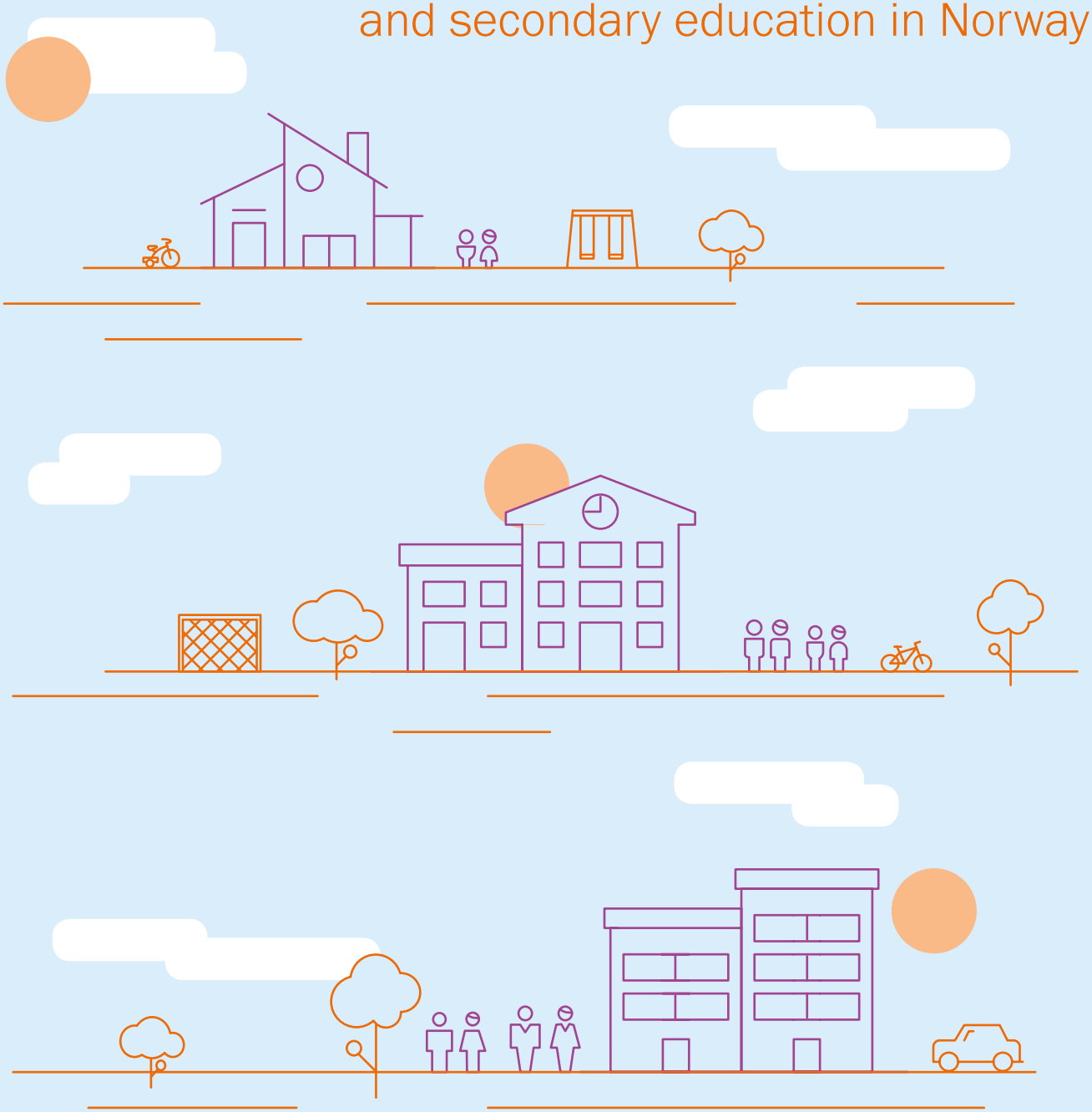
Norwegian Directorate
for Education and Training

The Education Mirror 2014

Facts and analysis of kindergarten, primary and secondary education in Norway



The Education Mirror presents facts and analysis of kindergarten, primary and secondary education in Norway

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Petter Skarheim
Director of the Norwegian Directorate for Education and Training

Overview + Information = Insight

The Education Mirror is a key source of information about kindergartens, primary and secondary education in Norway. It provides analyses of this year's most recent figures. Many of the diagrams show developments over a 10-year period.

This edition marks the 10th anniversary of The Education Mirror. In other words, our "Mirror" started school in 2004 and has now reached the last year of lower secondary. This is a very important year for the "mirror" and its classmates in Year 10. They are on the threshold of the future and are about to start upper secondary. Most of them will succeed, but far too many will drop out along the way. The reasons behind the high drop-out rates are complex, and you can read more about them in Chapter 6 "Completion".

If I were to sum up the state of Norwegian education at a national level with a single word, I would probably say "stable". Things are stable for better or for worse. We are seeing positive trends in a number of areas, but elsewhere we feel that progress is too slow. Some figures also remain unchanged over time, when we would have wished to see improvements.

Children enter the education system at an early age in Norway, and every year we spend vast sums on our kindergartens, primary and secondary schools. The total cost is more than NOK 135 billion – 5% of our GDP. What is the return on this investment? The chapter on learning outcomes will tell us more about this.

In 2012 the Norwegian Directorate for Education and Training assumed responsibility for the kindergarten sector. We will help create better kindergartens, and in order to do so we are expanding our knowledge base year by year.

Our "Mirror's" little sister started kindergarten as a 1-year-old in 2012 and has now spent two years there. She is one of a large number of 3-year-olds (around 95%) who attend kindergarten. She loves to play, enjoys her days in kindergarten and appreciates the growing number of qualified kindergarten teachers.

Norwegian kindergartens have experienced a period of rapid growth, and it is especially encouraging to see a growing number of children from language minority backgrounds attend kindergarten. This is important to their language development, and we know that it has a great impact on how they perform in school later on.

Kindergartens should provide a good environment for care and play, learning and development. The expertise of the kindergarten staff is a key factor, and we are noting an increase in personnel with formal teaching, childcare and youth work qualifications. This is a positive trend and one that shows we are seeing returns on our investment in skills development.

In terms of schools, we do not need a crystal ball to see that we will be needing even more good, qualified teachers in the years ahead. Over the next decade the number of pupils in primary and lower secondary education will increase by 60,000.

Norway spends up to 50% more resources on each pupil than the OECD average, and the teacher-to-pupil ratio is one of the reasons for the high level of spending. But do the results reflect the cost?

There is a clear correlation between results from national tests and where the pupils live. With few exceptions,

We are facing major challenges, and we need a knowledge base in order to set ourselves clear and long-term targets.

- Many more pupils should complete their education.
- More pupils should be given apprenticeships.
- Fewer pupils should experience harassment.

pupils living in large municipalities achieve better results in national tests than do pupils from small and medium-sized municipalities. This pattern has remained stable year after year. There are differences between girls and boys, and parents' level of education and earnings also have an impact. Compared to other OECD countries (the PISA survey), Norway performs about average. We are therefore unable to see the level of spending reflected in the results from primary and secondary education.

We are investing a great deal in improving the learning environment, because we know that a good learning environment has a significant impact on pupils and apprentices' learning outcomes. The Pupil Survey has found that 9 out of 10 pupils enjoy school very much and that this figure has remained stable over time. The same is true for the kindergarten environment.

However, the Pupil Survey carried out in autumn 2013 also found that 11% of pupils have experienced being picked on or teased. The responses to the survey show that pupils in lower secondary are especially vulnerable to bullying. Further nationwide initiatives need to be introduced in this area. The objective is to improve the learning environment, increase pupils' motivation, make the tuition more relevant, and let the pupils experience mastery.

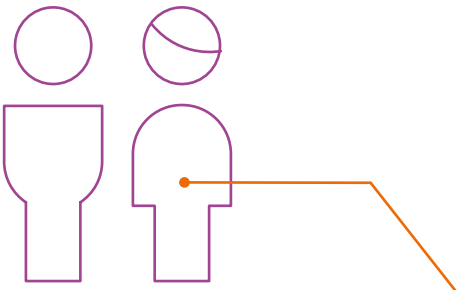
We see that the pupils leaving lower secondary school with the poorest grades are the same pupils at risk of dropping out of upper secondary education later on. 17% of young people between 16 and 25 years of age have not completed and passed the upper secondary stage. In recent years the Follow-up Service (Oppfølgingstjenesten) has obtained a better overview of young people not in upper secondary education or training, and a growing number of them have become engaged in activity.

The proportion of pupils receiving special needs education had been increasing until this year. We have now noted a slight fall. This could indicate that schools are becoming better at adapting tuition within the ordinary curriculum framework. We strongly believe that early intervention at the right time is the correct "medicine". Efforts must be made to help the child, pupil or apprentice as soon as the challenge occurs. A "wait and see" approach benefits no one.

Many of us care about the state of our kindergartens, primary and secondary schools. Every single one of us is affected by it one way or another. We are facing big challenges, but the knowledge we have about these challenges means we can take steps to overcome them.

We have set out clear objectives. Many more pupils should complete their education. More pupils should be given apprenticeships. Fewer pupils should experience bullying. We must also reinforce our focus on maths and sciences and enable teachers to develop their expertise within their individual specialisms. One thing is certain: we are entering a more specialised future and must ensure that each child, pupil and apprentice is equipped to enter the labour market and wider society safely and securely.

I highly recommend reading this year's Education Mirror. You are guaranteed to find enough information to form an opinion on kindergartens, primary and secondary education in Norway. Let the facts speak for themselves! Happy reading!



There were 615,300 pupils in primary and lower secondary schools in Norway in autumn 2013.

Read more in chapter 1

Statistics Norway (SSB) expects pupils numbers to rise by 10% over the next decade.

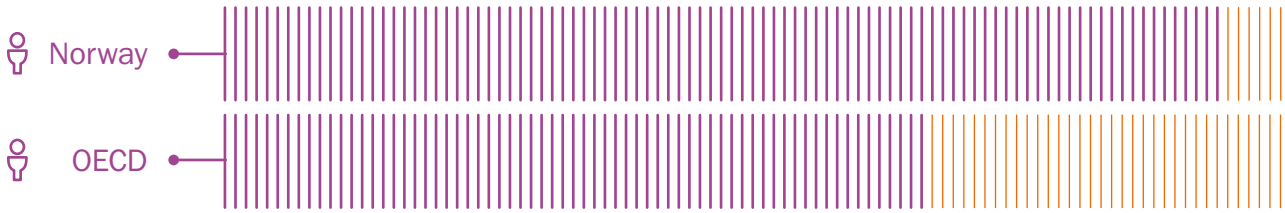
Kindergartens cost NOK 44 billion a year to run.

Read more in chapter 2

Parents meet 15% of the cost.

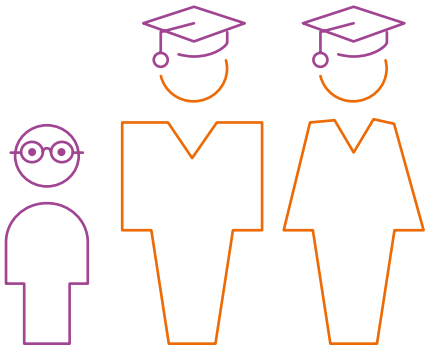
95% of all Norwegian 3-year-olds attend kindergarten. The OECD average is 67%.

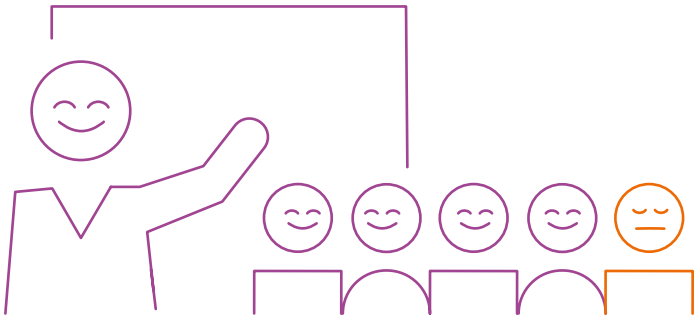
Read more in chapter 3



The parents' level of education has a significant impact on pupils' exam results.

Read more in chapter 4

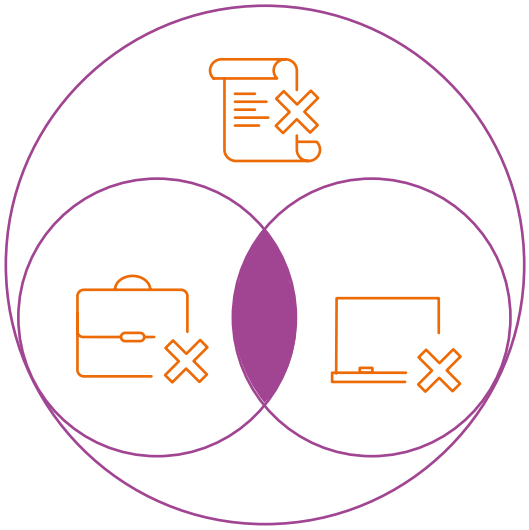




Relations between teachers and pupils have improved.

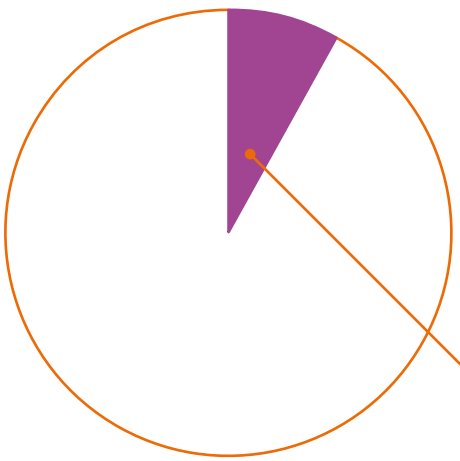
Read more in chapter 5

More than 80% of pupils say their teachers are supportive.



7% of young people aged 16–25 have not passed upper secondary education or training and are not in education, employment or training.

Read more in chapter 6



51,000 pupils in primary and lower secondary with individual decisions on special needs education. This is a slight decline on last year.

Read more in chapter 7

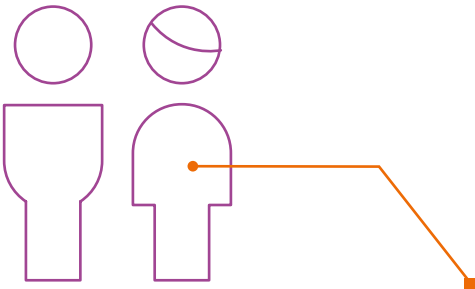
8.3% of all pupils.

1

Facts about primary and secondary education

In order to make good decisions both locally and nationally, we need facts and knowledge about the state of the education sector.

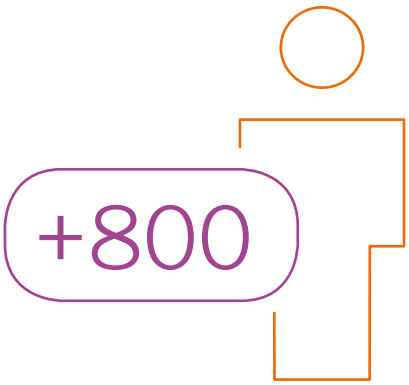
In this chapter we present a range of facts and figures on primary and secondary education in Norway. It includes an overview of school structures, pupil numbers and the distribution of pupils across different study programmes and subjects at the upper secondary stage. You will also find figures on apprentices and adults in secondary education.



Autumn 2013, 615,300 pupils attend primary and lower secondary schools.

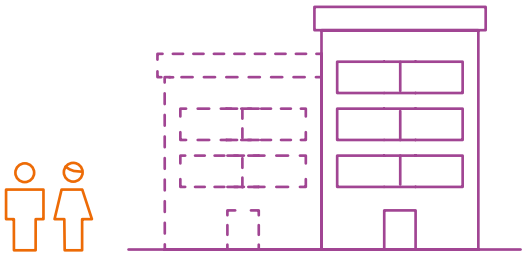
Statistics Norway (SSB) expects pupils numbers to rise by 10% over the next decade.

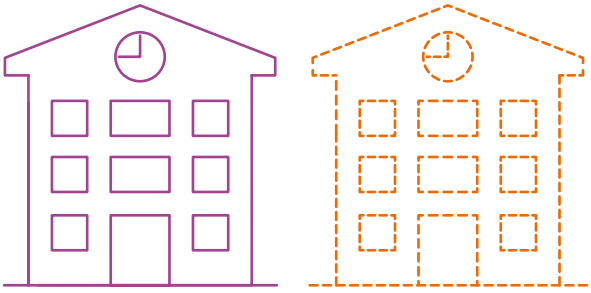
198,200 pupils attend upper secondary schools in Norway in autumn 2013. This is an increase of 800 compared to autumn 2012 numbers.



The trend is moving towards fewer, but larger schools across the country. Ten years ago there were nearly 400 more primary and lower secondary schools than there are today.

There is a total of 433 upper secondary schools in Norway. This is a decrease of 42 schools from 2003.

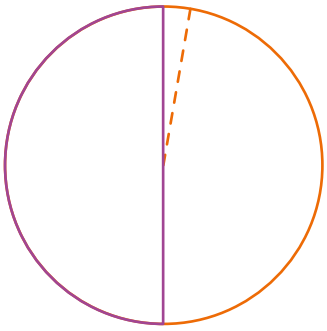




There is a total of 195 private primary and lower secondary schools in 2013. This number has doubled since 2003.

60 percent of pupils taking optional subjects in Years 8 and 9 have chosen the most popular optional subjects: Physical Activity and Health; Music and Stage Production; and Design and Redesign.

60%



Between 2012 and 2014 the proportion of applications for vocational programmes at Level Vg1 fell from 53 percent to 50 percent.

There are 9,867 adults studying at the lower secondary stage in the 2013/14 academic year. 20,242 adults are in upper secondary education or training.

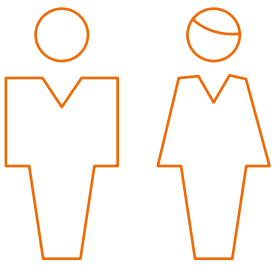
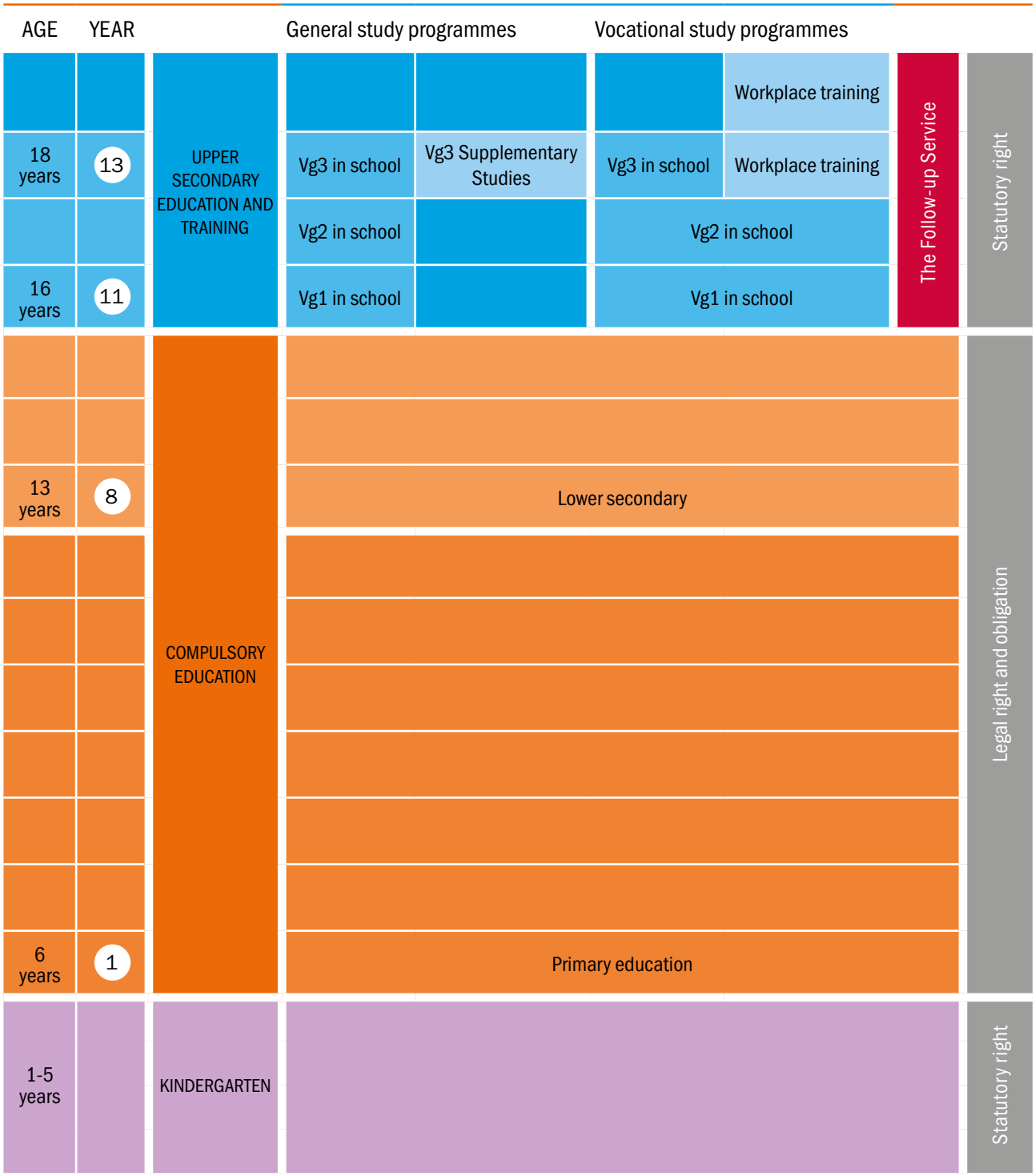


Figure 1.1 The Norwegian education system 0–18 years.



Compulsory education

Compulsory education in Norway lasts 10 years and comprises Years 1 to 7 at the primary school stage and Years 8 to 10 at the lower secondary stage. The compulsory education system is based on the principle of equitable and adapted tuition for all. Compulsory education is free and is primarily financed by local authorities.

Public sector primary and lower secondary schools are owned by local councils, while public sector upper secondary schools are owned by county councils. Private schools are owned by the individual school's board of governors.

1.1 Pupil numbers

615,300 pupils in primary and lower secondary education

In October 2013 615,300 pupils enrolled in public and private primary and lower secondary schools in Norway. This was 400 more than at the same time in 2012. Nationwide, the number of pupils has remained stable over the last decade, although with considerable regional differences. The counties Oslo and Akershus saw the largest increase in pupil numbers, with a rise of 17 percent and 9 percent respectively. At the same time pupil numbers fell by 16 percent in Nordland county and by 13 percent in Finnmark. Migration to urban areas is the main reason for the regional changes in pupil numbers (SSB).

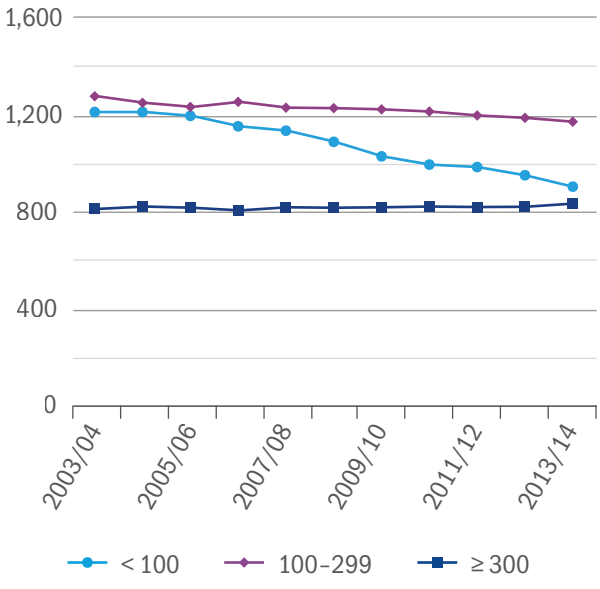
Significantly more primary school pupils by 2023

Statistics Norway (SSB) (2013) expects the number of children of primary and lower secondary school age (6–15) to rise to 681,000 by 2023. This is an increase of just over 10 percent. Pupil numbers are thought to increase by around 5,000 annually from 2015, and by 7,000–8,000 annually from 2019. The growth will predominantly be at primary school level, where the number of pupils will increase from 427,000 in the autumn of 2013 to around 478,000 by 2023. At the lower secondary stage pupil numbers will increase from 190,000 to around 202,000 in the same period.

