with subject didactics, teaching practices, and classroom management. In autumn 2016, continuing education programmes were launched to train teacher specialists in mathematics and Norwegian, focusing especially on literacy. The scheme may be expanded to include additional subjects.

#### **New model for competency development in schools**

The government is introducing a new model for competency development in schools.<sup>71</sup> Funding will increasingly be channelled to school owners rather

67 White Paper No. 18 (2014-2015) *Consolidation for Quality — structural reform in the higher education sector*

68 Ministry of Education and Research 2013

69 Ministry of Education and Research 2015a

70 Ministry of Education and Research 2015b

71 White Paper 21 (2016-2017) *Wanting to Learn – early intervention and quality in schools*

than through national programmes, thus making it easier for local authorities to adapt initiatives to local needs and capacity. Teacher education providers will play an important role in developing content for competency development initiatives in close and long-term cooperation with school owners and the teaching profession. The courses should be school-based wherever possible. The county governor will form an important link between the different parties. .

The model comprises three schemes: a *decentralised competency development scheme designed to enable all local authorities to work with the universities and university colleges to define the competency development that they need*; a *support scheme* whereby local and county authorities that fail to produce satisfactory results over time are offered additional support; and an *innovation scheme* aiming to generate more research-based knowledge about kindergartens and schools.

The ministry is currently revising the competency strategy for kindergartens and will assess how workplace learning in kindergartens is organised in the light of the decentralised scheme and the innovation scheme for schools.

### **Revised national curriculum regulations for kindergartens and schools**

Teacher education programmes build, among other things, on the national curriculum regulations for kindergartens and schools. New national curriculum regulations for kindergartens will come into effect in autumn 2017. This will affect the content of initial teacher education, continuing education and in-service training, cf. White Paper No. 19 (2015-2016) *Time for Play and Learning*. The objective of the new regulations is to clarify the roles and responsibilities of staff in order to ensure equitable and high-quality provision for all children. This may generate a need for increased and broadened competency levels among all kindergarten employees.

In White Paper No. 28 (2015-2016) *Subject – Specialisation – Insight*, the Ministry of Education and Research announced a review of the national school curriculum. A new Core Curriculum will be drawn up, and individual subject curricula will be revised. In addition to the revision of the subject curricula, new subject guidelines will be developed to provide teachers with additional support. A strategy for the renewal of the Knowledge Promotion and Sami Knowledge Promotion curricula has been produced. It invites broad-based involvement by relevant stakeholders, including the teaching profession and the teacher education institutions.

### **ICT strategy for primary and lower secondary schools**

In the course of 2017, the government will draw up an ICT strategy for primary and lower secondary education. The main aim of the strategy will be to give pupils the digital skills they need to succeed in their continued education, work and participation in society, and to put ICT to better use when organising and implementing learning activities in order to enhance the pupils' learning outcomes. Teachers must have adequate digital skills relevant to the profession in order to help reach these main goals. The 2017 national budget promises funding to particular digital skills programmes for teachers.

### **The Vocational Teacher Promotion**

The government's *Vocational Teacher Promotion* strategy stipulates that vocational teacher education programmes should be of a high quality while also being flexible, based on experience, and adapted to the personal circumstances of the participants. Experience shows that in order to recruit more skilled workers to vocational teaching, it is important to offer decentralised, internet-based and flexible courses in addition to ordinary campus-based education. The strategy also aims to work more closely with school owners to offer vocational teacher education.

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