All counties except Finnmark are expected to see a growing number of children of primary and lower secondary school age in the period up until 2023. In absolute figures, the greatest increase is likely to be in Oslo, Rogaland and Akershus. The largest percentage increase, meanwhile, is expected to occur in Oslo and Aust-Agder. In Oslo there will be almost 12,000 more pupils in 2023 than in 2013 – an increase of 20 percent.

In light of this potential increase in pupils in primary and lower secondary education of more than 60,000 over ten years, we should expect to see a growing need for more teachers in the same period. Statistics Norway's teacher projections show that there could be a general teacher shortage of around 10,000 full-time equivalents in primary and lower secondary education by 2020 (SSB 2012).

Figure 1.2 Schools – by pupil numbers. 2003–2013. Numbers.



Source: GSI/Norwegian Directorate for Education and Training

1.2 Fewer and larger schools

In 2013 (autumn) there were 2,907 primary and lower secondary schools in Norway, 50 fewer than in 2012. In 2003 there were almost 400 more primary and lower secondary schools than there are today.

There is a tendency towards fewer and larger schools. In 2003, Norwegian primary and lower secondary schools had an average of 188 pupils whereas in 2013 the number had risen to 212, an increase of 13 percent. Half of all schools have fewer than 186 pupils.

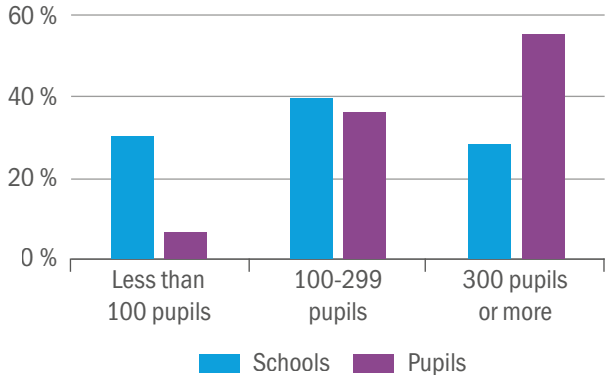
Two in three schools have fewer than 300 pupils, while more than half of all pupils attend schools with more than 300 pupils. In 2003/04, there were just over 1,200 schools with fewer than 100 pupils. By 2013/14 this number had fallen to 900. 7 percent of all pupils are attending schools with fewer than 100 pupils in the 2013/14 academic year.

80 primary and lower secondary schools have closed down in the last academic year

80 primary and lower secondary schools closed down between the 2012/13 and 2013/14 academic years. 70 of these were municipal schools, 8 were private and 2 were county schools. 30 new primary and lower secondary schools opened in the same period: 9 of these municipal, 19 private, and 2 county schools.

When a school closes down its pupils will normally be transferred to the nearest public school. In 10 percent of cases a new, private school is established in the same area when a public school is closed down. New private schools have an average of 33 pupils, while the public

Figure 1.3 Distribution of schools and pupils – by number of pupils at each school. 2013/14. Percentage.



Source: GSI/Norwegian Directorate for Education and Training

Table 1.1 Primary and lower secondary schools – by ownership type. 2013/14. Numbers.

Ownership type	Number of schools
Municipal	2,693
County council	11
Intermunicipal	4
Central government	4
Private	195
Total	**2,907**

Source: GSI/Norwegian Directorate for Education and Training

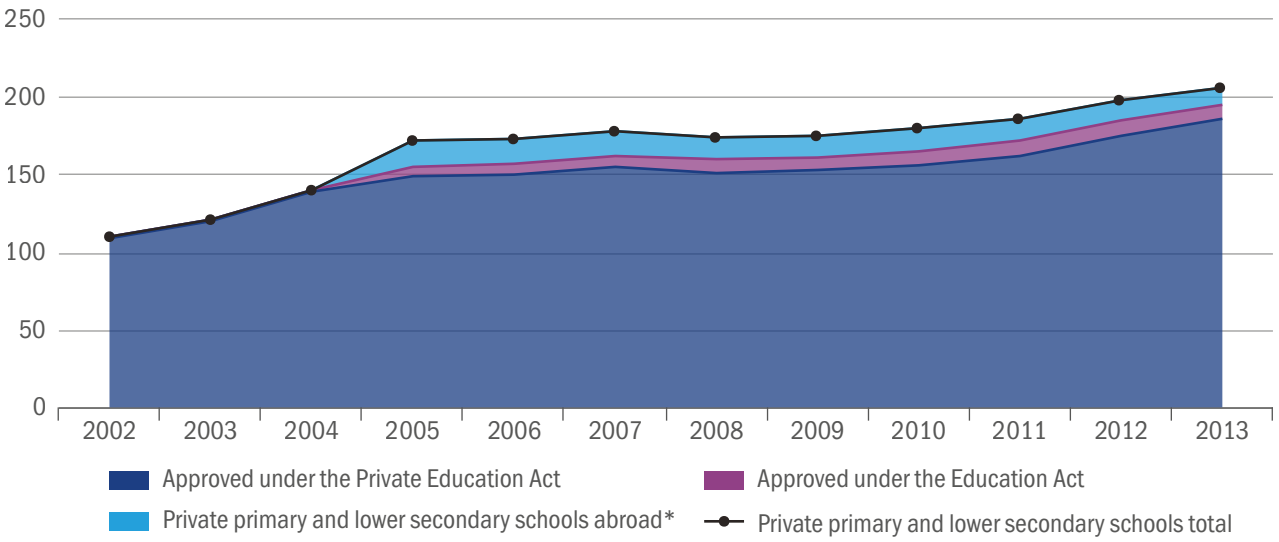
Private schools

The Private Education Act states that new private primary and lower secondary schools must be founded one of the following platforms in order to be granted approval:

- religious
- acknowledged educational approach
- international
- specially adapted education for the disabled
- Norwegian primary and lower secondary education abroad

Private schools approved under the Education Act do not have to meet one of these specific criteria, but the quality of the tuition must be equivalent to that offered in public sector schools. Schools approved under the Private Education Act are entitled to government funding. Schools approved under the Education Act are not entitled to government funding. Running private primary and secondary schools is not permitted in Norway without approval under the Private Education Act Section 2-1 or the Education Act Section 2-12.

Figure 1.4 Changes in the number of private primary and lower secondary schools between 2002 and 2013. Figures for private primary and lower secondary schools abroad from 2006. Numbers.



Source: GSI/Norwegian Directorate for Education and Training

schools that closed down had an average of 69 pupils. It is primarily the smallest schools that are being closed down. Half of all schools that closed down between 2012/13 and 2013/14 had fewer than 30 pupils. 12 of the schools that closed had more than 100 pupils, and most of these larger schools were merged with other schools.

More private schools

In the 2013/14 academic year there are 195 private primary and lower secondary schools in Norway. 186 of the schools have been approved under the Private Education Act and 9 approved under the Education Act.

There are now almost twice as many private schools as there were in 2002/03. In this period, private schools have attracted 7,600 more pupils – an increase of 66 percent. 3 percent of pupils in primary and lower secondary education are attending private schools in the 2013/14 academic year whereas ten years ago the figure was just under 2 percent. There are 10 more private schools in 2013/14 than there were last year.

In 2013, the Norwegian Directorate for Education and Training received 41 applications to open new private primary and lower secondary schools. 22 of these applications were approved, and the schools can open in the autumn of 2014. In 2014, the Directorate received 34 applications for new private primary and lower secondary schools by the 1 April deadline. These schools can open in the autumn of 2015 at the earliest, if approved.

Table 1.2 Private primary and lower secondary schools. 2013/14. Numbers.

Basis for approval	Number
Religious	70
Acknowledged educational approach	88
International	11
Specially adapted education for the disabled*	3
No particular basis **	14
Private schools approved under the Education Act	9
Total number of private primary and lower secondary schools in Norway	195
Norwegian primary and lower secondary education abroad	11
Total number of private primary and lower secondary schools in Norway and abroad	206

* Four of the schools approved on the basis of an acknowledged educational approach also provide specially adapted tuition for the disabled.

** These schools were approved before the new Private Education Act stipulated a basis for approval.

Source: Norwegian Directorate for Education and Training

84 percent of private schools established in the period 2002–2009 were still running four years after they opened.

Private primary and lower secondary schools have far fewer pupils than public schools. While private schools have an average of 98 pupils in the 2013/14 academic year, the corresponding number for public schools is 217 pupils.

Most private schools in Oslo and the largest cities

Private schools are largely, located in urban areas. In the cities Oslo, Bergen and Trondheim around 5 percent of pupils attend private schools.

Sogn og Fjordane has the lowest proportion of pupils attending private schools, less than 1 percent.

11 private Norwegian primary and lower secondary schools abroad

In addition to private schools in Norway, there are 11 private Norwegian primary and lower secondary schools abroad with a total of 839 Norwegian pupils. These schools have been approved under the Private Education Act and receive funding from the government.

1.3 Distribution of teaching hours

Norwegian and mathematics make up almost 40 percent of the total number of teaching hours at the primary and lower secondary stages. Physical education and social studies are third and fourth largest in terms of teaching hours. Municipal authorities and schools may elect to offer more teaching hours than the minimum requirement. With an even distribution of teaching hours, pupils in Years 8–10 will normally receive 3.5 hours of Norwegian tuition per week, for example.

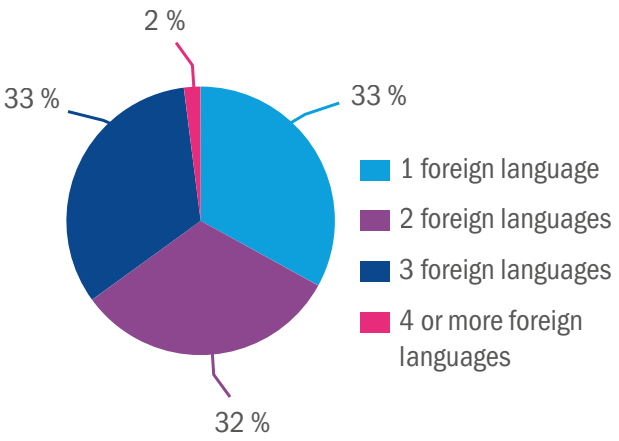
Optional subjects have been introduced gradually from 2012/13. From the 2014/15 academic year all pupils in Years 8, 9 and 10 will be offered optional subjects.

Table 1.3 Ordinary distribution of teaching hours for pupils in Years 1–10, applicable to all pupils from the 2014/15 academic year.

Subject/Year	Years 1–7	Years 8–10	Total primary and lower secondary
Norwegian	1,372	398	1,770
Mathematics	888	313	1 201
Physical Education	478	223	701
Social Studies	385	249	634
Arts and Crafts	477	146	623
English	366	222	588
Religious and Ethical Education (REE)	427	153	580
Natural Sciences	328	249	577
Music	285	83	368
Foreign Languages / advanced language study		222	222
Food and Nutrition	114	83	197
Optional subjects		171	171
Career Planning		110	110
Physical Activity	76		76
Flexible hours	38		38
Total	**5,234**	**2,622**	**7,856**

Source: Norwegian Directorate for Education and Training

Figure 1.5 Number of foreign languages per school. 2013/14. Percentage.



Source: GSI/Norwegian Directorate for Education and Training

1.4 Subject choices for lower secondary pupils

Most subjects at the primary and lower secondary stages are subject to the standard distribution of teaching hours. However, lower secondary pupils are able to choose between different optional subjects and foreign languages. They can also elect to pursue the subject working life skills (arbeidslivsfag) or subjects from the upper secondary curriculum. In practice their subject choices depend on which subjects are offered by the school and available choices vary greatly.

7 in 10 lower secondary pupils choose a foreign language

Secondary pupils should either study a foreign language or pursue advanced studies in English, Norwegian or Sami. Pupils may elect to pursue working life skills instead, if the school offers it. 73 percent of pupils chose a foreign language in 2013. 22 percent chose advanced language studies, and 5 percent chose working life skills.

Most pupils taking a foreign language choose Spanish

Over the last decade, Spanish has gone from being a minor foreign language to replacing German as the most popular foreign language. 45 percent of pupils taking a foreign language in lower secondary choose Spanish. German and French are the most popular foreign languages after Spanish with 35 and 19 percent of pupils pursuing these respectively. Less than 1 percent of pupils study other foreign languages such as Italian and Russian.

As mentioned the availability of language subjects depend on the individual school. It is only mandatory for schools to offer a minimum of one out of the following: Spanish, German, French and Russian. A third of schools only offer one language. On average two languages are available in lower secondary schools.

Differences in language choices between counties

The proportion of pupils choosing foreign languages varies between counties. In Akershus and Rogaland, more than 80 percent of pupils receive foreign language tuition in the 2013/14 academic year, while in Finnmark the figure is 41 percent.

Spanish is the most popular foreign language in 13 counties, while German is most popular in 6 counties. French is most popular in Oslo, where 30 percent of pupils who study a foreign language choose French.

More pupils are choosing working life skills

Working life skills (arbeidslivsfag) allows pupils to engage in practical work and explore their interests. 2,000 more pupils are pursuing working life skills in the 2013/14 academic year than the previous year. 375 schools offer working life skills – 100 more than last year. 69 percent of pupils taking working life skills are boys.

Pupils pursuing working life skills often have lower than average grades. The total average grade among all pupils in the 2012/13 academic year was 40 points, while pupils taking working life skills received an average of 34 points. However, high achieving pupils are also present in working life skills classes, as many as one in five working life skills pupils achieved point scores above the total grade average.

Figures from 2008/09, before the programme was introduced, show that the working life skills programme has not led to fewer pupils choosing foreign languages. Instead, there are now fewer pupils choosing advanced studies in English, Norwegian or Sami.

Positive evaluation of working life skills pilot

The research institute NOVA has evaluated the working life skills trial in the period 2010 to 2013. The evaluation shows that working life skills has evolved into a practical subject, as intended. The majority of pupils are very satisfied with the subject. In Year 10 more than 8 out of 10 pupils say that they find the subject

useful and that the teachers provide good tuition. Pupils especially seem to value the practical approach of the working life skills programme. The introduction of the working life skills programme appears to have created an alternative forum for learning that stands out from the more theory-driven subjects at the lower secondary stage, allowing otherwise poorly performing pupils to experience a sense of achievement (Bakken, Dæhlen and Smette 2013).

Until now working life skills has been a trial subject, but partly due to the positive feedback from the evaluation, it has been decided to make the subject permanent from the 2015/16 academic year. Schools will still be free to decide whether to offer working life skills.

Optional subjects at the lower secondary stage

The most popular optional subjects are physical activity and health; music and stage production; and design and redesign

In the 2013/14 academic year, pupils in Years 8 and 9 are able to choose between at least 2 out of 14 different optional subjects. Optional subjects will also be introduced to Year 10 in the autumn of 2014.

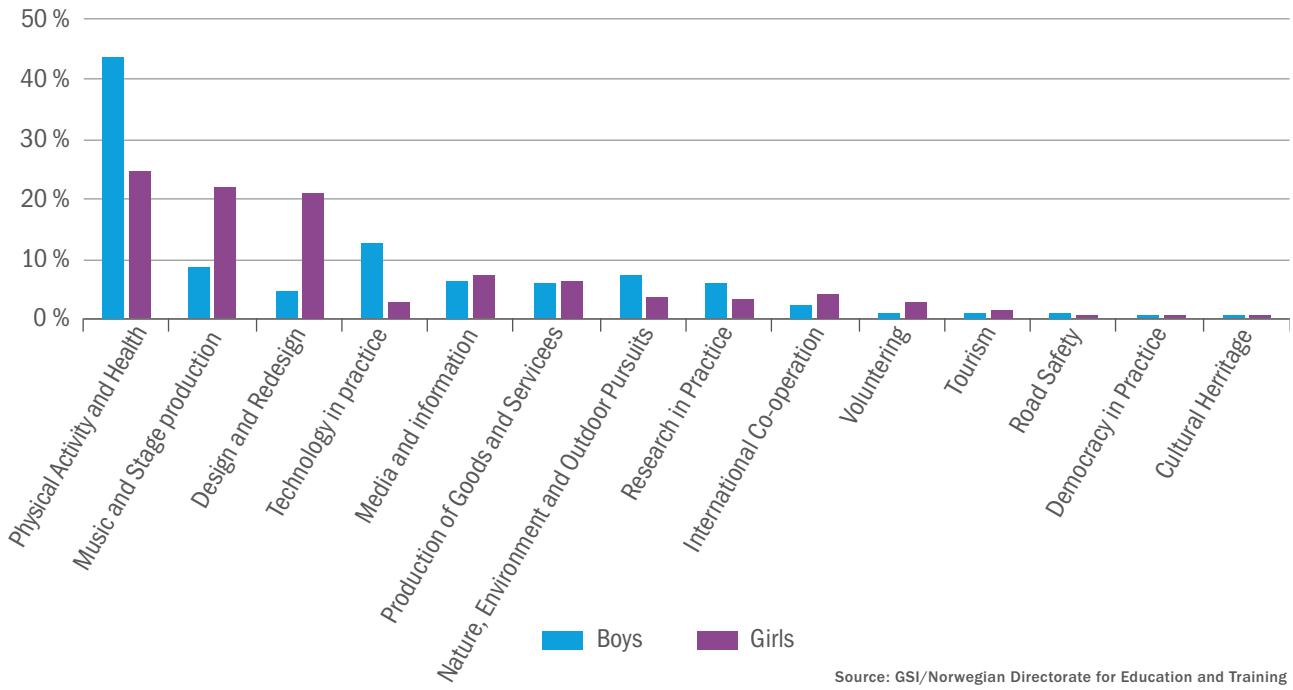
Table 1.4 Pupils studying optional subjects in Year 8 and Year 9. 2013/14. Numbers and percentage.

Optional subjects	Total	
	Number	Percent
Physical Activity and Health	42,136	34 %
Music and Stage Production	18,321	15 %
Design and Redesign	15,253	12 %
Technology in Practice	9,638	8 %
Media and Information	8,336	7 %
Production of Goods and Services	7,517	6 %
Nature, Environment and Outdoor Pursuits*	6,501	5 %
Research in Practice	5,629	5 %
International Co-operation	3,969	3 %
Volunteering*	2,056	2 %
Tourism*	1,109	1 %
Road Safety*	872	1 %
Democracy in Practice*	545	0 %
Cultural Heritage*	531	0 %
Total optional subjects	**122,413**	**100 %**

* new optional subjects as of autumn 2013

Source: GSI/Norwegian Directorate for Education and Training

Figure 1.6 Pupils taking optional subjects – by gender. 2013/14. Percentage.



Source: GSI/Norwegian Directorate for Education and Training

60 percent of pupils taking optional subjects in Years 8 and 9 have chosen one of the three most popular options: physical activity and health; music and stage production; and design and redesign. A total of 42,100 pupils have chosen physical activity and health, making up 34 percent of all pupils taking optional subjects. A respective 15 percent and 12 percent of pupils have chosen music and stage production, and design and redesign. A total of 7 percent of pupils have chosen one of the least popular optional subjects.

More boys than girls choose physical activity

44 percent of boys and 25 percent of girls have chosen physical activity and health. Girls more evenly distribute across the three most popular subjects – choosing music and stage production, and design and redesign more frequently than do boys.

Schools offer an average of four different optional subjects

Schools offer an average of four different optional subjects. 85 percent of pupils attend schools that offer at least four optional subjects whereas 1 percent of pupils attend schools only offering one optional subject.

The number of optional subjects on offer is closely related to the size of the school. Schools with more than 300 lower secondary pupils offer an average of six different optional subjects.

More pupils in lower secondary take subjects from the upper secondary curriculum

There are few formal arrangements in place for primary and lower secondary pupils seeking further academic challenges. One available scheme allows qualified lower secondary pupils to pursue subjects at the upper secondary level. Pupils may elect to take upper secondary subjects by making use of the up to 60 percent of the teaching hours allocated to the subject career planning, or by choosing upper secondary subjects instead of optional subjects.

At a national level, few lower secondary pupils take upper secondary subjects. When the scheme was first introduced in 2008/09 some 600 pupils made use of it, but there has been an increase the recent years.

In the 2013/14 academic year, 1,550 pupils are taking upper secondary subjects while in the lower secondary stage. The vast majority are pursuing upper secondary subjects when in Year 10 and instead of career planning. The scheme used to entail pupils forfeiting the possibility to retake the subject pursued when later attending upper secondary school. Pupils on a fast-track pathway in the 2013/14 academic year are given dispensation from this rule. As of the school year 2014/15, pupils will be allowed to take any available subject in upper secondary regardless of prior studies.

Taking upper secondary subjects is most common in Oslo

Just over 100 municipalities have lower secondary pupils taking subjects from the upper secondary curriculum. There are big differences when comparing the ten most populous municipalities in Norway. In Drammen and Oslo, a respective 8 percent and 7 percent of Year 10 pupils are taking upper secondary subjects. In six of the ten largest municipalities the proportion is less than 1 percent. Whether or not the municipality actively promotes the arrangement thus appears to impact on the number of pupils taking upper secondary subjects.

1.5 Special language tuition

7 percent of pupils receive special Norwegian tuition

Pupils with a mother tongue other than Norwegian or Sami are entitled to special Norwegian tuition until they are sufficiently fluent in Norwegian to be able to follow ordinary tuition.

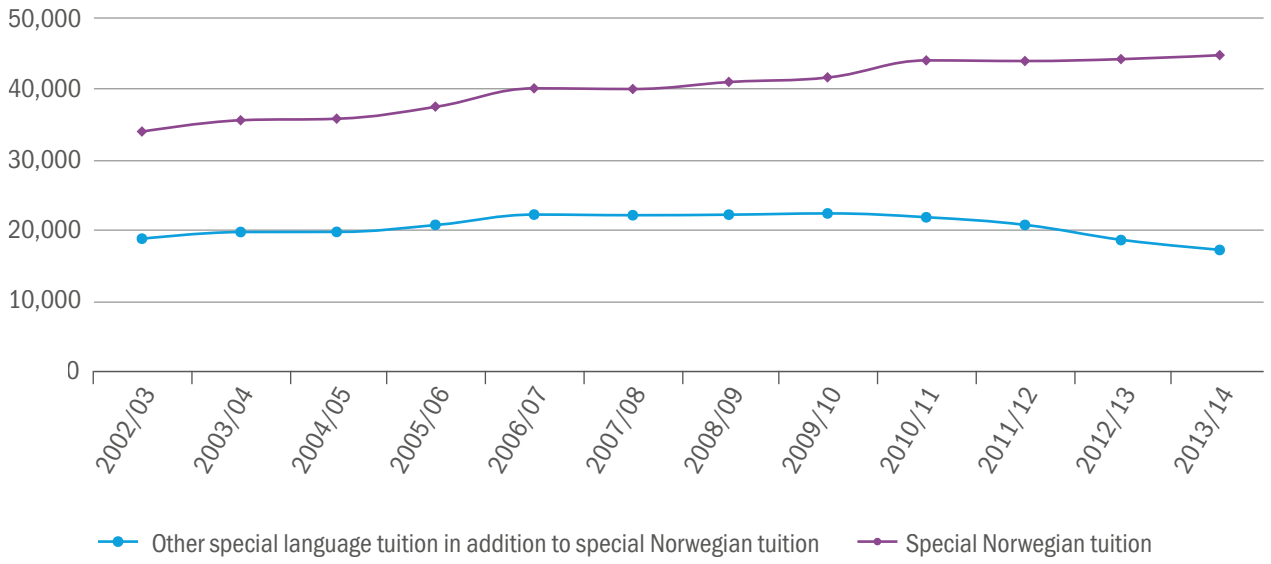
In the autumn of 2013 a total of 44,800 pupils were receiving special Norwegian tuition – equivalent to 7 percent. The number of pupils receiving special Norwegian tuition has remained stable over the last four years, but it has risen by almost 10,000 since the 2003/04 academic year, when 6 percent of pupils received such tuition. Again, this mirrors the recent years' stable immigration figures in the 0–15 age group (SSB).

A significantly higher number of pupils (9 percent) are receiving special Norwegian tuition in Years 1–4 than in Years 8–10 (5 percent). In the period between 2003/04 and 2013/14, the proportion of pupils receiving special Norwegian tuition in Years 1–4 increased from 7 to 9 percent.

Oslo has the highest proportion of pupils receiving special Norwegian tuition

The proportion of pupils receiving special Norwegian tuition varies across counties, ranging from 3 percent in Nord-Trøndelag to 24 percent in Oslo. In Drammen municipality 19 percent of pupils receive special Norwegian tuition.

Figure 1.7 Pupils receiving special Norwegian tuition and other special language tuition. 2002–2013. Numbers.



Source: GSI/Norwegian Directorate for Education and Training

Fewer pupils receive mother tongue tuition, bilingual subject tuition and adapted tuition

Pupils entitled to special Norwegian tuition are also entitled to tuition in their mother tongue and/or to bilingual subject tuition if needed Mother tongue tuition comes in addition to ordinary teaching hours. Bilingual subject tuition involves tuition within ordinary teaching hours where the pupil's mother tongue is used, either alone or in combination with Norwegian. If staff is unable to provide mother tongue tuition or bilingual tuition, the local council must provide other adapted tuition insofar as it is possible.

17,100 (38 percent) of pupils receiving special Norwegian tuition are also given other special language tuition. 19 percent of these pupils receive both mother tongue tuition and bilingual subject tuition, 56 percent only receive bilingual subject tuition, and 12 percent receive mother tongue tuition. Due to lack of qualified staff able to provide mother tongue tuition or bilingual subject tuition, 12 percent of pupils receive adapted tuition.

Among pupils receiving special Norwegian tuition, there are 23 percent fewer pupils receiving other special language tuition in 2013/14 than there were in 2009/10. The decline is largest in number of pupils receiving mother tongue tuition. Most pupils receive mother tongue tuition and/or bilingual subject tuition in Somali, Polish or Arabic.

Significant variations in how much special language tuition municipalities offer

The amount of special language tuition provided varies greatly across different municipalities. In Trondheim 89 percent of pupils receiving special Norwegian tuition also receive other special language tuition, primarily bilingual subject tuition. In Oslo and Drammen, the figures are 18 percent and 11 percent respectively, and again pupils usually receive bilingual subject tuition.

Large municipalities often run dedicated induction groups for asylum seekers

Local councils are able to organise tuition for pupils who have recently arrived in Norway in separate groups, classes or schools.

In the 2013/14 academic year 4,500 pupils are receiving tuition in separate induction groups, groups for asylum seekers or similar. This is 400 more than in the previous academic year. Just under 600 of pupils in separate tuition groups are asylum seekers.

The schooling background of newly arrived, foreign language pupils is found to have little impact on the tuition offered (Rambøll 2013). With the exception of the large urban municipalities, induction schemes are offered to all newly arrived language minority pupils regardless of their school background in their home country. The smallest municipalities primarily offer schemes where the pupils are affiliated with one particular class but are given separate tuition in certain subjects. Of the six municipalities with more than 20,000 inhabitants

Upper secondary education and training

Upper secondary education and training is voluntary. However, every pupil who has completed primary and lower secondary school is entitled to upper secondary education or training leading to general university and college admissions certification or to a vocational qualification. 92% of all 16 to 18-year-olds were in upper secondary education or training in autumn 2013.

taking part in the survey, four currently run a separate induction scheme, while two operate induction classes at ordinary schools (Rambøll 2013).

1.6 Pupils at the upper secondary stage

Slight increase in the number of upper secondary pupils

In 2013 (autumn) there were 198,200 upper secondary pupils in Norway, almost 800 more than in 2012.

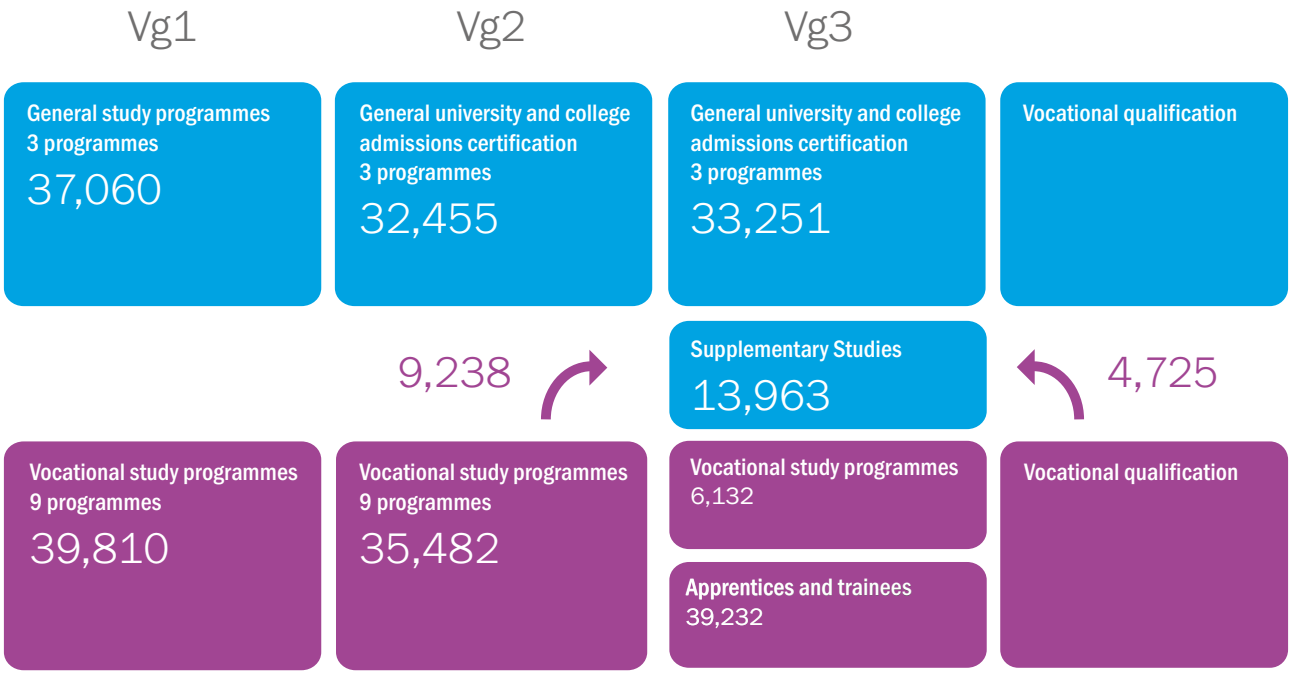
There are 76,900 pupils studying at Level Vg1, 68,000 pupils at Level Vg2 and 53,300 at Level Vg3. In addition to pupils in upper secondary school, there are 37,500 apprentices and 1,800 training candidates in the 2013/14 academic year.

59 percent of pupils are on general study programmes and 41 percent on vocational study programmes. There has been an increase in pupils on general study programmes in recent years.

1.7 Upper secondary schools

In the autumn of 2013, there were 433 upper secondary schools in Norway (SSB, preliminary figures for 2013). That is 42 fewer schools than in 2003.

Figure 1.8 Pupils and apprentices in upper secondary education and training as at 1 October 2013 – by level and pathway. Numbers.



Source: Norwegian Directorate for Education and Training

The number of pupils in each school has risen, in 2003 each upper secondary school had an average of 370 pupils, while in 2013 the figure was around 460.

The number of private upper secondary schools remains stable

In the autumn of 2013, there were 88 private upper secondary schools in Norway. All of them have been approved under the Private Education Act, except one, which was approved under the Education Act.

The number of private upper secondary schools has remained stable in recent years

14,500 (just over 7 percent) of upper secondary pupils were attending private schools in Norway in the autumn of 2013. The proportion of pupils attending private upper secondary schools has remained stable since 2007/08.

Private upper secondary schools are even more likely than private primary and lower secondary schools to be located in urban areas. As at 1 October, there are also five private Norwegian upper secondary schools abroad with a total of just over 200 pupils.

In 2013, the Norwegian Directorate for Education and Training received 11 applications to start new private upper secondary schools, most of them sports schools. The Directorate approved five of the applications, and the schools, four of them sports schools, can open in the autumn of 2014.

Private upper secondary schools

The Private Education Act states that new private upper secondary schools must be founded one of the following platforms in order to obtain approval:

- religious
- acknowledged educational approach
- international
- specially adapted upper secondary education or training combined with elite sports
- specially adapted education for the disabled
- Norwegian primary and lower secondary education abroad
- upper secondary training in rare arts and crafts disciplines worthy of preservation

After the new Private Education Act came into force in 2007 it is no longer possible to approve new upper secondary schools abroad.

As at 1 April 2014 the Directorate had received nine applications to open new private upper secondary schools from the autumn of 2015.

Table 1.5 Private upper secondary schools. 2013/14. Numbers

Basis for approval	Number
Religious	70
Acknowledged educational approach	88
International	11
Specially adapted education for the disabled*	3
No particular basis **	14
Private schools approved under the Education Act	9
Total number of private primary and lower secondary schools in Norway	**195**
Norwegian primary and lower secondary education abroad	11
Total number of private primary and lower secondary schools in Norway and abroad	**206**

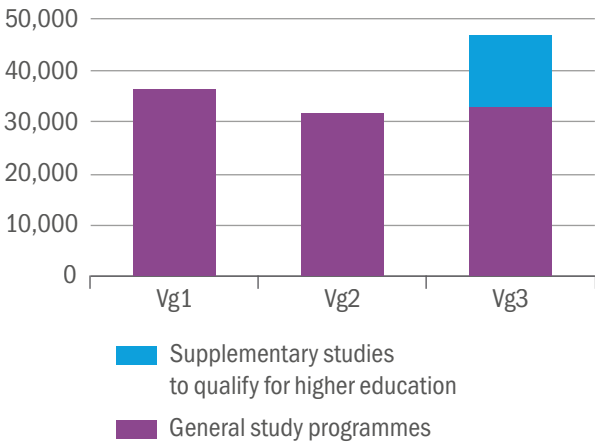
* Four of the schools approved on the basis of an acknowledged educational approach also provide specially adapted tuition for the disabled.
** These schools were approved before the new Private Education Act stipulated a basis for approval.

Source: Norwegian Directorate for Education and Training

1.8 Programme areas and programme subjects on general study programmes

Almost half of all pupils who started Level Vg1 in the autumn of 2013 enrolled on a general study programme. The Programme for Specialisation in General Studies is the largest of all the study programmes.

Figure 1.9 Pupils on general study programmes – by level. 2013/14.



Source: Norwegian Directorate for Education and Training, foreløpige tall

Table 1.6 Pupils on general study programmes – by study programme. As at 1 October 2013, preliminary figures. Numbers.

	Vg1	Vg2	Vg3
Specialisation in General Studies	30,667	26,731	27,597
Vg3 Supplementary Studies			13,963
Sports and Physical Education	4,052	3,616	3,646
Music, Dance and Drama	2,341	2,108	2,013

Pupils on the vocational study programmes Media and Communication, and Agriculture, Fishing and Forestry may also choose pathways that lead to general university and college admissions certification. They have not been included in this table.

Source: Norwegian Directorate for Education and Training, foreløpige tall

More pupils on general study programmes

General study programmes have seen an increase in pupil numbers in the last few years.

In the last year the number of pupils on the programme for specialisation in general studies rose by 3 percent. There was an increase at all levels, but mostly at levels Vg2 and Vg3. 2 percent fewer pupils pursued Vg3 supplementary studies to qualify for higher education than in the previous academic year.

Study programmes, programme areas, core subjects and programme subjects

Upper secondary education comprises 12 different study programmes, three of them general study programmes and nine of the vocational study programmes. The Programme for Specialisation in General Studies is an example of a general study programme, while the Programme for Building and Construction is an example of a vocational study programme.

At Level Vg2 pupils choose which programme area they wish to pursue within their wider study programme, e.g. the Programme Area for Natural Sciences and Mathematics for pupils on the Programme for Specialisation in General Studies, or the Programme Area for Construction Technology for pupils on the Programme for Building and Construction.

Core subjects are obligatory subjects at each level of upper secondary education, e.g. Norwegian, English, Mathematics and Natural Sciences. Programme subjects may be core subjects whereby pupils are obliged to study them, or they may be optional. Sociology and Social Anthropology is one of the optional programme subjects available to pupils pursuing the Programme Area for Languages, Social Sciences and Economics. On vocational study programmes the programme subjects are studied by all pupils pursuing the same programme area. Certain programme subjects are compulsory for all pupils at Levels Vg1, Vg2 and Vg3 of the programmes for Sports and Physical Education; Music Dance and Drama; and Specialisation in General Studies with Arts, Crafts and Design.

More pupils receive university and college admissions certification than vocational qualifications

Although there are slightly more pupils on vocational programmes than on general study programmes at Level Vg1, there is still a considerably higher number of graduated candidates with university and college admissions certification than with vocational qualifications. One explanation is that many pupils who enrol on a vocational study programme later opt to pursue other pathways that give them university and college admissions certification. A further explanation is that drop-out rates are significantly higher on vocational study programmes than on general study programmes.

You can read more about completion rates and differences in completion rates between vocational and general study programmes in Chapter 6.

Most pupils enroll in the programme area for languages, social sciences and economics at Level Vg2

Almost 14,000 pupils at level Vg2 enroll in the programme area for languages, social sciences and economics in the 2013/14 academic year. That accounts for 53 percent (53 percent) of all pupils on the programme for specialisation in general studies.

11,000 pupils at Level Vg2 enroll in the programme area for natural sciences and mathematics in the 2013/14 academic year. . There has been an increase in pupils studying maths and sciences as programme subjects in the last three academic years. Between the 2010/11 and 2013/14 academic years, the number of pupils studying chemistry rose by 25 percent, physics by 20 percent and mathematics by 17 percent.

Just over 800 (3 percent) of all pupils on the programme for specialisation in general studies choose the programme area arts, crafts and design.

Spanish is the most popular foreign language

In the 2013/14 academic year, 69,000 pupils study foreign languages as a core subject, and 1,900 are taking foreign languages as a programme subject.

Spanish is the most popular foreign language at the upper secondary stage, chosen by 44 percent of pupils who study a foreign language. Schools may provide tuition in 39 different foreign languages, only 3 percent of pupils studying a foreign language choose languages other than Spanish, German and French, however. Just as in lower secondary, there has been a decline in pupils choosing French. 17 percent of pupils choose French, while the proportion of pupils choosing German has remained stable at 36 percent.

More foreign languages offered at the upper secondary stage

There are more foreign languages to choose from in upper secondary than in lower secondary school. One in three lower-, and one in ten upper-, secondary schools offer tuition in only one foreign language. Almost 70 percent of upper secondary schools offer tuition in three or more foreign languages.

1.9 Vocational study programmes

Around 52 percent of all pupils who started Level Vg1 in the autumn of 2013 enrolled on a vocational study programme. The figure is the same as in 2012.

Most pupils choose the healthcare, childhood and youth development programme

The vocational study programmes attracting the largest number of pupils in the autumn of 2013 were the programme for healthcare, childhood and youth development and the programme for technical and industrial production. The programme for agriculture, fishing and forestry and the programme for restaurant management and food processing saw the lowest number of pupils.

At Level Vg1, the number of pupils enrolled on the programme for electrical and electronic engineering rose by 3 percent on the previous academic year. The healthcare, childhood and youth development programme also saw a slight increase in pupils at Level Vg1.

The largest decline in pupil numbers occurred on the design, arts and crafts programme and the media and communication programme, where the number of pupils at Level Vg1 fell by 12 percent and 10 percent respectively on the previous academic year.

A few more apprentices in 2013 than in 2012

In October 2013, there were a total of 37,500 apprentices in workplace training and 500 pupils receiving vocational classroom tuition. There was an increase of around 1,000 apprentices compared with the 2012/13 academic year.

More than two thirds of the apprentices are boys. The biggest fall in the number of apprentices was seen on the programme for design, arts and crafts, while the greatest increase was on the programme for electrical and electronic engineering. Chapter 6 provides more information about new apprentices as a result of the

Table 1.7 Pupils and apprentices on vocational study programmes – by study programme. As at 1 October 2013. Preliminary figures. Numbers.

	Vg1	Vg2	Vg3 in school	First-year apprentices in workplace training
Healthcare, Childhood and Youth Development	8,864	9,077	1,479	2,988
Technical and Industrial Production	7,171	5,985	281	4,146
Electrical and Electronic Engineering	5,131	4,252	1,030	3,165
Building and Construction	4,849	3,800	131	3,667
Services and Transport	3,619	4,098	277	1,960
Media and Communication	3,479	3,278	2,251	70
Design, Arts and Crafts	2,538	1,759	237	1,127
Restaurant Management and Food Processing	2,360	1,563	46	1,123
Agriculture, Fishing and Forestry	1,799	1,670	912	433

Source: Norwegian Directorate for Education and Training

so-called Social Contract for VET. See also Chapter 4 for information about apprenticeship and journeyman's examinations. Chapter 7 addresses training candidates.

1.10 Applications for upper secondary education

The number of applications for upper secondary education as at 1 March gives an indication of what young people want to study, and time series analyses show that preferences have changed over the last few years.

In recent years, there has been a clear tendency for young people to choose general study programmes rather than vocational study programmes. Between 2012 and 2014, the proportion of applications for vocational programmes at Level Vg1 fell from 53 percent to 50 percent. During this period, the number of applicants for vocational Vg1 and Vg2 programmes fell by 4,500, while applicant numbers for general study programmes increased by almost 2,500. The decline is largely due to fewer pupils applying for the media and communication; building and construction; and design, arts and crafts programmes.

The programme for specialisation in general studies sees the greatest increase

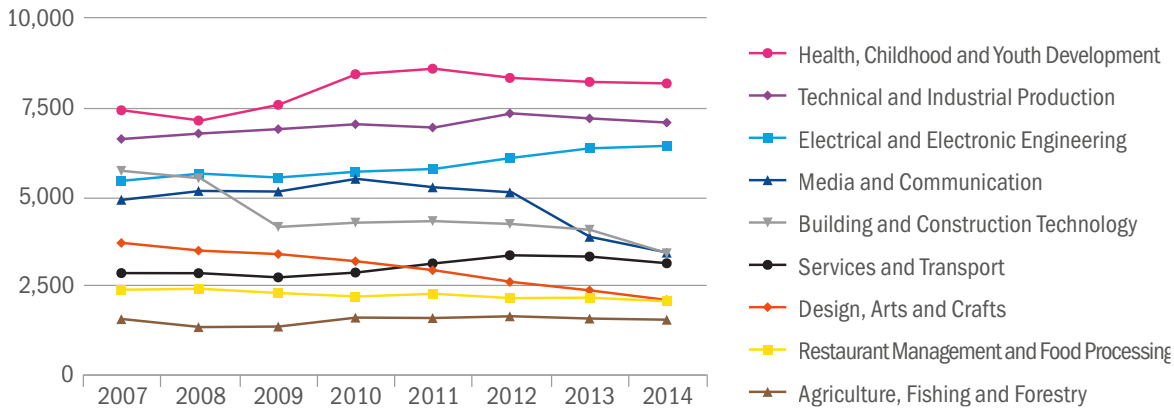
As well as being the largest study programme, the programme for specialisation in general studies has also seen the greatest increase in applications in recent years. Of all applicants for Level Vg1, 40 percent put specialisation in general studies as their first choice. In 2007, the figure was 32 percent, an increase of just under 5,000 applicants. With regard to the other general study programmes, sports and physical education has seen relatively stable applicant numbers since the introduction of the Knowledge Promotion Reform, while music, dance and drama experienced a decline of 20 percent between 2007 and 2014.

Fewer applicants for vocational study programmes

After several years of stable applicant numbers, the number of applicants for Level Vg1 media and communication fell by 24 percent between 2012 and 2013, a decline that continue in 2014. At the same time, there has been a sharp fall in applicants for building and construction at Level Vg1. In 2014, there were almost 700 fewer applicants than in 2013, a decline of 16 percent. Design, arts and crafts is also experiencing a significant fall in applications.

Electrical and electronic engineering is the only vocational programme to receive a higher number of applications than last year. The programme has seen a steady increase in applications over several years.

Figure 1.10 Applicants for vocational study programmes at Level Vg1. As at March 2014. Numbers.



Source: Norwegian Directorate for Education and Training

Despite a sharp drop in applications for the programme for media and communication last year, pupil numbers only dropped by 10 percent. One reason for this is that media and communication has always been oversubscribed, and there were therefore more applicants than there were places available in the previous year.

Boys and girls make traditional study choices

More girls than boys apply for general study programmes, while the majority of boys apply for vocational programmes. The differences become especially clear when we look at the individual study programmes. Of the pupils applying for the healthcare, childhood and youth development and design, arts and crafts programmes, a respective 85 percent and 88 percent are girls, while the proportion of girls applying for the building and construction and electrical and electronic engineering programmes is 4 percent and 6 percent respectively.

Table 1.8 Oversubscription and undersubscription at Level Vg1 – by study programme. As at 1 March 2014. Numbers.

	Applicants as at 01.03.2014	Pupils as at 01.10.2013	Applicants per 100 pupils
Electrical and Electronic Engineering	6,418	5,131	125
Sports and Physical Education	4,928	4,052	122
Music, Dance and Drama	2,615	2,341	112
Technical and Industrial Production	7,071	7,171	99
Media and Communication	3,420	3,479	98
Specialisation in General Studies	29,333	30,667	96
Healthcare, Childhood and Youth Development	8,170	8,864	92
Restaurant Management and Food Processing	2,052	2,360	87
Services and Transport	3,121	3,619	86
Agriculture, Fishing and Forestry	1,536	1,799	85
Design, Arts and Crafts	2,087	2,538	82
Building and Construction	3,401	4,849	70
Total	**74,152**	**76,870**	**96**

Source: Norwegian Directorate for Education and Training, foreløpige elevtall

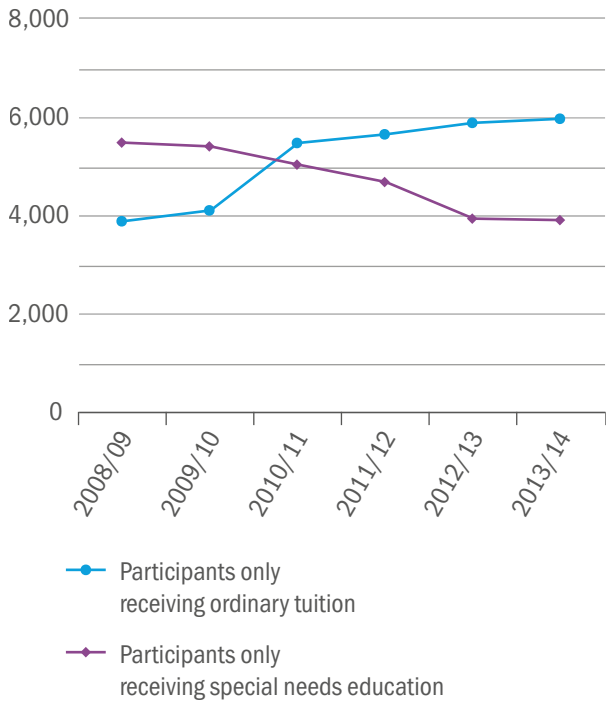
Adult education

All adults above compulsory school age, i.e. 16 years, who need lower secondary education are entitled to such education from their local authority. This entitlement includes tuition in subjects that the pupil needs in order to obtain a certificate of completed lower secondary education for adults. The education must be adapted to suit the individual pupil's needs. Adults who do not benefit sufficiently from ordinary education provision are entitled to special needs education. Adults are also entitled to upper secondary education or training from the year they turn 25 years of age, unless they have already exhausted their entitlement to upper secondary education.

Most applicants for each place on the programme for electrical and electronic engineering

By comparing application numbers for the 2014/15 academic year with the number of enrolled pupils in the 2013/14 academic year, we can get an idea of over- and undersubscription on the different study programmes. Oversubscription means there are more applications for the programme than there were available places in the previous academic year.

Figure 1.11 Adults receiving ordinary tuition and special needs education. 2008/09–2013/14. Numbers.



Source: GSI/Norwegian Directorate for Education and Training

The applicant numbers for Level Vg1 in the 2014/15 academic year are considerably lower than the number of pupils enrolled at Level Vg1 in the 2013/14 academic year. Few study programmes therefore have more applicants than they have places. The most oversubscribed programmes were electrical and electronic engineering, and sports and physical education with a respective 25 and 22 percent more applicants than places. The most undersubscribed programmes were building and construction, and design, arts and crafts with a respective 30 and 18 percent fewer applications than there were enrolled pupils in the previous academic year.

1.11 Adults in lower secondary education

There were 9,900 adults in lower secondary education in the 2013/14 academic year. Adults in lower secondary education include both adults receiving ordinary lower secondary tuition and adults receiving special needs education..

A majority of local councils offer lower secondary education for adults

In the 2013/14 academic year, 324 municipalities out of 428 have residents participating in lower secondary education for adults. This is 9 more than in the previous academic year. In 267 municipalities adults received tuition within the municipality while in 137 adults received tuition outside the municipality.

Not all municipalities have adults in lower secondary education. This could be because there are no residents in need of such education, or because people in the target group are unaware of such tuition. In a survey carried out by NOVA (Dæhlen et al. 2013), the majority of local councils reported a lack of applicants as one reason for not offering lower secondary education for adults.

Increasing number of adults in ordinary lower secondary education

6,000 adults are receiving ordinary lower secondary education in 2013/14. This is an increase on 2008/09, when the number was 3,900.

There are many young people receiving ordinary lower secondary education. 41 percent of participants are under 25 years of age, while only 18 percent are more than 40 years old.

Fewer adults receive special needs education

There has been a steady decline in the number of adults receiving special needs education over the last few years and the number is now 3,900. In 2008/09, a total of 5,500 adults received special needs education.

Adults receiving special needs education are older than adults receiving ordinary lower secondary education; only 17 percent are younger than 25 years of age, while 46 percent are more than 40 years old.

Many language minority adults receive lower secondary education

In 2013/14, the number of foreign language adults in lower secondary education rose by 500 to 6,000. This accounts for 61 percent of all adults in lower secondary education. It represents an increase on 2009/10, when 40 percent of adults in lower secondary education used a foreign language.

Most foreign language participants receive ordinary education. Of adults receiving ordinary lower secondary education, 91 percent are foreign language users, while the figure for special needs education is 14 percent. An increase in the number of people with a foreign language background is the likely explanation for the sharp rise in adults receiving ordinary lower secondary education. We do not have a good explanation for the significant decline in the number of adults receiving special needs education, however.

Young adults are more likely to complete ordinary lower secondary education

A NOVA study (Dæhlen et al. 2013) shows that around 65 percent of adults in ordinary lower secondary education in 2008/09 had completed their lower secondary education by 2011. The same study found that men are more likely than women to complete, and that younger participants are more likely than older participants to complete lower secondary education. Around half of all adults who completed lower secondary education moved on to upper secondary education.

1.12 Adults in upper secondary education

Adults who have completed lower secondary education but not upper secondary education are entitled to free upper secondary education. This entitlement applies from the year the adult turns 25 years of age.

Little change in the number of adults in upper secondary education

The number of adults in upper secondary education has remained fairly stable in recent years. There has been a slight increase in the number of adults receiving classroom tuition, while the number of practice candidates for apprenticeship and journeyman's examinations has fallen somewhat. The number of apprentices and training candidates remains the same in 2012/13 (latest available figures) as in 2011/12

Practice candidates are not enrolled in upper secondary education except in order to sit the apprenticeship or journeyman's examination. They are still included in the statistics to identify the number of adults obtaining formal qualifications at upper secondary level.

The average age of adult participants was 35 years.

Table 1.9 Participants in upper secondary education and training aged 25 or older. 2008/09-2012/13. Numbers.

	2008/09	2009/10	2010/11	2011/12	2012/13
Apprentices and training candidates	4,864	4,610	4,251	4,026	4,054
Practice candidates	6,456	6,649	6,520	7,402	6,760
Participants in school	12,943	9,446	8,838	8,847	9,428
Total	**24,263**	**20,705**	**19,609**	**20,275**	**20,242**

Source: Norwegian Directorate for Education and Training/SSB, foreløpige tall

Table 1.10 Adult participants in upper secondary education and training – by study programme. Study programmes in the Knowledge Promotion curriculum. 2012/13. Preliminary figures. Numbers.

Study programme	Pupils	Training candidates	Apprentices	Practice candidates	Total
Healthcare, Childhood and Youth Development	3,545	34	973	2,112	6,664
Vg3 Supplementary Studies	3,659	0	0	0	3,659
Building and Construction	291	14	767	1,754	2,823
Services and Transport	458	10	296	1,125	1,889
Technical and Industrial Production	244	30	474	1,021	1,769
Electrical and Electronic Engineering	246	3	723	200	1,172
Restaurant Management and Food Processing	160	15	163	268	606
Design, Arts and Crafts	132	10	380	55	577
Agriculture, Fishing and Forestry	364	5	88	110	567
Specialisation in General Studies	322	0	0	0	322
Media and Communication	7	0	46	14	67
Other (Reform 94)	0	0	23	101	124
Total	**9,428**	**121**	**3,933**	**6,760**	**20,242**

Source: Norwegian Directorate for Education and Training/SSB

Healthcare, Childhood and Youth Development is the most popular programme

Healthcare, childhood and youth development is the study programme with the highest number of adult participants, both for recipients of classroom tuition and practice candidates. One third of adults in upper secondary are in this study programme, a 6 percent increase on the previous year.

The second most popular study choice among adults is the programme for supplementary studies to qualify for higher education. It had 3,700 participants in 2012/13, an increase of 12 percent on the previous year. The Electrical and Electronic Engineering programme has the greatest rise in adult participants with a 21 percent increase, followed by building and construction with an 18 percent increase.

Fewer adults in upper secondary education are having their existing skills assessed

Adult education programmes may be compressed and their duration shortened following an assessment of the participant's existing skills. Existing skills are assessed in relation to the curricula for the subjects in question. The participant may have acquired skills through education, paid or voluntary work, and leisure activities or in other ways. All adults entitled to upper secondary education are also entitled to an assessment of their existing skills.

Of the 20,200 adult participants in upper secondary education in 2012/13, 2,600 had their existing skills assessed before commencing their studies. This is 13 percent of the total and represents a slight increase on last year. Most of the participants who had their existing skills assessed were enrolled in classroom courses. 26 percent of these participants were assessed, while only 1 percent of apprentices, training candidates and practice candidates for apprenticeship and journeyman's examinations were assessed. In 2013, the Norwegian Directorate for Education and Training drew up a set of guidelines for assessing the existing skills of candidates in adult upper secondary education. The purpose of the guidelines is to ensure high quality assessments and uniform practice in every county in order to underpin the legitimacy of the scheme and safeguard adults' legal rights.

2

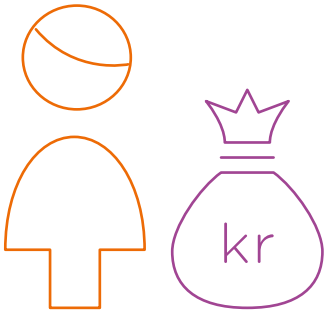
Finances and personnel

Every year Norway spends vast sums on its kindergartens, primary and secondary schools. The total cost stands at more than NOK 135 billion – almost 5 percent of the country's GDP.

This chapter provides an insight into where the money is spent, which factors influence costs, and how spending has changed. We also present an overview of how human resources and their competencies have evolved.

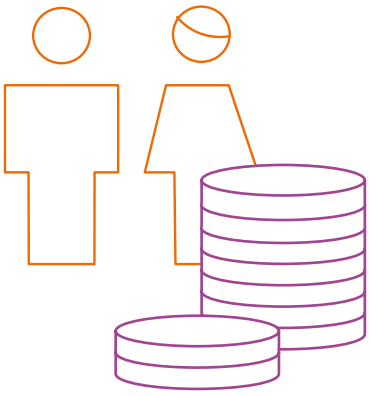
Kindergartens cost NOK 44 billion a year to run.

Parents meet 15% of the cost.



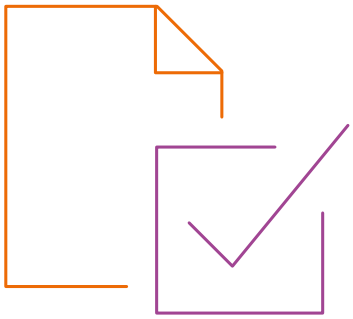
Local authorities spend NOK 132,500 on each kindergarten child.

Primary and secondary schools cost around NOK 62 billion to run. A pupil in primary or lower secondary education costs NOK 102,000 per year.



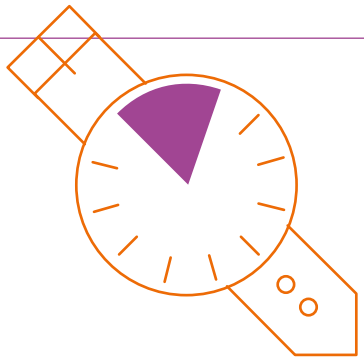
Upper secondary education and training costs more than NOK 29 billion. A pupil in upper secondary education or training costs NOK 141,000 per year.

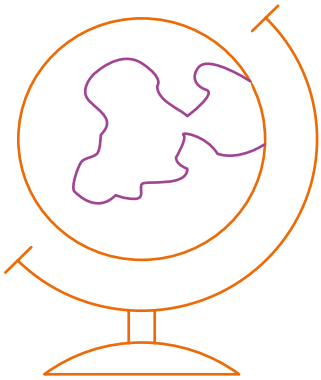
Municipalities and counties with low population densities spend more on each kindergarten child and on each pupil in primary and secondary education.



95% of teachers have approved teacher status.

18% of teachers' annual teaching hours in primary and lower secondary are spent on special needs education.





Norway spends more on compulsory education than most OECD countries.

Norway spends over 50% more than the OECD average on each pupil in upper secondary education or training.

Price adjustments

The cost of providing public services rises every year due to inflation and wage increases. In order to measure real-term growth in spending, all figures in this chapter have been adjusted to reflect inflation and wage rises.

2.1 Kindergartens cost more than NOK 44 billion

Local authorities are responsible for funding kindergartens

As of 1 January 2011, most government funding earmarked kindergartens has been incorporated into the block grants paid to municipalities. Municipalities finance around 80 percent of the cost of running kindergartens (Lunder and Eik2013). The remainder is primarily paid by the parents. The government provides additional smaller grants to Sami kindergartens and to schemes designed to improve language comprehension among minority language children.

In 2013, municipalities spent NOK 38 billion on kindergartens (KOSTRA, preliminary figures). This is an increase of around 2 percent on 2012, and it includes the cost of running municipal kindergartens as well as grants for private kindergartens.

Municipalities' spending on kindergartens accounted for an average 14.5 percent of their total spending on municipal services. The share varies from less than 5 percent in some municipalities to more than 20 percent in others. It means that kindergartens are the third biggest expense for local authorities after healthcare and primary and lower secondary education.

A large share of municipal spending on kindergartens goes to private kindergartens

Norway has a large number of private kindergartens, 53 percent of all kindergartens were private in 2013.

The Regulation on Equal Treatment regulates the extent of public funding for private kindergartens. From August 2013, public funding for private kindergartens was increased from a minimum 92 percent to a minimum 96 percent of the average funding received by equivalent municipal kindergartens.

In 2013, funding for private kindergartens accounted for 43.9 percent of municipalities' total spending on kindergartens (KOSTRA, preliminary figures).

Parents pay 15 percent of the cost of running kindergartens

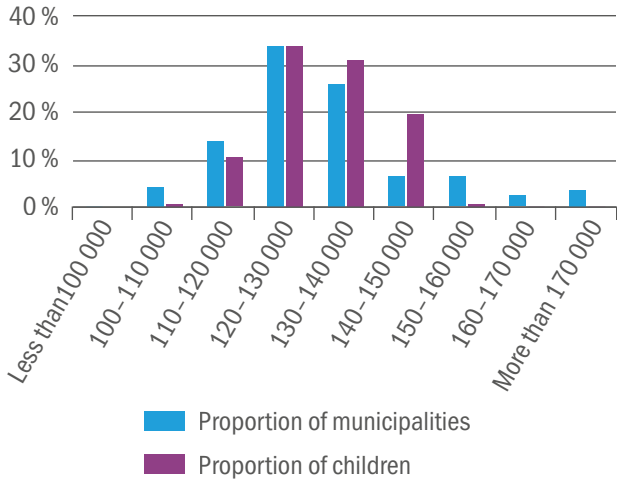
Parents pay a contribution towards the cost of running kindergartens. In 2013, the maximum monthly rate for parent contributions was NOK 2,330 for a full-time place. The rate remained unchanged between 2007 and 2013, so kindergarten places have become cheaper in real terms. From 1 January 2014, the maximum rate increased to NOK 2,405. In addition to parent contributions, kindergartens have certain powers to charge for the cost of meals and similar expenses, but such fees must not exceed the kindergarten's actual expenditure. In 2012, parent contributions totalled NOK 6.4 billion. Around NOK 3.4 billion of this was paid to municipal kindergartens. (Lunder and Eika 2013). This means that parents contributed around 15 percent of the cost of running kindergartens. Chapter 3 on kindergartens provides more information about parent contributions and discounts.

Local councils spend an average of NOK 132,500 per kindergarten child

In 2013, local councils spent NOK 132,500 on each kindergarten child. This does not include government grants or parent contributions, but it does include municipal funding for non-municipal kindergartens.

As figure 2.1 shows, there are significant variations

Figure 2.1 Municipalities and children attending kindergarten – by municipal spending per kindergarten child. 2013. Preliminary figures. Percentage.



Source: Norwegian Directorate for Education and Training og SSB KOSTRA

Kindergarten owners

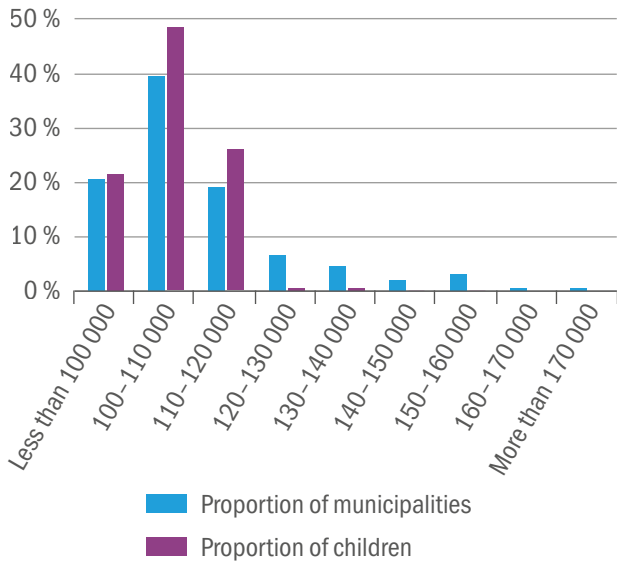
There were a total of 6,296 kindergartens in 2013.
This figure can be broken down as follows:

- 2,934 municipal kindergartens
- 3,342 private kindergartens
- 16 kindergartens run by county councils or central government

Subsequently in this chapter the 16 kindergartens run by county councils and central government will be included in the private kindergartens category. This does not affect the results of the analyses provided in this chapter. Kindergartens run by county councils and central government receive subsidies in the same way as private kindergartens.

in spending per child between different municipalities. The level of spending ranges from under NOK 100,000 to more than NOK 210,000 per kindergarten child in different municipalities. However, 75 percent of children attend kindergartens in municipalities that spend between NOK 120,000 and NOK 140,000 per kindergarten child. 13 percent of local authorities spend more than NOK 150,000 per kindergarten child, but fewer than 2 percent of kindergarten children live in these municipalities.

Figure 2.2 Municipalities and children attending kindergarten – by municipal spending per older kindergarten child with a full-time place. 2013. Preliminary figures. Percentage.



Source: Norwegian Directorate for Education and Training og SSB KOSTRA

Differences in children's ages and lengths of stay have an impact on municipal spending

There are stricter criteria for qualified teaching staff for children under 3 years of age, and kindergarten places for young children are therefore more expensive than places for older children. In some municipalities, children below 3 years of age make up just under 20 percent of kindergarten children, while in other municipalities they make up more than 40 percent. The cost per child also depends on the length of stay. There are considerable variations between municipalities in terms of the number of hours children spend in kindergarten every week. The proportion of children with full-time places varies from under 40 percent to almost 100 percent in some municipalities.

In order to compare the cost per child across municipalities, the expenditures must be standardised. We then convert part-time places into full-time places and assume that one child under 3 years of age is equivalent to 1.8 children over 3 years of age. This calculation shows the cost per older child with a full-time place to be around NOK 106,000, which is an increase of 0.8 percent on 2012.

Figure 2.2 shows that much of the variation in municipal spending on kindergartens disappears when we make adjustments for the children's ages and lengths of stay. However, there are still substantial variations in municipal spend per child. Most children live in municipalities that spend less than NOK 110,000 per older child with a full-time place, but almost 30 percent of municipalities spend more than this. When referring to spending per child later in this report we mean older children with full-time places.

Municipalities with low population densities spend more per kindergarten child

Municipalities with low population densities incur higher spending per child than other, otherwise similar, municipalities. Municipalities with low population densities often require small kindergartens to avoid excessive travelling distances.

It is primarily the number of children per kindergarten, rather than the number of children in the municipality, that affects spending levels. Municipalities with small kindergartens spend more per child due to diseconomies of scale.

Analysis of factors affecting municipal spending per kindergarten child

We will also be analysing the factors affecting municipal spending levels per older child with a full-time kindergarten place. The analysis only covers 2011 and 2012. Care should be taken when interpreting the results. Results should not be taken to mean that a potential correlation necessarily represents causality. We have analysed the influence of the following factors:

- population distribution
- proportion of private kindergartens
- proportion of family day care centres and ordinary kindergartens
- proportion of children of kindergarten age
- proportion of children receiving special educational support
- proportion of minority language children
- demographics

Municipalities with a large proportion of private kindergartens spend less on each child

The proportion of children attending private kindergartens varies significantly across municipalities. In total, almost half of all kindergarten children in Norway attend private kindergartens. Around 140 municipalities only have municipal kindergartens, while five municipalities only have private kindergartens. Municipalities with a high percentage of children in private kindergartens spend less per child than other municipalities, adjusted for other differences. As mentioned above, the minimum funding for private kindergartens in 2011 and 2012 did not match the level of public funding for municipal kindergartens. This is probably the main reason why municipalities with a high proportion of children in private kindergartens spend less on each child.

In addition to ordinary kindergartens, there are around 750 family day care centres in Norway, most of them private. A family day care centre is a kindergarten for small groups of children run in private homes. Just less than 6,000 children attend such kindergartens. There were family day care centres in 129 municipalities in 2013. The proportion of family day care centres does not significantly appear to affect the local councils' spending per older child with a full-time place.

Municipalities with a high number of kindergarten children with special needs incur a higher level of spending

Municipalities with a high proportion of kindergarten children with special needs spend more per child than other, comparable municipalities. You can read more about special educational support in Chapter 7.

Municipalities with many children of kindergarten age spend less on each child

Municipalities with a high proportion of children of kindergarten age can find it more costly to prioritise the kindergarten sector, and we find that these spend less on each child.

Local authorities are responsible for providing a range of different services, including schools and geriatric care, in addition to kindergartens. Kindergartens are therefore competing for scarce resources. This could mean that local authorities experiencing high demand in other areas give less priority to kindergartens. In our analysis, we have found no clear-cut link between the proportion of elderly people, the proportion of children of school age and the cost per kindergarten child.

Well-off municipalities spend more on kindergartens

Affluent municipalities spend more per kindergarten child. This is the case even after making adjustments for the cost of providing municipal services and for variations in the demand for municipal services.

The proportion of children with an immigrant background does not affect the cost per child

The proportion of kindergarten children from immigrant backgrounds varies from just under 2 percent in some municipalities to more than 30 percent in others. Children with an immigrant background may require particular language stimulation, but it would appear that municipalities with a high proportion of children with immigrant backgrounds do not spend significantly more per child than comparable municipalities.

2.2 Primary and lower secondary schools cost NOK 62.5 billion

In 2013, the cost of running municipal primary and lower secondary schools amounted to NOK 61 billion (SSB KOSTRA, preliminary figures). This covers the cost

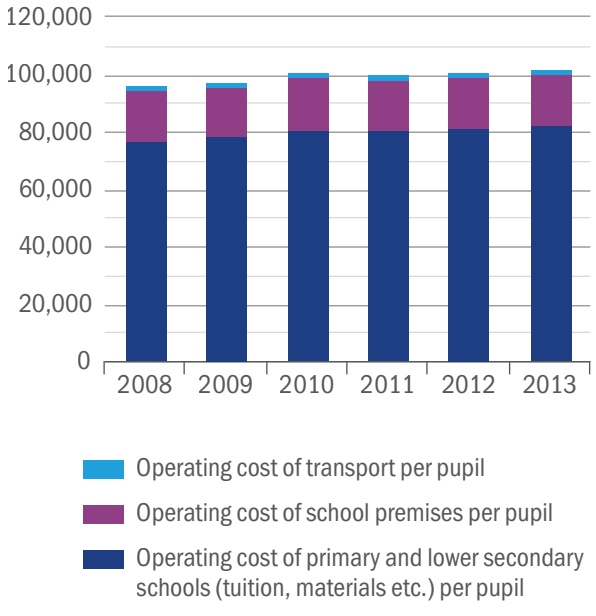
of tuition and materials, the cost of running and maintaining school premises, and expenditure on transport between home and school. The government also provides an additional NOK 1.5 billion or so in funding for private primary and lower secondary schools.

Adjusted for inflation, municipalities spent 0.8 percent more on primary and lower secondary schools in 2013 than they did in 2012. In 2013, municipalities spent 22.9 percent of available funds on primary and lower secondary schools. The only bigger expense for municipalities is healthcare. Public primary and lower secondary schools in Norway are predominantly funded by municipalities, but there are some government grants available. Examples include a funding scheme implemented from the 2013/14 academic year to increase teacher-to-pupil ratios in lower secondary education. There are also separate government funding schemes for Sami teaching in primary and lower secondary schools, and funding for school camps.

A pupil in primary or lower secondary education costs an average of NOK 102,000

In 2013, the cost of a pupil in primary or lower secondary school stood at NOK 102,200. The cost of tuition, school materials and similar expenses accounted for NOK 83,000, while the cost of premises and school transport was NOK 19,000. The total cost per pupil has increased by some 0.9 percent, or around NOK 950.

Figure 2.3 Operating costs per pupil – by expenditure on primary and lower secondary schools, school premises and school transport. 2013. Preliminary figures. NOK.



Source: SSB KOSTRA

Grants for private primary and lower secondary schools increased by 10 percent in 2013

In 2013, a total of NOK 1.5 billion in government grants was awarded to private primary and lower secondary schools in Norway, a 10 percent increase on 2012. The increase was caused both by rising pupil numbers and an increase in the average subsidy rate paid per pupil.

Private primary and lower secondary schools approved under the Private Education Act receive government-funding equivalent to 85 percent of the operating costs of public sector schools. Private schools can charge school fees of up to 15 percent of the operating costs of public schools. Subsidy rates vary depending on the number of pupils and on their distribution across the primary and lower secondary stages. In the autumn of 2013, they ranged from NOK 59,700 to NOK 142,200 per pupil.

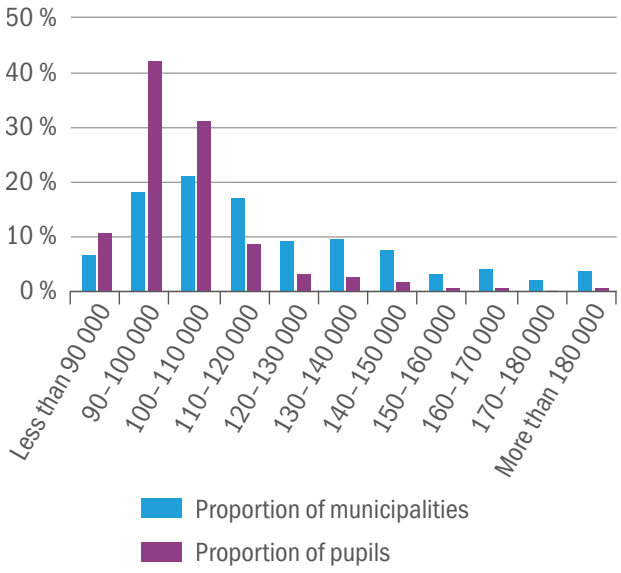
The cost of out-of-school provision has increased

All local authorities are obliged to offer an out-of-school programme (known as SFO) before and after school hours for pupils in Years 1–4. Preliminary figures from KOSTRA show that the cost of running municipal out-of-school programmes amounted to NOK 4 billion in 2013. Parent contributions constitute around 75 percent of the operating costs, while the remainder is mostly covered by municipalities. The cost of the SFO scheme has increased by 0.8 percent since 2012 while spending by municipalities have fallen slightly over the same period. The increase in costs is largely met by higher parent contributions. As of 1 January 2013 the average monthly parent contribution towards a full-time SFO place was NOK 2,383 (SSB). In comparison, the maximum price for a full-time kindergarten place was NOK 2,330.

There are considerable differences in expenditure per pupil in primary and lower secondary education

All pupils in Norway enjoy the same entitlement to education, regardless of where they live, yet the expenditure per pupil varies greatly between municipalities. As figure 2.4 shows, a pupil costs around NOK 80,000 in the lowest- spending municipality, while the highest-spending municipalities spend more than NOK 230,000 per pupil. Around 39 percent of municipalities spend between NOK 90,000 and NOK 110,000 per pupil, while around 70 percent of pupils attend school in these municipalities.

Figure 2.4 Municipalities and pupils – by operating costs per pupil in primary or lower secondary. Municipal primary and lower secondary schools. 2013. Preliminary figures. Percentage.



Source: Norwegian Directorate for Education and Training og SSB KOSTRA

In this section, we will explain the factors affecting the cost per pupil, just as we did for kindergartens. The analysis covers the period 2008–2012.

In this section, we will explain the factors affecting the cost per pupil, just as we did for kindergartens. The analysis covers the period 2008–2012.

Municipalities with small schools spend more

Just as for kindergartens, diseconomies of scale generate higher costs per pupil in primary and secondary education. Low numbers of pupils in each year group and small schools in municipalities with low population densities mean small classes and subsequently higher costs per pupil in terms of teachers' salaries.

Even when excluding the cost of school transport, municipalities with small schools incur higher costs.

A high proportion of children receiving special needs education renders higher costs

Municipalities with a high number of children receiving special needs education spend more per child than other, comparable municipalities.

The proportion of children receiving special Norwegian tuition does not appear to have a significant effect on the cost per pupil.

Municipalities with a high proportion of children of school age spend less per child

Municipalities with a high proportion of children of school age spend less on each child. Just as for kindergartens, a high proportion of children of school age makes it more expensive for local councils to give priority to primary and secondary tuition.

Affluent municipalities spend more

Even for primary and lower secondary schools, there is a clear correlation between the local council's finances and the cost per pupil. T. Hægeland et al. (2009) have made similar findings and conclude that variations in revenues from electricity production is a particular reason why affluent municipalities spend more on each pupil than comparable municipalities.

2.3 Upper secondary education and training costs more than NOK 29 billion

In 2013, upper secondary education and training cost NOK 25.6 billion, an increase of around 0.6 percent on 2012. The expenditure includes tuition, premises, specially adapted education, the Follow-up Service (Oppfølgingstjenesten), and the educational psychology service (PPT). Expenditure on general study programmes has increased, while spending on vocational study programmes has fallen.

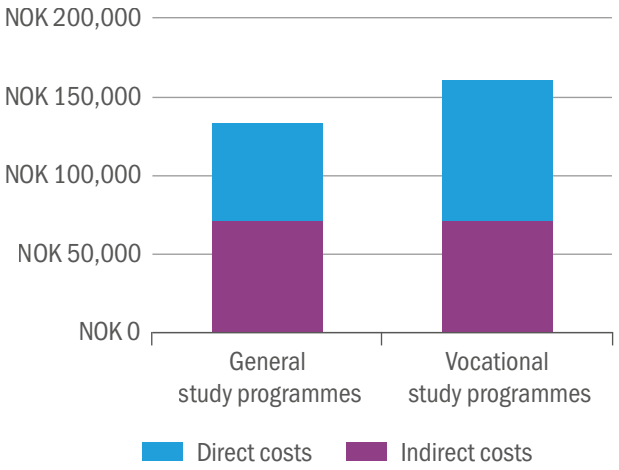
In 2013, county authorities (excluding Oslo) spent 53.4 percent of their available funds on upper secondary classroom education, a decrease of 0.9 percent on 2012. Spending on upper secondary education and training has increased at a slower pace than county authorities' spending on other services such as transport and communication. County councils spend an additional NOK 2.3 billion or so on vocational training in the workplace. This is an increase of around 2.7 percent on 2012.

Grants for private upper secondary schools

In 2013, a total of NOK 1.3 billion in standard government grants was awarded to private upper secondary schools in Norway. This is an increase of 3 percent on 2012.

Private upper secondary schools approved under the Private Education Act receive government-funding equivalent to 85 percent of the operating costs of public

Figure 2.5 Expenditure per pupil in upper secondary education and training. 2013. Preliminary figures. NOK.



Source: SSB KOSTRA

schools. Private schools are also able to charge school fees of up to 15 percent of the operating costs of public sector schools. The size of the grant largely depends on the study programmes on offer. In 2013, it ranged from NOK 108,600 per pupil on the Programme for Specialisation in General Studies to NOK 184,600 per pupil on the Programme for Agriculture, Fishing and Forestry.

A pupil in upper secondary education or training costs NOK 141,000

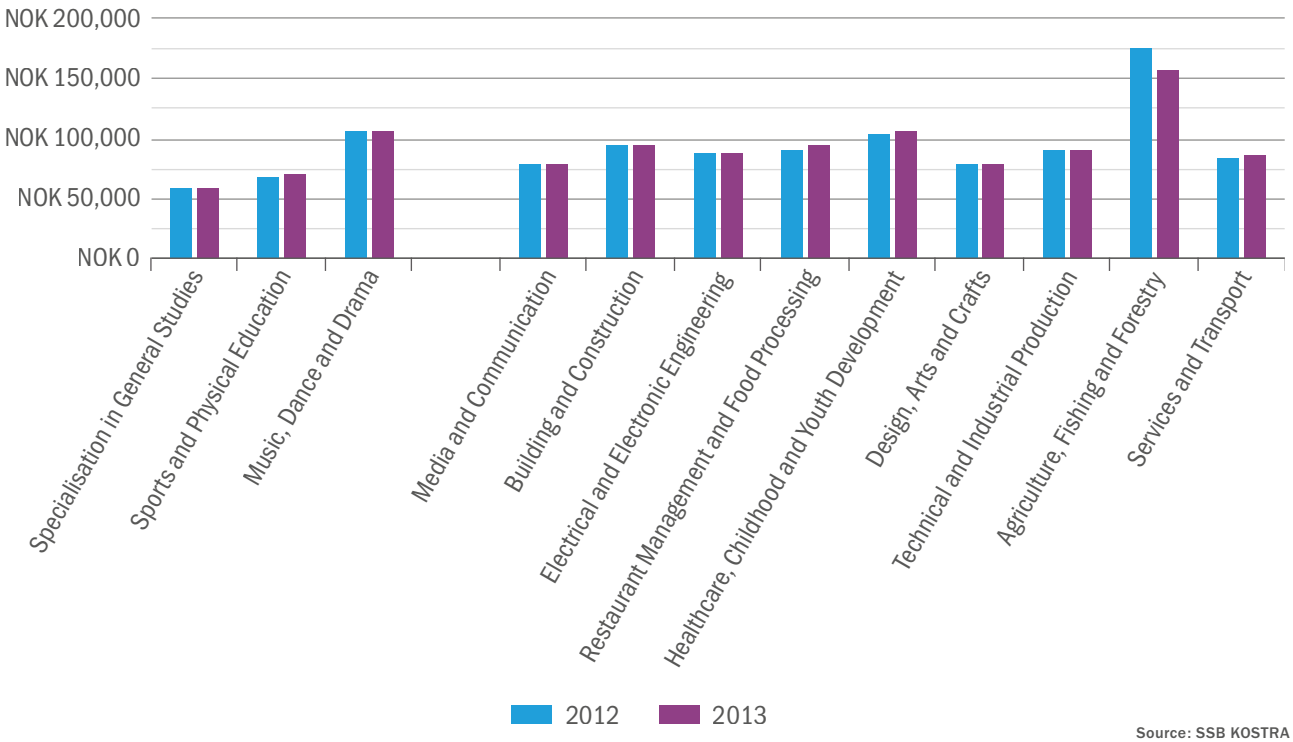
The cost per pupil in upper secondary education or training is around NOK 141,000. This is approximately NOK 39,000 more than the cost per primary and lower secondary school pupil.

When calculating the total cost of upper secondary education and training we distinguish between direct and indirect costs. Direct costs are costs directly associated with a study programme, such as teachers' salaries. Indirect costs include school premises, support functions, academic management, special needs education and specially adapted education.

Vocational study programmes are more expensive than general study programmes

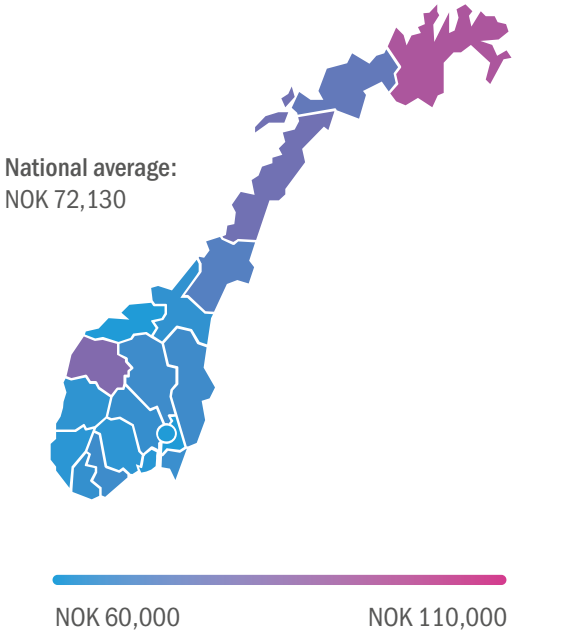
There are significant differences between the cost per pupil on vocational and general study programmes. A pupil on a vocational study programme costs an

Figure 2.6 Expenditure per pupil – by study programme. Adjusted for inflation and wage increases. 2013. Preliminary figures. NOK.



Source: SSB KOSTRA

Figure 2.7 Indirect costs per pupil – by county. 2013. Preliminary figures. NOK.



Source: SSB KOSTRA

average of NOK 27,000 more per year than a pupil on a general study programme. This is partly due to smaller class sizes and more expensive study materials. The direct costs per pupil remained largely unchanged between 2012 and 2013 for both study programmes.

Figure 2.6 shows how expenditure varies considerably, also between different study programmes. An average study programme costs just over NOK 90,000 per pupil. The cheapest study programme, the programme for specialisation in general studies, costs less than NOK 60,000, while the most expensive, the programme for agriculture, fishing and forestry costs NOK 160,000 per pupil. The level of spending on most study programmes increased between 2011 and 2012, but the most noticeable increases have occurred on the sports and physical education, and design, arts and crafts programmes.

Expenditure on upper secondary education and training varies between counties

There are also considerable variations across counties as regards spending on upper secondary education and training. The total cost ranges from NOK 121,000 to almost NOK 172,000 per pupil.

The indirect costs vary even more across counties. The county with the highest indirect costs incurs more than 50 percent higher indirect costs than the county with the lowest indirect costs.

There are smaller differences in direct costs. The difference between the counties with the lowest and highest direct costs per pupil is NOK 11,000 for general study programmes and NOK 21,500 for vocational study programmes.

Lower costs per pupil in counties with high population densities

Many of the reasons why the cost of upper secondary education and training varies from county to county are the same as for primary and secondary schools, although there are a few differences. Direct costs per pupil are inversely related with population density at the county level. Although upper secondary schools can benefit from economies of scale, pupils in upper secondary education and training can be expected to have to travel further than pupils in primary and lower secondary education to get to school. Diseconomies of scale are thus less significant than in primary and secondary education. We have found no significant links between school size and costs per pupil. One possible explanation could be that most upper secondary schools are so large that they have been able to benefit from economies of scale.

Affluent counties spend more per pupil

Affluent counties incur higher indirect costs per pupil. The county councils' finances do not appear to have an impact on the direct costs of general study programmes and vocational study programmes.

2.4 Personnel and qualifications

Sharp rise in FTEs in kindergartens since 2008

Kindergartens employed around 74,400 full-time equivalents (FTEs) in 2013, an increase of almost 9,000 FTEs since 2008. If we only include staff who work directly with all children, i.e. pedagogical leaders and teaching assistants, staff numbers have risen by more than 8,000 FTEs since 2008.

Just since 2012, the number of FTEs has increased by around 1,100. There has been an increase in FTEs among pedagogical leaders of just less than 3 percent, or 650 FTEs between 2012 and 2013, whereas the number of kindergarten assistant FTEs remained virtually unchanged. The number of kindergarten children has increased in the last few years, but the number of baseline staff FTEs has risen even more rapidly. The staff-to-

child ratio is thus increasing in the period 2008–2013 also when adjusting for children's age and length of stay. The number of children per baseline staff FTE varies across municipalities, from less than four to more than seven children (2013). Around 60 percent of municipalities have between 5.5 and 6.5 children per baseline staff FTE. You can find more information about kindergarten personnel in Chapter 3..

The number of teacher FTEs per pupil has risen by more than 10 percent in the last decade

In 2013/14 there were 57,600 teacher FTEs in primary and lower secondary education, largely the same as the previous year. Since 2003/04, the number of teacher FTEs per pupil has risen by more than 10 percent.

The number of ordinary teaching hours per pupil has risen

Teaching resources are allocated to both ordinary tuition and to different types of individually adapted tuition. Individually adapted tuition includes special needs education, language tuition for language minorities, and other types of language tuition.

One measure of the allocation of resources in schools is the teachers' total number of teaching hours divided by the total number of pupils. In 2013/14 a total of 58.5 teaching hours were given to each pupil. 44.6 teaching hours per pupil are spent on ordinary tuition. This is an increase of 2.4 hours (6 percent) since 2003/04. Some of the increase is due to an increase in the overall number of teaching hours in the period.

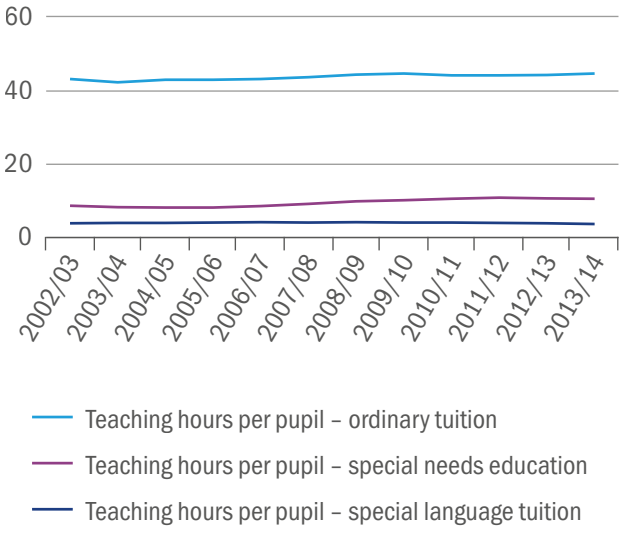
The number of teaching hours spent on special needs education rose by 2.1 hours (17 percent) per pupil between 2002/04 and 2013/14. The number of teaching hours per pupil spent on special language tuition fell by around 7 percent in the same period.

Class sizes remain largely unchanged

Another way of measuring the resource input in schools is to look at class/group sizes. The average group size in an ordinary teaching situation was 16.8 in 2013/14. Hours spent on special Norwegian tuition and special needs education are often disregarded, so that only group sizes in ordinary teaching situations are measured. 22 percent of pupils attend schools with more than 20 pupils per teacher, based on ordinary teaching situations.

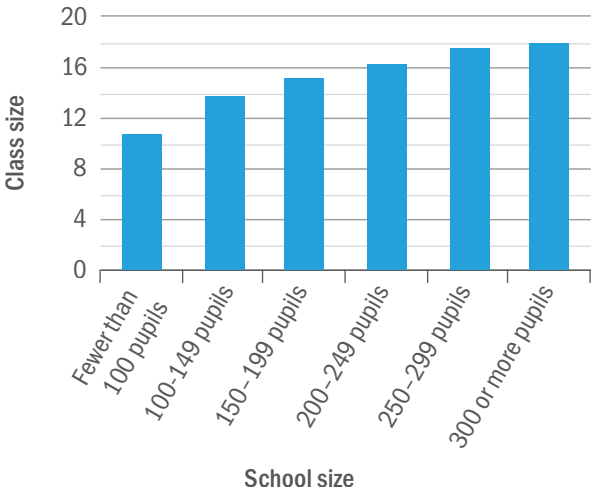
Class size covaries with school size, which is the main reason why municipalities with low population densities and small schools incur higher costs per pupil, as described earlier in this chapter.

Figure 2.8 Teaching hours per pupil for ordinary tuition, special needs education and special language tuition. 2003/04–2013/14. Numbers.



Source: Norwegian Directorate for Education and Training

Figure 2.9 Class sizes in an ordinary teaching situation – by average school size. 2013/14. Numbers.



Source: Norwegian Directorate for Education and Training

95 percent of teachers have approved teacher status

In the last decade, more than 95 percent of teacher FTEs have been filled by teachers with approved teacher status. The proportion is gradually increasing, and is at 96.7 percent in 2013/14. This means that in 2013/14, teachers without approved teacher status filled around 1,600 teacher FTEs. The Education Act

and associated regulations require candidates to hold both professional qualifications and teaching qualifications to be appointed to a teaching post.

There are no adequate and up-to-date figures on which training and qualifications teachers have in the subjects that they teach. We thus know roughly how many teachers have maths qualifications, but not whether these teachers actually teach maths. At the upper secondary level, 93 percent of the teachers hold university-level qualifications.

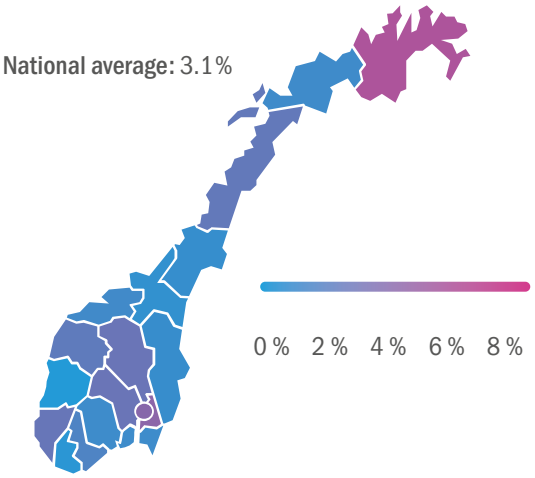
The proportion of teachers without approved teacher status varies according to municipality size

In 42 municipalities less than 90 percent of FTEs in municipal primary and lower secondary schools were filled by teachers with approved teacher status. 75 municipalities only employ approved teachers. The proportion of teachers without approved teacher status varies according to municipality size, the figure ranging from 3 percent in large municipalities (more than 7,500 pupils) to 5 percent in municipalities with fewer than 250 pupils.

Municipalities in the counties Finnmark and Akershus had the highest average proportion of FTEs carried out by staff without approved teacher status at 7 percent and 5 percent respectively. Hordaland and Vest-Agder had the lowest proportion of such FTEs at 1 percent.

54 percent of teachers without approved teaching qualifications only have upper secondary qualifications or lower, and Nordland and Finnmark have the highest proportion of these. The counties Oslo, Hordaland, and Sør-Trøndelag have the highest proportion of unapproved, but university-level educated teachers. They are all counties with large universities.

Figure 2.10 Teacher FTEs filled by teachers without approved teacher status. 2013/14. Percentage.



Source: Norwegian Directorate for Education and Training

2.5 Resources spent on special adaptation

1,500 teacher FTEs dedicated to special educational support in kindergartens

In 2013, municipalities allocated around 1,500 teacher FTEs to provide special educational support for kindergarten age children. In 2013, local authorities reported that some 7,000 pre-school children had individual decisions on special educational support, a number that has risen in the last few years. Since the number of teacher FTEs has increased correspondingly the resource input per child remains largely unchanged.

Special needs education constitutes 18 percent of teachers' annual teaching hours in primary and lower secondary schools

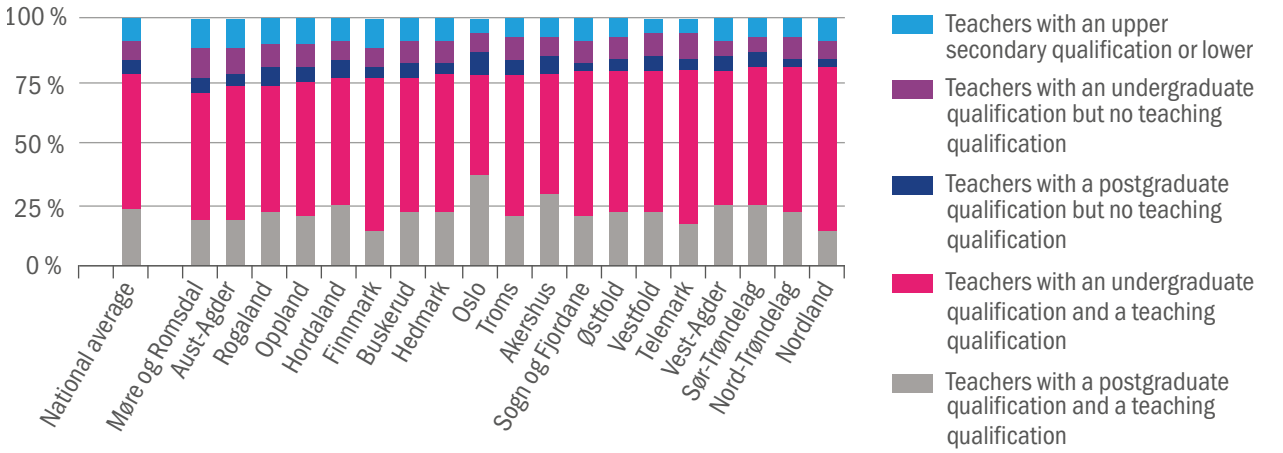
In 2013/14, special needs education constituted a total of 18 percent of the teaching hours in primary and lower secondary school, amounting to around 9,200 FTEs. Hours allocated to special needs education fell for the first time since 2004/05, dropping 0.2 percentage points from 2012/13.

As previously explained, the proportion of pupils receiving special needs education in a municipality affects cost per pupil. Municipal spending on special needs education varies from around 1 percent of teaching hours, to more than 40 percent. Figure 2.12 shows the rise, and subsequent levelling out, in the proportion of teaching hours spent on special needs education since 2006/07.

The resource input per pupil receiving special needs education is falling slightly

Along with the increase in resources spent on special needs education in primary and lower secondary schools, the number of teaching hours spent on special needs education for each pupil has fallen. Between 2006/07 and 2013/14 the average number of hours spent on each pupil fell from 145 to 126 hours. Possible reasons is that the number of hours spent on each individual pupil has been cut, or that tuition is provided in larger groups.

Figure 2.11 Level of education amongst upper secondary teachers – by county. Q4 2012. Percentage.



Source: SSB

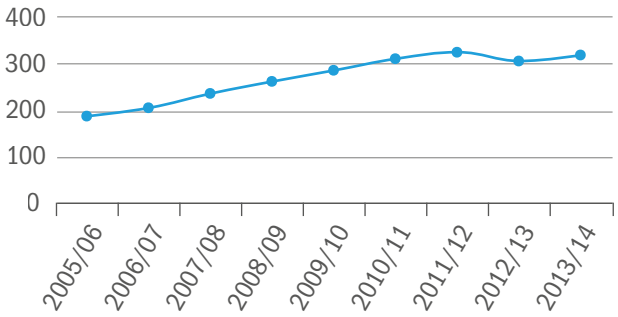
County authorities spent NOK 2.8 billion on special needs education and special adaptation in upper secondary education

County councils spent around NOK 2.8 billion on special needs education and special adaptation in 2013 (KOSTRA, preliminary figures). The cost increased by some 18 percent between 2008 and 2012. The cost of special needs education and special adaptation accounts for around 11 percent of county councils' spending on upper secondary education, largely the same as in 2012.

The expenditure on special needs education and special adaptation at the upper secondary stage represents a cost of NOK 15,600 per pupil. The expenditure per pupil has increased since 2008, but has flatlined slightly in the last few years. Nordland, which saw the highest level of spending in 2013, spent 20 percent more than the average county council, while Oslo, the lowest-spending county, spent 20 percent less than the average.

The cost of special needs education and special adaptation in upper secondary education are not directly comparable with the equivalent spending in primary and lower secondary education. For example, expenditure in upper secondary education includes the cost of the educational psychology service (PPT), the Follow-up Service (Oppfølgingstjenesten), induction schemes for newly arrived language minority pupils, and special Norwegian tuition.

Figure 2.12 Municipalities spending more than 15% of teaching hours on special needs education. 2006/07–2013/14. Numbers.



Source: Norwegian Directorate for Education and Training

2.6 Resources spent on minority language children

13,300 minority language children were offered special language stimulation in kindergarten

13,300 minority language children were offered special language stimulation in kindergarten, including bilingual assistance. This accounts for around 35 percent of all minority language children who attend kindergarten. Just under 1,900 kindergartens offered such provision.

Municipalities are given earmarked grants to fund initiatives to improve language comprehension among minority language pre-school children. In 2013 the grant was NOK 3,576 per child. The size of the grant has fallen relatively sharply in recent years and is roughly half of what it was per child in 2006.

5.5 percent of teaching hours in primary and secondary schools are spent on special language tuition

In the 2013/14 academic year 5.5 percent of teaching hours are spent on special language tuition, a reduction from 6.5 percent in 2007/08.

The provision of special language tuition varies between municipalities. 11 municipalities spent more than 10 percent of teaching hours on special language tuition, while thirty municipalities didn't spend any. The proportion of teaching hours spent on different types of language tuition varies according to municipality size. In municipalities with more than 7,500 pupils around 5 percent of teachers' annual teaching hours were spent on special language tuition. The figure was 3.2 percent in municipalities with fewer than 250 pupils.

Both the number and the proportion of pupils receiving special language tuition have risen since 2006/07. Over the same period the number of teaching hours per pupil receiving special language tuition has fallen, as illustrated in figure 2.13.

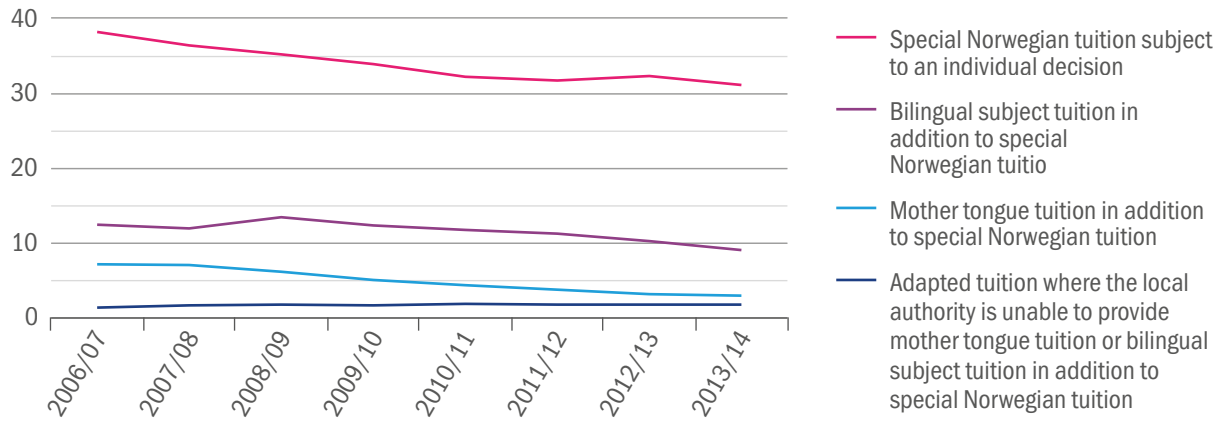
Figure 2.13 shows that the greatest fall has been in special Norwegian tuition and mother tongue tuition. The number of teaching hours per pupil receiving mother tongue tuition has fallen by 60 percent since 2006/07.

2.7 Classroom assistants

In 2013/14 primary and lower secondary schools spent around 8,200 FTEs on classroom assistants. The duties of a classroom assistant include helping the teacher with individual pupils during lessons.

The number of assistant FTEs has increased by more than 25 percent since 2006/07, but has remained stable over the last two years. The teacher FTEs rose by 6 percent in the same period. . In 2013/14 assistant FTEs

Figure 2.13 Teaching hours per pupil receiving special language tuition in the form of special Norwegian tuition, mother tongue tuition, bilingual subject tuition and adapted language tuition. 2006/07–2013/14. Numbers.



Source: Norwegian Directorate for Education and Training

accounted for almost 13 percent of the combined FTEs for both classroom assistants and teachers.

According to the municipalities, increase in pupil numbers and a desire to give more individual attention to pupils are the main reasons for employing classroom assistants. The challenges of recruiting qualified teaching staff are also a key factor in small municipalities. (Rambøll Management 2010).

Around 70 percent of assistant FTEs are spent on special needs education. This is equivalent to around 5,800 FTEs. Chapter 7 looks more closely at classroom assistants' role in special needs education.

Assistants will often have an upper secondary qualification as their highest qualification. Figures from SSB show that almost 21 percent of classroom assistants held trade certificates in childcare and youth work in 2012. This is a slight increase on 2011. The proportion is highest in Vest-Agder, where more than 40 percent of classroom assistants have childcare and youth work qualifications, and lowest in Troms, where the figure is 16 percent.

Other professions are also involved in pupil-oriented work

As well as teachers and assistants, a number of other professions work towards pupils in schools. They include social workers, child protection officers and physiotherapists. In 2013/14 these groups performed just over 500 FTEs in primary and lower secondary schools a figure that has remained fairly stable since 2005/06.

2.8 Resources spent on adults in secondary education

The input of resources for adults in lower secondary education remains stable

The number of FTEs for teachers and other staff involved in lower secondary education for adults has remained stable at around 1,200 in the last few years.

Adult participants in lower secondary education often enrol in condensed programmes with a duration of less than one academic year. Each adult participant in ordinary lower secondary education receives an average of 55.6 teaching hours per year. This is 3.3 annual teaching hours less than in 2012/13. Adults receiving special needs education received on average 73.4 annual teaching hours in 2013, a decrease of 4.2 annual teaching hours. 97 percent of the FTEs spent on teaching were filled by staff with approved teacher status.

In 2013 county councils spent around NOK 384 million on upper secondary education and training specially adapted for adults (KOSTRA, preliminary figures), an increase of 0.8 percent on 2012.

2.9 Resources spent on primary and secondary education in Norway compared with other countries

There are considerable variations in how different countries calculate their spending on kindergartens. It is therefore difficult to compare kindergarten spending in different countries. The Organisation for Economic Co-operation and Development (OECD) is working to improve the statistics.

Norway spends more on schools than the OECD average

Norway spends more per pupil, adjusted for purchasing power, than the average OECD member country. This is true both for primary and secondary education. Expenditure per pupil has increased both in the OECD countries and in Norway since 2000, but spending on upper secondary education among OECD countries fell between 2009 and 2010.

Figure 2.15 shows how Norway spends more than the OECD average at all stages, but especially at the upper secondary stage. Norway spends over 50 percent more on upper secondary education than the OECD average. When compared with the other Nordic countries, Norway also incurs higher costs per pupil, especially in upper secondary education. For example, Norway spends 40 percent more per pupil in upper secondary education or training than Sweden, while we only spend some 20 percent more per pupil in Years 1–7.

A high teacher-to-pupil ratio is the main reason for the high cost

Norway has a higher teacher-to-pupil ratio than most OECD countries, mostly due to our low population density as discussed previously. It is particularly in

Years 1–7 that the teacher-to-pupil ratio in Norway is higher than the OECD average. On average Norway also have fewer pupils per teacher FTE than the other Nordic countries, while Finland and Iceland have a slightly higher teacher-to-pupil in some year groups.

Few teaching hours per teacher mean higher costs per pupil

Fewer teaching hours per teacher also push up the expenditure per pupil compared with the average across the OECD. Depending on the year group, Norwegian teachers deliver between 6 and 21 percent fewer hours per year than the OECD average.

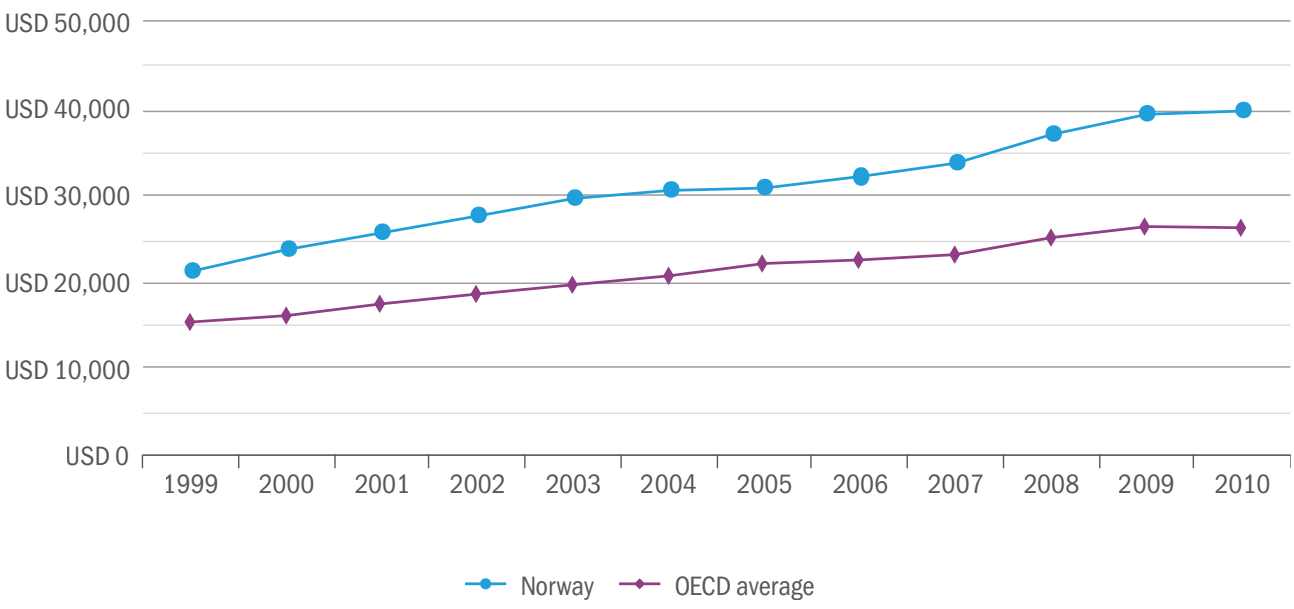
Relatively small differences in teachers' salaries between Norway and the OECD average

Adjusted for purchasing power, there are relatively small differences in salary levels between Norwegian teachers and the average OECD member country. The top salary of a Norwegian teacher is between 7 percent and 13 percent lower than the OECD average. The opposite is true for newly employed teachers, where newly employed Norwegian teachers earn between 10 percent and 17 percent more than the OECD average.

Norwegian pupils receive fewer teaching hours

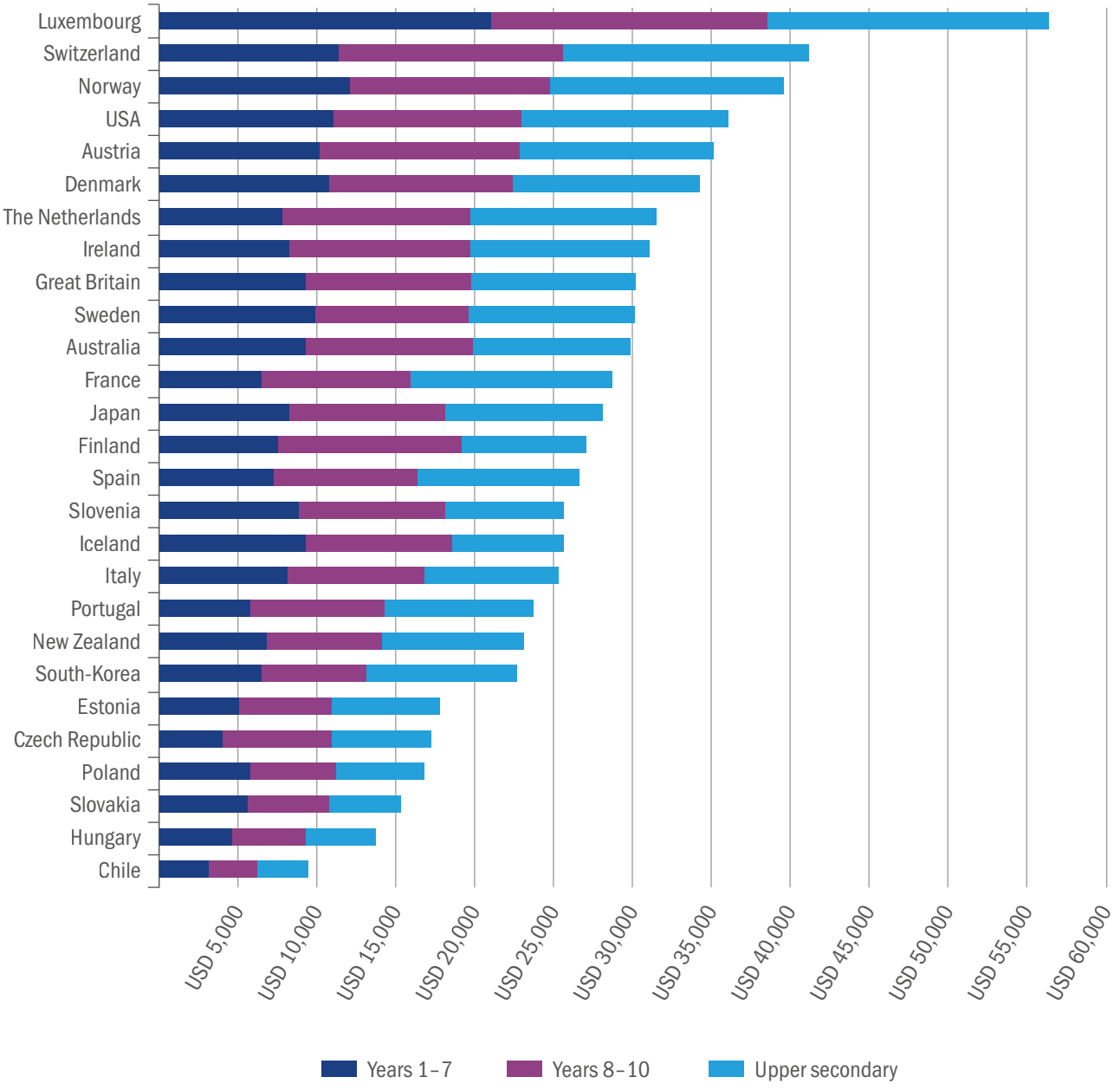
Norwegian primary and lower secondary pupils received around 5–7 percent fewer teaching hours than the average across the OECD in 2011, which slightly brings down per pupil expenditure. They received slightly fewer hours than Danish and Icelandic pupils but overall a few more hours than Swedish and Finnish pupils in the same age group.

Figure 2.14 Cost per pupil. Norway and the OECD average. 2000–2010. Figures in USD adjusted for purchasing power.



Source: OECD

Figure 2.15 Cost per pupil in the OECD. 2010. Figures in USD adjusted for purchasing power.



Source: OECD

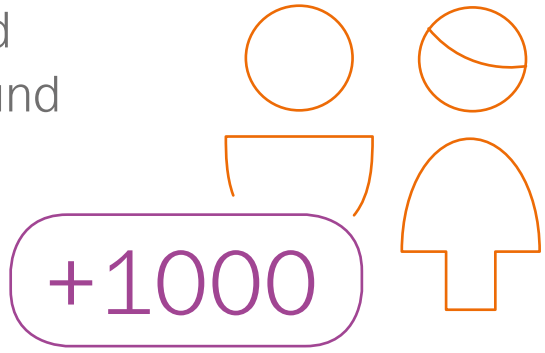
3

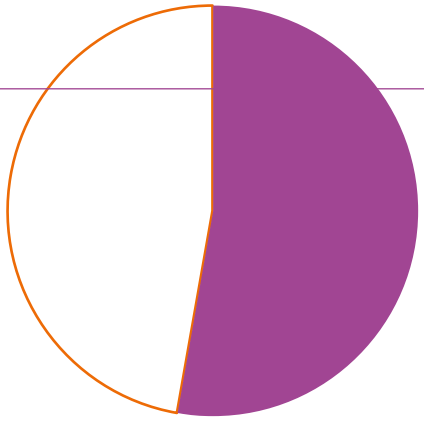
Kindergartens

More children than ever before are attending kindergarten in Norway. For most children, kindergarten is an important first step on a long educational journey. In this chapter we present recent figures and research from the kindergarten sector.

We will be looking at kindergartens and the children who attend them, the qualifications of kindergarten staff, teacher-to-child ratios and parent contributions. We also look into how kindergarten affects children's well-being and development.

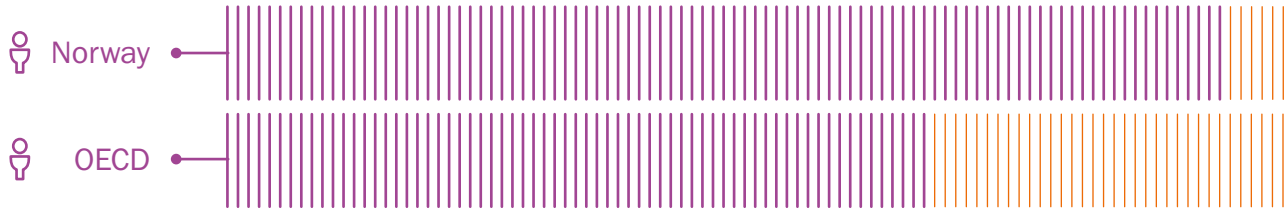
Almost 287,200 children attended kindergarten in 2013. This is around 1,000 more than in 2012.

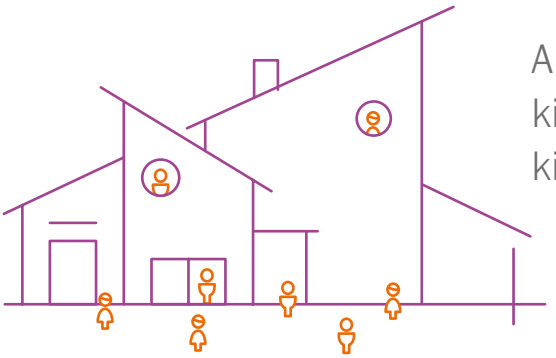




There are 6 200 kindergartens in Norway. 53% of them are private.

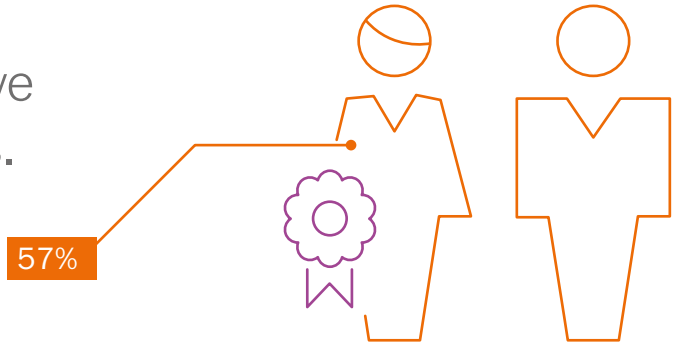
95% of all Norwegian 3-year-olds attend kindergarten. The OECD average is 67%.

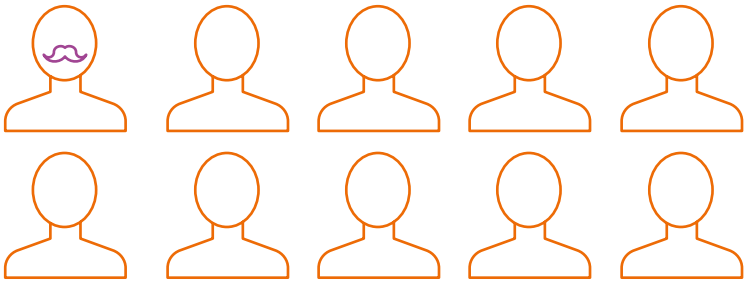




A growing number of children attend large kindergartens. 16% of children attend kindergartens with more than 100 children.

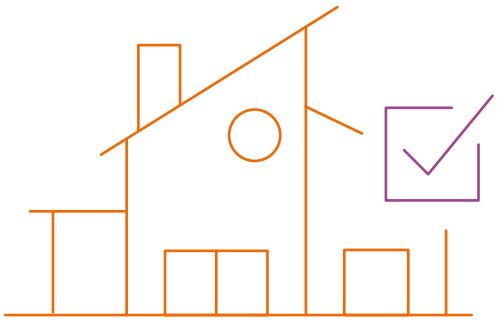
A growing number of kindergarten staff have relevant qualifications.





9% of kindergarten staff are male.

49% of kindergartens meet the minimum teacher-to-child ratio without a dispensation.



Parents pay 15% of the cost of a kindergarten place. The maximum price of a full-time kindergarten place is NOK 2,405.

3.1 Children in kindergarten

Almost 287,200 children attended kindergarten in 2013. This is around 1,000 more than in 2012, but the increase is smaller than in previous years. Between 2003 and 2013, around 82,000 more children enrolled kindergarten. Around half of all kindergartens are municipal. The vast majority of non-municipal kindergartens are private.

High and stable enrolment rate

The enrolment rate –the percentage of children enrolled in a kindergarten – stands at 90 percent for children aged between 1 and 5, the core group of kindergarten children. Over the last five years the enrolment rate has increased, but between 2012 and 2013 it remained largely unchanged, cf. Table 3.1.

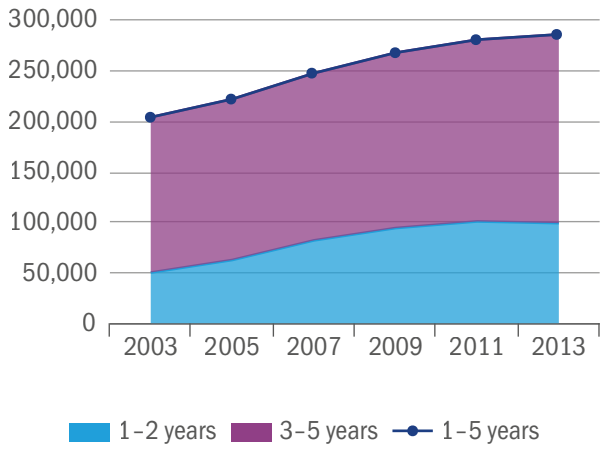
The kindergarten enrolment rate is high in Norway compared with many other countries. In 2011, 95 percent of Norwegian 3-year-olds attended kindergarten while the corresponding figure for OECD and EU was 67 percent and 77 percent respectively. (OECD 2013).

Fewer children aged 0–2 attend kindergarten

The number of children aged 0–2 attending kindergarten has fallen by around 1,850 since 2012. The enrolment rate among 1-year-olds has dropped by 0.7 percentage points, mostly in the group of children born to late in the year to be entitled to a kindergarten place the same year. The enrolment rate for 2-year-olds has risen slightly, but because this year group was relatively small, there are 1,000 fewer 2-year-olds attending kindergarten compared with the previous year.

Only 2 percent of all kindergarten children attend family day care centres. Children aged 0–2 made up 73 percent of the 5700 children attending family day care centres in 2013. There were 500 fewer children in this age group attending family day care centres than in 2012.

Figure 3.1 Kindergarten children – by age group. 2003–2013. Numbers.



Source: Statistics Norway (Childcare statistics)

Table 3.1 Enrollment rate of children attending kindergarten. 2009–2013. Percentage.

Age	2009	2010	2011	2012	2013
0 years	4.4	4.2	4.3	3.8	3.2
1 years	68.6	70.4	70.9	69.6	68.9
2 years	85.9	87.4	88.0	90.5	90.6
3 years	94.5	95.1	95.1	95.3	95.3
4 years	96.9	97.1	97.2	97.1	96.9
5 years	97.3	97.4	97.3	97.6	97.5
1–5 years	**88.5**	**89.3**	**89.7**	**90.1**	**90.0**

Source: Statistics Norway (Childcare statistics)

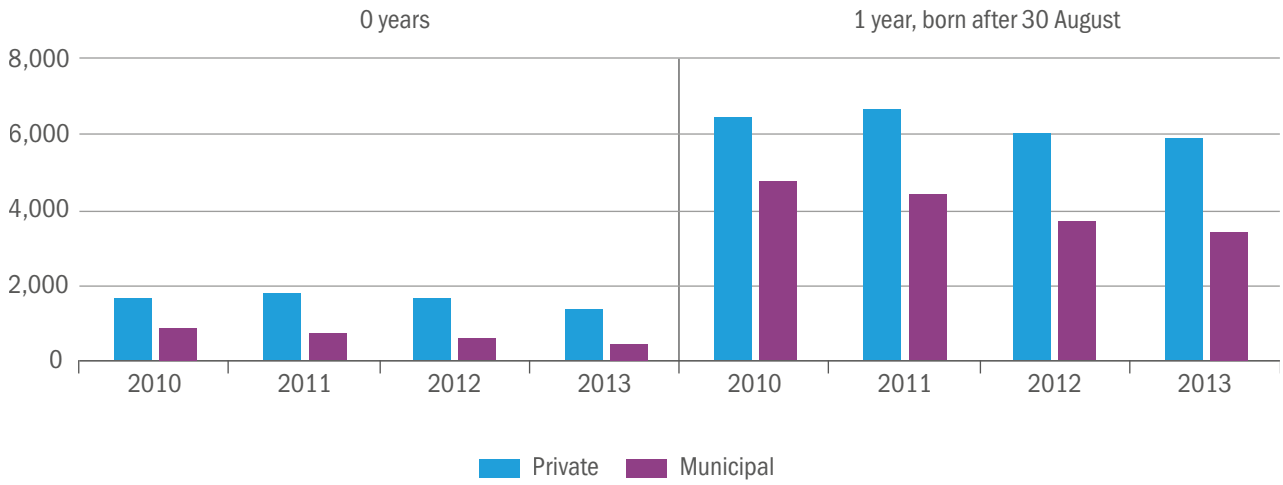
Most children who are not entitled to a kindergarten place attend private kindergartens

In 2009, the Norwegian parliament made it a legal right for every child to attend kindergarten. This means that children who have turned 1 year of age by 1 September are entitled to a kindergarten place by the end of august that same year. The fulfilment of the right to a kindergarten place is one of the key goals for the sector. In 2013, virtually all children entitled to a kindergarten place had been offered one by the end of August, by the end of September all children had been given a place.

A total of 11,300 children not entitled to a kindergarten place attended kindergarten in 2013. 1,900 of the children were younger than 1 year of age, while 9,400 were 1-year-olds born after the end of August. 65 percent of these children attended private kindergartens. In other words, private kindergartens receive most of the children not entitled to a kindergarten place. Kindergarten owners are at liberty to define their own catchment areas and enrolment criteria in their statutes.

By the end of 2013, there were around 400 fewer children born after 1 August the preceding year in kindergartens than there were by the end of 2012. One reason

Figure 3.2 Children aged 0–2 years not entitled to a kindergarten place who attend kindergarten – by private and municipal kindergartens. 2010–2013. Numbers.



Source: BASIL/The Norwegian Directorate for Education and Training

for this could be that more parents choose not to send their 1-year-olds to kindergarten following an increase in the cash benefit rate for 1-year-olds not attending kindergarten in 2012. It could also be that parents were not given a kindergarten place despite having applied.

More minority language children attend kindergarten

In 2013 around 37,900 minority language children (children of parents with a mother tongue other than Norwegian, Sami, Swedish, Danish or English) attended kindergarten. This is an increase of some 3,500 children (10 percent) on 2012. The increase has been particularly great among 1-year-olds and 4-year-olds. Over the last year the number of minority language 1-year-olds attending kindergarten has increased by 560 and the number of 4-year-olds by almost 1,100. The enrolment rate among minority language children continues to rise and stands at 76.8 percent in 2013 – an increase of almost 2 percentage points since 2012. In the same period the number of immigrants in this age group increased by around 4,500. The enrolment rate among minority language 1-year-olds has increased from 36.5 percent to 39.5 percent.

Children with special needs

Kindergartens have a particular responsibility for preventing problems and identifying children with

Table 3.2 Enrollment rate of minority language children attending kindergarten. 2009–2013. Percentage.

	2009	2010	2011	2012	2013
1 years	33.0	34.5	36.8	36.5	39.5
2 years	55.5	56.8	59.4	68.2	72.3
3 years	81.8	84.1	83.7	85.5	86.0
4 years	92.4	93.0	94.5	92.0	93.4
5 years	95.2	94.7	96.4	96.9	95.3
1–5 år	**71.1**	**71.7**	**73.0**	**75.0**	**76.8**

Source: Statistics Norway (Childcare statistics)

particular needs. They can make special arrangements such as social, pedagogical and/or physical provisions for these children. See Chapter 7 for more information about special educational support in kindergartens.

Almost all kindergarten children have a full-time place

The percentage of kindergarten children with a full-time place rose from 85 percent to 92 percent between 2009 and 2013. As much as 94 percent of language minority children have a full-time place in 2013. A full-time kindergarten place means that the child has an agreed length of stay in kindergarten of 41 hours or more every week. The agreed and the actual length of stay are not necessarily the same.

The biggest increase in children with full-time places has been among children aged 1 and 2. 92 percent of children in this age group had full-time places in 2013, compared with 84 percent in 2009. In Oslo and Akershus as many as 98 percent of kindergarten children had full-time places in 2013, while at the other end of the scale 75 percent of kindergarten children in Oppland had full-time places.

Slightly fewer children per FTE

The average number of children per FTE has decreased from 6.19 in 2009 to 6.03 in 2013. When calculating the number of children per FTE we count children under 2 years of age as two children, and adjust for children's agreed length of stay. In the FTEs we count the baseline staff, i.e. pedagogical leaders and assistants. There are fewer children per FTE in municipal kindergartens (5.88) than in private kindergartens (6.21). You can read more about FTE trends in kindergartens in Chapter 2.

3.2 Kindergartens

There were around 6,200 kindergartens in Norway in 2013, around 100 fewer than in 2012. Family day care centres stand for most of the decrease, there being 80 less in 2013 than in 2012. Since 2009 the number of family day care centres has dropped by almost 30 percent.

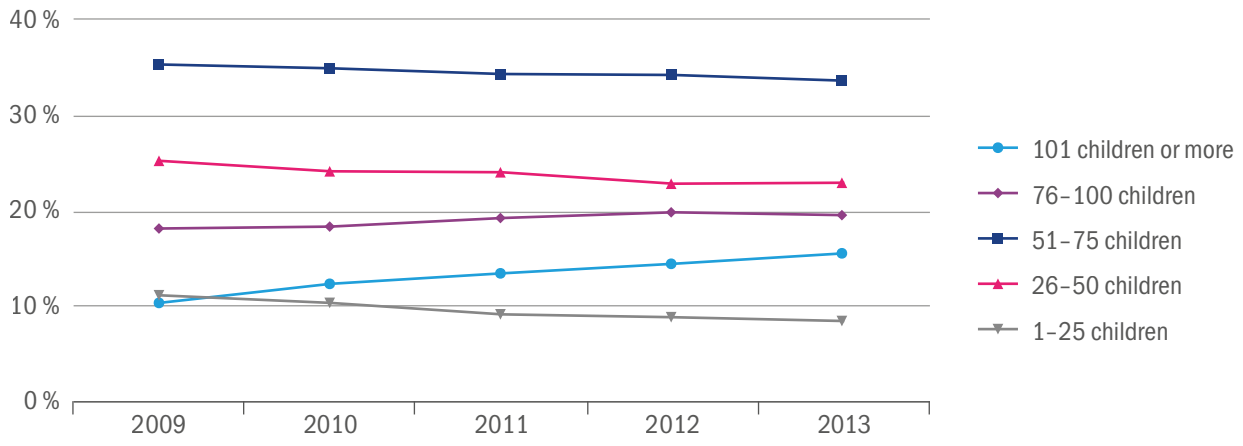
Most children attend large kindergartens

Most children attend kindergartens with between 51 and 75 children, but the proportion of children attending larger kindergartens has increased in the last five years. In particular, there have become more kindergartens with excess of 100 children, as shown in Figure 3.3. In 2013 a total of 16 percent (45,500 children) attended the largest kindergartens compared with 10 percent in 2009.

Just over half of all kindergartens are private

47 percent of kindergartens were municipal and 53 percent had private owners in 2013. The proportion of private kindergartens has remained stable in the

Figure 3.3 Children attending kindergarten – by kindergarten size. 2009–2013. Percentage.



Source: BASIL/The Norwegian Directorate for Education and Training

last five years. 70 percent of the smallest kindergartens, those with 25 children or fewer, are private, thus fewer than half of children (48 percent) attend private kindergartens.

One in three Norwegian municipalities, most of them small, only have municipal kindergartens. Five municipalities, also small, only have private kindergartens. In 35 percent of Norwegian municipalities at least half of the kindergartens are private. In 11 percent of municipalities more than 70 percent of all kindergartens are private.

More than 60 percent private kindergartens in the southern part of Norway

Fewer than 30 percent of kindergartens in Sogn og Fjordane and Finnmark are private. In the counties Akershus, Aust-Agder, Vest-Agder, Buskerud, Hordaland and Østfold, on the other hand, more than 60 percent of kindergartens are private, cf. Figure 3.4.

Most private proprietors own only one kindergarten

Few kindergarten proprietors control multiple kindergartens (Nasjonalt barnehageregister (NBR)). The vast majority (around 3,300 of 3,450 private kindergartens in total) only manage one kindergarten. Around 75 owners run three or more kindergartens, and just under 30 of those have five or more kindergartens. Only a handful of them hold more than 25 kindergartens, and these proprietors often possess kindergartens in several counties and in different parts of the country.

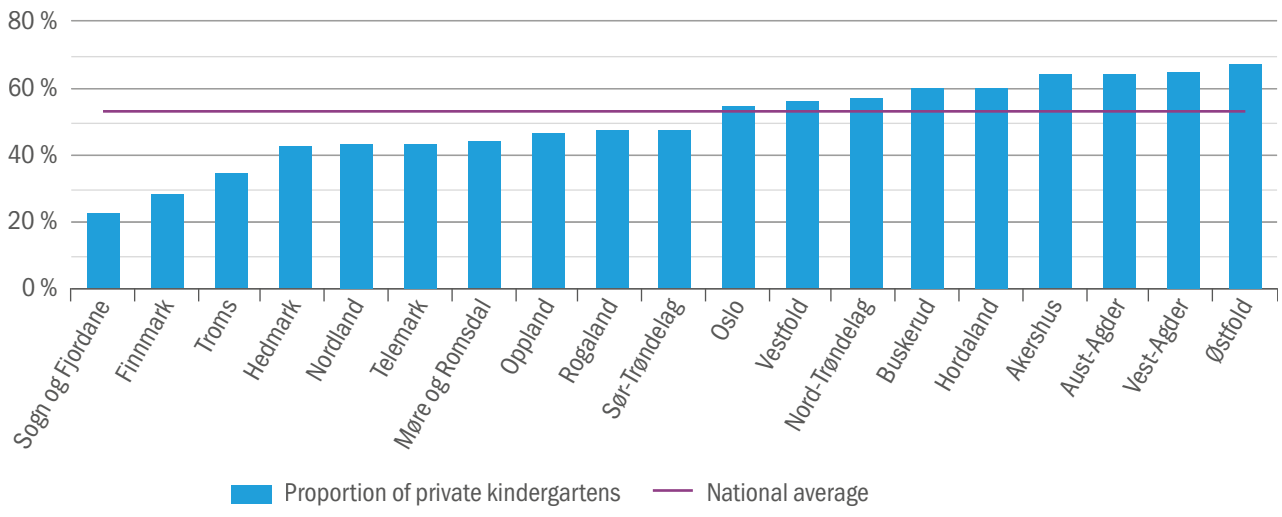
National kindergarten register

The national kindergarten register (NBR) is a register of all kindergartens in Norway. NBR data is obtained from the Central Coordinating Register for Legal Entities. The NBR contains information about ownership structures, affiliations and inspection arrangements. The register also has a map function. NBR data plays a part in the way in which kindergartens appear in the Norwegian Directorate for Education and Training's statistics.

More kindergartens are inspected

Municipalities are obliged under the Kindergarten Act to inspect their kindergartens. Municipalities are carrying out more inspections than they have done in the past. In 2013, the kindergarten authorities conducted on-site or written inspections of 64 percent of all kindergartens, an increase of 6 percentage points on 2012. The inspections aim to ensure kindergarten's compliance with the Kindergarten Act. 68 percent of private and 58 percent of municipal kindergartens underwent inspections in 2013. For family day care centres the figure was 69 percent. Around half of the inspections were on-site.

Figure 3.4 Proportion of private kindergartens – by county. 2013. Percentage.



Source: BASIL/The Norwegian Directorate for Education and Training

3.3 Staff

A key goal for kindergartens is to provide a good arena for care and play, learning and development. Two important quality indicators for kindergartens are the skills of the staff and the number of staff per child (White Paper 1 S 2013–2014). Although many staff members still lack formal kindergarten teaching qualifications, the proportion of non-qualified staff is decreasing.

Pedagogical leaders is the fastest growing professional group in kindergartens

At the end of 2013, a total of 93,600 employees carried out around 74,400 FTEs in Norwegian kindergartens. Between 2009 and 2013 the number of staff rose by some 8,700 employees, almost half of whom were pedagogical leaders. In other words, the increase in the number of pedagogical leaders accounts for most of the increase in kindergarten staff over the last five years. From 2012 to 2013, the number of pedagogical leaders rose by 2 percent – an additional 600 positions. In the same period the number of assistants fell by around 100 and the number of kindergarten heads rose by 50. For more information about FTEs and the allocation of resources, see Chapter 2.

Growing number of personnel with teaching qualifications or child welfare qualifications

The number of staff with kindergarten teaching qualifications has increased by around 4,400 (2 percentage points) since 2009. Administrative staff, support staff and other salaried personnel such as caretakers and cleaners are not included in the figures.

Pedagogical leaders

Pedagogical leaders must be qualified kindergarten teachers or hold equivalent qualifications. An equivalent qualification constitutes a three-year teacher training qualification at university level with an additional qualification in early childhood education.

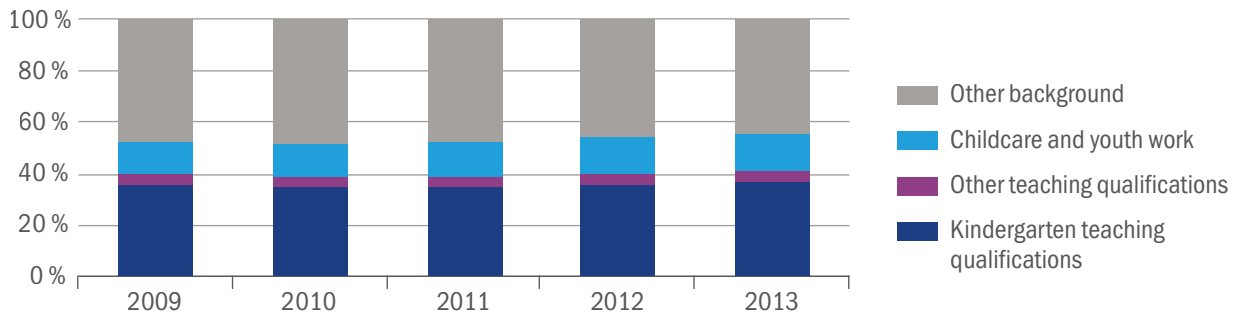
Local authorities may grant temporary dispensations from the qualifications requirement for pedagogical leaders for up to one year at a time. In certain cases they may also grant a permanent dispensation.

In the same period the number of personnel with childcare and youth work qualifications rose by 2,900. The proportion of staff with childcare and youth work qualifications has risen from 13 percent to 15 percent over the last few years (Figure 3.5). The increase in personnel with relevant qualifications has taken place alongside a general increase in staff numbers. The group "Other background" includes everything from completed lower secondary education to higher education qualifications not covered by the other categories.

More childcare and youth workers in municipal kindergartens

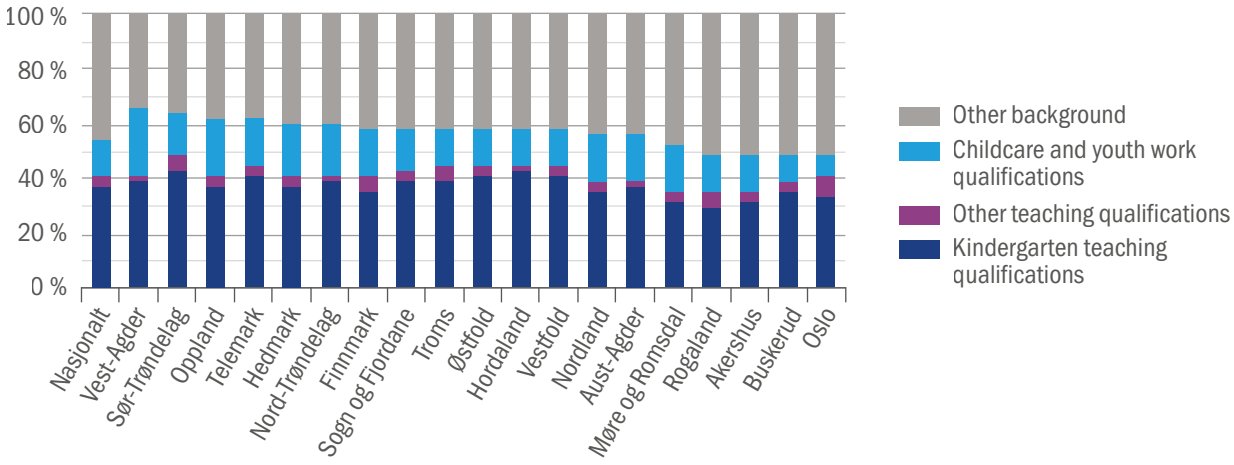
The proportion of staff with kindergarten teaching qualifications or similar is roughly the same for both municipal and private kindergartens. The differences are far greater when we look at childcare and youth

Figure 3.5 Educational background of kindergarten staff. 2009–2013. Percentage.



Source: BASIL/The Norwegian Directorate for Education and Training

Figure 3.6 Educational background of kindergarten staff – by county. 2009–2013. Percentage.



Source: BASIL/The Norwegian Directorate for Education and Training

workers. In municipal kindergartens, 18 percent of employees have childcare and youth work qualifications, while in private kindergartens the figure is 10 percent.

Regional differences in staff qualifications

Staff qualifications vary across counties. In Rogaland, fewer than 31 percent of personnel have kindergarten teaching qualifications, while the figure for Sør-Trøndelag is 45 percent. Oslo stands out with as many as 9 percent of staff members having "Other teaching qualifications". In other counties the figure is 5 percent or lower.

In Vest-Agder and Oppland, more than 20 percent of kindergarten staff have childcare and youth work qualifications, while in Oslo the figure is only 7 percent.

Men in kindergartens

One of the aims of the government's action plan Gender Equality 2014 is for 20 percent of kindergarten staff to be male. At the end of 2013 around 9 percent, or just over 6,000, of all baseline personnel in kindergartens were male. Baseline personnel are staff members working with all of the children, i.e. pedagogical leaders and assistants. The number of men working in kindergartens has remained stable in the last five years. The total number of personnel has increased in the same period.

Around 45 percent of kindergartens employ men among their baseline personnel.. Just under a quarter of the men, around 1,400 of a total of 6,000, are the only male member of the baseline personnel.

There are male kindergarten heads in around 9 percent of Norwegian kindergartens. 62 percent of kindergartens with male heads also employ male baseline staff members.

Men predominantly work in the largest kindergartens. Men are slightly more likely to be working in private kindergartens (50 percent) than in municipal kindergartens (41 percent).

Supervision of newly qualified kindergarten teachers is becoming more widespread

The Ministry of Education and Research and the Norwegian Association of Local and Regional Authorities (KS) have signed a Memorandum of Understanding stipulating that all new teachers and kindergarten teachers should be supervised during their first year of work. The supervisors should be experienced teachers or kindergarten teachers with additional supervisor qualifications.

A 2014 survey found 61 percent of kindergarten owners and 60 percent of kindergarten heads to have arrangements in place to supervise newly qualified staff (Rambøll 2014). The percentage of kindergarten owners and heads saying they run a supervision scheme has increased in all regions since 2012, in both private and municipal kindergartens, and in large and small municipalities. The northern region (Trøndelag and Northern Norway) still stand out with fewer kindergarten owners having introduced supervision schemes.

60 percent of newly appointed kindergarten teachers say they are taking part in a supervision scheme.

Kindergarten teachers in the counties Oslo and Akershus, and in municipal kindergartens are more likely to take part in a supervision scheme. The difference in supervision scheme availability among municipal and private kindergartens have decreased from 31 percentage points in 2012 to 13 percentage points in 2014.

Scheduling and commitment from the kindergarten head are crucial

When surveyed kindergarten owners express that commitment from the kindergarten head is the single most important factor for introducing a supervision scheme. Kindergarten heads, on the other hand, believe that allocating time in the supervisors and teachers' timetables is the most significant factor.

Supervisors are predominantly pedagogical leaders or kindergarten heads, and supervision in kindergartens usually takes place in the form of regular meetings or seminars. Kindergarten owners, heads and teachers are all overwhelmingly positive towards the supervision scheme.

Kindergarten staff wants to become better language role models

Supporting children's language acquisition is one of the core tasks of kindergartens. Studies have shown that communication, language and text is the learning area that kindergartens dedicate most time to (Gulbrandsen and Eliassen 2013).

A qualitative study found that kindergarten staff feel they need to improve their competencies for working with language learning across all kindergarten activities (Aspøy and Bråten 2014). Kindergarten staff also highlight the need for learning more about specific topics, especially language learning among children who may be struggling with their language in one way or other.

Teacher-to-child ratios

The Regulations on Qualified Personnel stipulate that there should be at least one pedagogical leader per 14–18 children when the children are over 3 years of age and one pedagogical leader per 7–9 children when the children are under than 3 years of age and their daily stay in kindergarten is longer than six hours. The number of children per pedagogical leader may be increased slightly in kindergartens where the children's daily length of stay is shorter.

Assistants and childcare and youth workers are less able to take part in learning initiatives and professional reflection at work than are qualified kindergarten teachers (Aspøy and Bråten 2014). They generally do not have time set aside for this purpose during working hours and rely on the management to provide courses or guidance for individual staff members.

3.4 Teacher-to-child ratio

A growing number of kindergartens are meeting the minimum teacher-to-child ratio

The number of pedagogical leaders with approved kindergarten teacher status has increased since 2009, and a growing number of kindergartens now meet the minimum teacher-to-child ratio (Pedagognormen). The number of kindergarten children has increased over the same period.

49 percent of ordinary kindergartens met the minimum teacher-to-child ratio without a dispensation in 2013. This compares with 39 percent in 2012. This 10 percent increase is part of a general, positive trend. There were 1,500 more kindergartens meeting the minimum teacher-to-child ratio in 2013 than there were in 2009. Yet only half of kindergartens have enough pedagogical leaders with approved teaching qualifications.

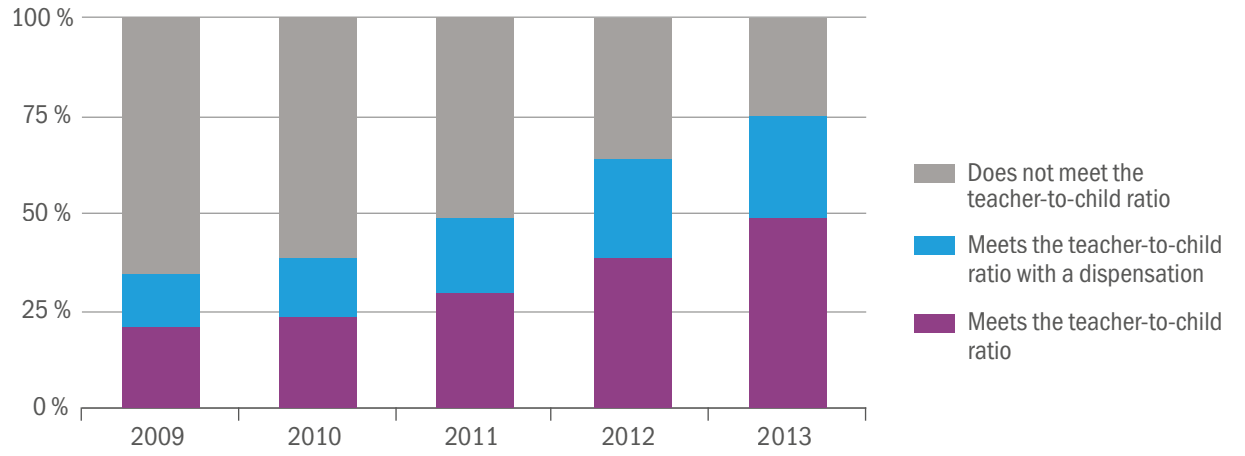
Just over half of children attend kindergartens with sufficient numbers of qualified teaching staff

Large kindergartens are more likely than small kindergartens to meet the minimum teacher-to-child ratio. In 2013 around 52 percent of children attended kindergartens that met the ratio, an increase from 24 percent in 2009. 132,000 children attend kindergartens that do not meet the criteria. Even though a kindergarten does not fully meet the ratio, it may still be employing staff with teaching qualifications. There is little difference between municipal and private kindergartens when it comes to meeting the criteria for teacher-to-child ratios.

Most kindergartens lack just one pedagogical leader

65 percent of kindergartens that do not currently meet the minimum teacher-to-child ratio lack only one pedagogical leader, this is equivalent to around 1,750 kindergartens. 24 percent of kindergartens need two pedagogical leaders in order to meet the criteria. In 2009 there was a shortage of 7,050 pedagogical

Figure 3.7 Kindergartens meeting the minimum teacher-to-child ratio, both with and without dispensation from the qualifications requirement. 2009–2013. Percentage.



Source: BASIL/The Norwegian Directorate for Education and Training

leaders. By 2013, this figure had fallen to 4,250. Around 1,000 kindergartens exceed the minimum teacher-to-child ratio.

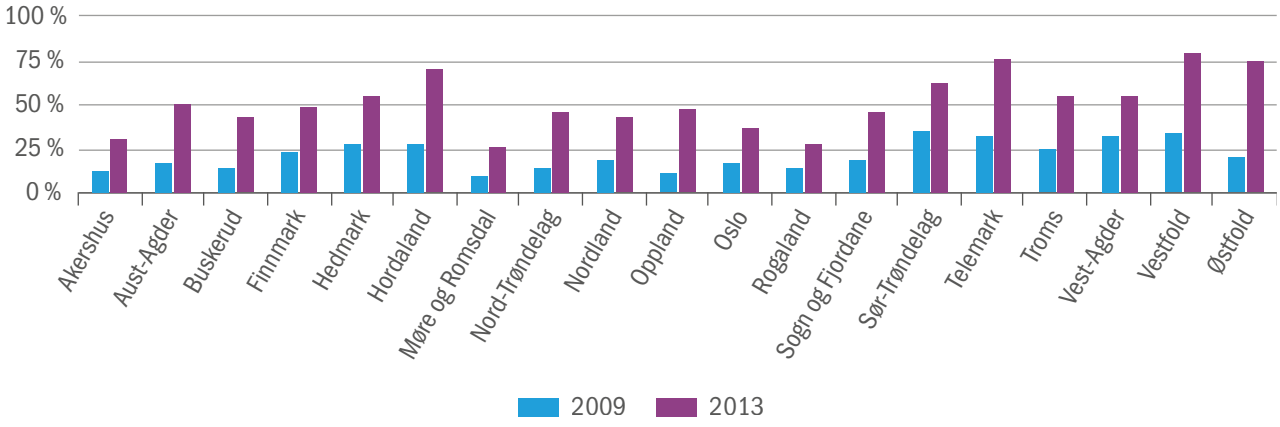
1 in 4 kindergartens meet the ratio by being granted dispensation from the qualifications requirement

In 2013 around a quarter of kindergartens (that is 1,300 of all kindergartens) lacked one or more pedagogical leaders even when dispensations from the qualifications requirement are taken into account, cf. Figure 3.7. This is a reduction of around 40 percentage points on 2009. The percentage of kindergartens meeting the teacher-to-child-ratio by obtaining a dispensation from the qualifications requirement increased from 13 percent in 2009 to 25 percent in 2013.

Significant regional variations

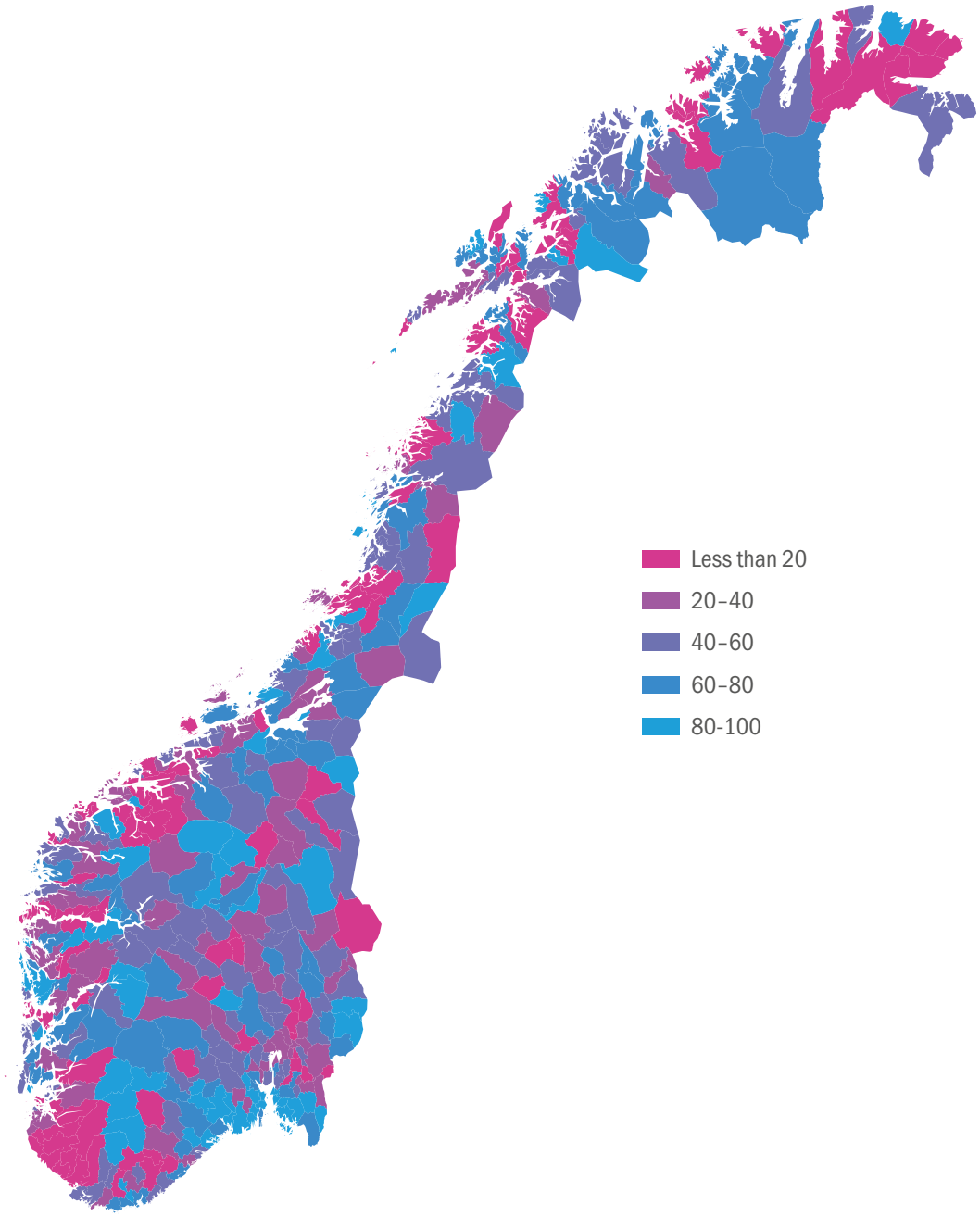
There are considerable differences between counties with regard to the number of kindergartens meeting the minimum teacher-to-child ratio, as shown in Figure 3.8. In the counties Oslo, Akershus, Rogaland and Møre og Romsdal more than 60% of kindergartens are lacking

Figure 3.8 Kindergartens meeting the minimum teacher-to-child ratio without dispensation from the qualifications requirement – by county. 2009 and 2013. Percentage.



Source: BASIL/The Norwegian Directorate for Education and Training

Figure 3.9 Kindergartens in municipalities meeting the minimum teacher-to-child ratio with pedagogical leaders with approved kindergarten teacher status. 2013. Percentage.



Source: BASIL/The Norwegian Directorate for Education and Training

pedagogical leaders, while 75 percent of kindergartens in Vestfold, Telemark and Østfold meet the criteria.

All counties have seen an improvement in pedagogical leader resources, and the greatest increase occurred in Østfold, Vestfold, Hordaland and Telemark. Between 2009 and 2013, more than 40 percent of kindergartens in these counties managed to recruit enough pedagogical leaders without obtaining a dispensation from the qualifications requirement.

In the counties Rogaland, Akershus and Møre og Romsdal the increase was far more modest, at below 20 percent. Around 30 percent of kindergartens have sufficient qualified teaching staff in these counties. There are also considerable variations from across municipalities as regards the number of kindergartens that meet the criteria for pedagogical leaders with approved kindergarten teacher status, cf. the map.

3.5 Parent contributions

An aim for the kindergarten sector is that anyone wishing to keep children in kindergarten should afford to do so. After a long period of real term reductions in parent contributions, the maximum price was raised slightly in January 2014.

Parents pay around 15 percent of the cost of a kindergarten place. As of 1 January 2014 the maximum price of a full-time kindergarten place is NOK 2,405 per month. An additional charge for meals may be made. Seventy-five private and one municipal kindergarten charged more than the maximum rate in 2013. Between 2005 and 2014 the maximum parent contribution was reduced from NOK 2,750 to NOK 2,405 per month.

Parent contributions

"Parent contributions towards a kindergarten place should not exceed a given maximum limit. An additional charge for the cost of meals may be levied. The maximum limit is set in parliament's annual budget resolution. The maximum limit applies to full-time ordinary kindergarten provision in line with prevailing laws and regulations. Full-time provision means an agreed weekly length of stay of 41 hours or longer."

(Regulation on Parent Contributions in Kindergartens, Section 1)

Increase in parent contributions

The average parent contribution is slightly higher in private kindergartens than in municipal kindergartens (Scheistrøen 2013). Parent contributions rose by 3 percent between January 2013 and January 2014, an effect of the increase in the maximum rate of parent contributions from NOK 2,330 per month in 2013 to NOK 2,405 per month in 2014.The increase in parent contributions was somewhat bigger in municipal (3.3 percent) than in private kindergartens (2.6 percent) (SSB 2014).

Largest increase in municipal kindergartens parent contributions in Vest-Agder, Aust-Agder and Rogaland

Statistics Norway (SSB) publishes regional data on changes in municipal kindergartens' parent contributions. Between 2012 and 2013, the biggest increase in parent contributions occurred in municipal kindergartens in Vest-Agder, Aust-Agder and Rogaland (SSB 2014). The increase stood at 4.8 percent in all three counties. In the same period the lowest increase in parent contributions occurred in municipal kindergartens in Northern Norway (1.9 percent) and South East Norway (2.6 percent).

Kindergarten meals are becoming more expensive

Parents may be charged for the cost of meals on top of the ordinary parent contribution. Meal charges should cover the actual cost of providing meals in kindergarten, i.e. there should be no profit margin. Parents paid an average of NOK 248 per month towards the cost of meals in 2013 compared with NOK 215 in 2010. On average private kindergartens charge more for meals than municipal kindergartens. 45 percent of private kindergartens charged NOK 300 or more per month in meal fees in 2013, while only 24 percent of municipal kindergartens did so.

Means-tested payment in 1 in 4 municipalities

23 percent of municipalities use means testing to determine parent contributions (Scheistrøen 2013). There are considerable variations in how the municipalities carry out the means testing in terms of the income measure used, eligibility threshold, and the size of the discount. All municipalities using means testing offer reduced rates for families with a gross income of under NOK 150,000.

Regional variations in the use of means testing

There are significant regional differences with regard to the use of means testing. Oslo and most municipalities in Akershus use a sliding pay scale. In Vestfold, Telemark and Aust-Agder at least half of municipalities offer means testing, as do many municipalities in Hordaland and Rogaland. On the other hand, no municipalities in Nord-Trøndelag, Nordland and Troms report offering means testing. It is particularly large municipalities that offer means-tested rates, hereby 19 of the 32 most populous municipalities. Almost half of all children in municipal kindergartens thus live in municipalities that use means testing.

Free means-tested places and other discount schemes

9 percent of all municipalities offer free means-tested places especially allocated as part of the kindergartens' ordinary payment system (Scheistrøen 2013). 70 percent of municipalities offer free means-tested places subject to individual consideration by social services, the child protection board or the local education authority, while 58 percent of municipalities offer discount schemes separate from the ordinary kindergarten payment system. 14 percent of municipalities say they do not offer any discounts other than the statutory sibling discount. Two municipalities offered free kindergarten places without means testing in 2013.

Discount schemes

According to the Regulations on Parent Contributions in Kindergartens, all municipalities must offer a discount on or exemption from the parent contribution to those families least able to pay. Such schemes must also cover non-municipal kindergartens in the municipality. It is up to the individual local authority to set up its own scheme.

3.6 Well-being and development

As mentioned previously, staff is one of the main quality criteria in kindergartens. Highly qualified staff can make a significant contribution towards the children's well-being and development. International research has found that good kindergartens have a positive impact on children's language and cognitive development, especially those from disadvantaged families (Ramey et al. 2000, Sylva et al. 2004, Gormley and Gayer 2004). The research is less conclusive when it comes to emotional and social development (White Paper 24 (2012–2013)). One key premise is that the kindergarten must be of a good quality and that there is good interaction between children and adults.

Improved language skills, especially among boys

The Norwegian Mother and Child study found that children who have attended kindergarten are less likely to experience delayed language development than children who have not attended kindergarten (Lekhal et al. 2010). Good relationships between adults and children in kindergarten appear to be linked to the children's language proficiency (Engvik et al. 2014).

Data from the Mother and Child survey also suggest that the expansion of kindergartens that took place between 2003 and 2008 has lessened the differences in language problems between children from low-income families and other children (Dearing et al. 2014). Another Norwegian study has established a link between how long a child has attended kindergarten and the child's language competence at the age of 4, although this only applies to boys. (Zachrisson et al. 2014). The longer the boys had attended kindergarten, the better their language competence, i.e. their conceptual understanding. As regards girls, there was little to suggest that the length of time spent in kindergarten had any impact on their linguistic competence.

Minority language girls are doing better

"Participation in high-quality kindergarten provision is important in order to give language minority children the same opportunities for learning as other pupils when they start school." (White Paper 24 (2012–2013)).

An evaluation found that children from immigrant backgrounds, living in urban districts that offer free core time in kindergarten, perform better in screening tests in reading and numeracy in Year 1 than does the same category of children living in districts that do not offer free core time (Drange 2013). The improved performance was particularly evident in reading tests. An earlier study found particularly significant effects of free core time among girls (Drange and Telle 2010).

It would also appear that the effects are great among children from immigrant families on low incomes and from immigrant families where the mother has a low level

Free core time

The government is trialling free core time in kindergarten in some urban areas with a high percentage of children from immigrant backgrounds. All children in the given area are then offered 20 hours per week in kindergarten free of charge. The main objectives of these trials are to prepare the children for starting school, encourage social contact, and boost the Norwegian language skills of minority language children.

of education or little experience of the labour market (Drange 2013). The free core time scheme has also succeeded in recruiting more children from immigrant backgrounds to kindergartens. The scheme did not recruit additional children without an immigrant background to kindergartens, and the researchers were unable to identify any effect on school performance among these children in Year 1.

No increase in behavioural problems

80 percent of children aged 1 and 2 attend kindergarten in Norway. This is a high percentage compared with many other countries, and the issue of starting kindergarten early has been subject to much discussion. Results from the Norwegian Mother and Child Cohort Study (MoBa) do not suggest there is a link between starting kindergarten early and behavioural problems (Lekhal 2012). Three-year-olds who attended ordinary kindergartens when they were 18 months old suffered fewer emotional problems such as feeling upset or scared than did children who did not attend kindergarten. Spending long hours in kindergarten at a young age does not appear to lead to more behavioural problems (Zachrisson et al. 2013). Norwegian research largely concludes that children who attend kindergarten in Norway do not experience a greater degree of behavioural problems.

A study carried out in Trondheim shows that group sizes and the number of hours spent in kindergarten have neither negative nor positive effects on social competence and behavioural problems in children aged 4 1/2 years (Solheim et al. 2013).

More difficult to reach out to vulnerable children

A recent Danish interventional study aimed to improve learning and well-being among socially vulnerable children in kindergarten. In the Vida project selected kindergartens worked systematically with learning and change processes over a period of two years.

The programme proved to have a positive effect on the children's socio-emotional development and on well-being in general, but it did not have a particular effect on the development of the most vulnerable children (Jensen et al. 2013).

Not all children enjoy kindergarten

Allowing all children to actively participate in an inclusive environment is an important goal for the kindergarten sector. Parent surveys over several years have shown a high level of satisfaction among parents as regards the standard of kindergarten provision (The Agency for Public Management and eGovernment 2013, Moafi and Bjørkli 2011). When asking the children, the answers are more nuanced. A kindergarten study in Kristiansand shows that even though most children are happy, around one in ten are not (Nordahl et al. 2013). They say they do not always enjoy kindergarten and that they are teased and harassed by other children. These findings mirror the results of another Norwegian well-being survey among children (Bratterud et al. 2012).

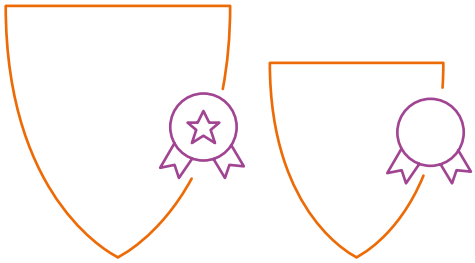
4

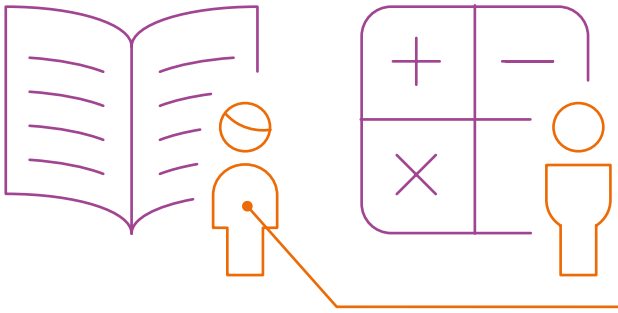
Learning outcomes

All pupils leaving compulsory education should have mastered a set of fundamental skills to allow them to participate in continued education and working life. Learning outcomes are an indicator of how successful we are in providing them with these skills. We measure results using coursework grades and exam results, national tests and international surveys.

In this chapter we look at how learning outcomes vary between different groups and how results develop over time.

Large municipalities achieve better results on average than small municipalities.

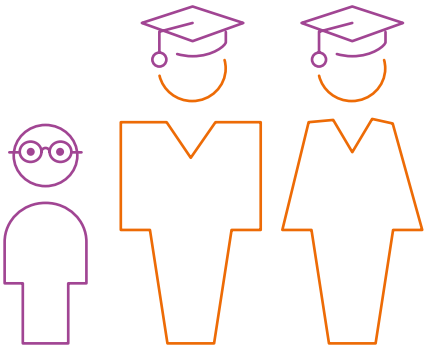




Girls perform better than boys in national reading tests, while boys perform slighly better than girls in numeracy.

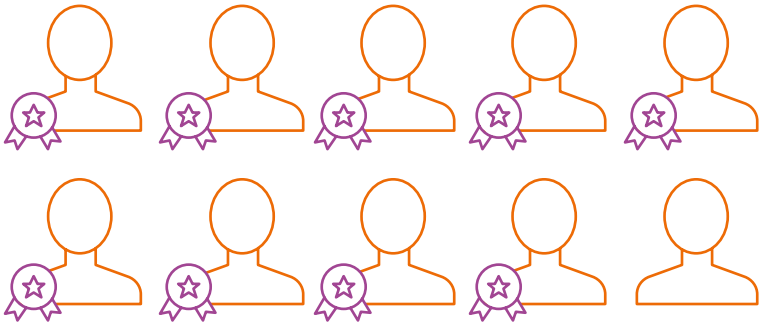
Girls outperform boys in all subjects in the Year 10 exam.

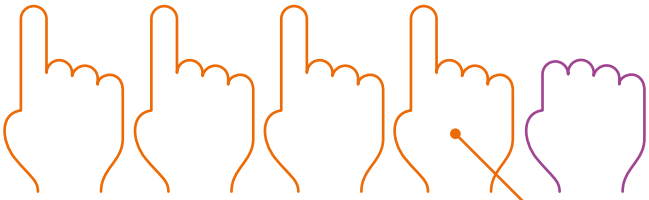
The parents' level of education has a significant impact on pupils' exam results.



Half of all pupils achieve lower written exam results than they do coursework grades in the same subject.

9 in 10 pupils pass their apprenticeship and journeyman's examinations.

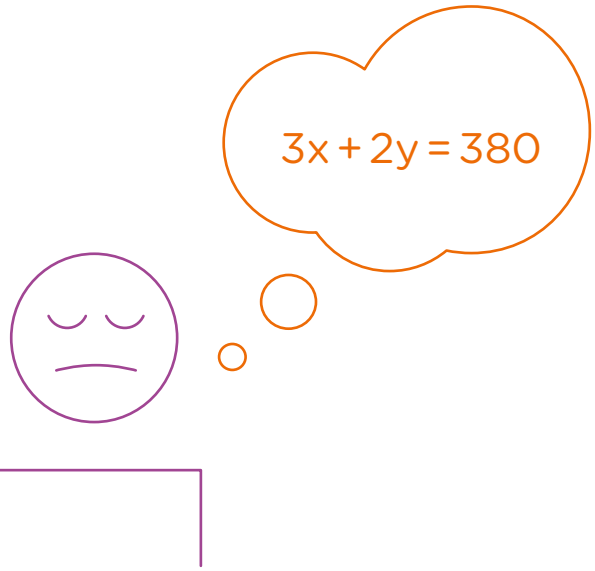




Slight decline in Norwegian pupils' maths results. Almost 1 in 5 Norwegian pupils perform at the lowest proficiency level or lower.

Norway is on a par with the OECD average

Norwegian pupils report feeling low inner motivation in mathematics and that they lack endurance when encountering problems in the subject.



Sources of information about learning outcomes

There are a number of sources providing information about learning outcomes. The most important are coursework grades and exam results, national tests and international studies.

Results from national tests reflect how well pupils at a certain school or in a certain municipality master a set of core skills compared with all other pupils in the same year group in a particular year. National tests do not currently measure progress over time. International studies are particularly suitable for measuring development over time and for comparing results with other countries. Exam results and coursework grades are a reflection of the pupils' attainment level upon completing a course of study. The final grades are used when enrolling in further education and workplace training and when entering the labour market.

4.1 National tests

Populous municipalities achieve better results on average than small municipalities

There is a clear link between the results of national tests and where the pupils live (SSB 2014 a). The largest municipalities achieve better results in national tests than small and medium-sized municipalities. The differences are most evident in Year 5, when municipalities with fewer than 2,500 residents achieve an average level of proficiency of 1.8, while the largest municipalities with a population of more than 50,000 achieve 2.1. This pattern appears across different national tests and is most conspicuous in Year 5. Only the very largest municipalities perform above the national average in the numeracy test in Year 8.

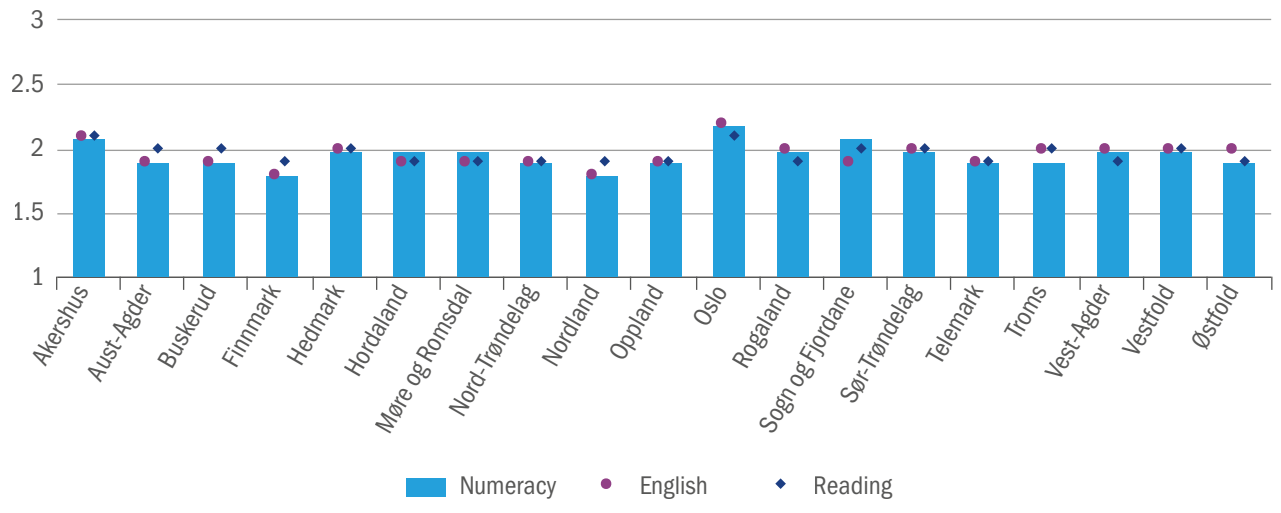
Results in the largest municipalities are often in line with or just above the national average. In the national numeracy test in Year 5, Trondheim and Stavanger achieve a proficiency level of 2.1, while Bergen, Kristiansand and Tromsø achieve the national average of 2.0. Oslo achieves 2.2. This pattern is in part due to the higher level of education among parents in and around the big cities. When adjusting for the parents' level of education, the largest municipalities perform closer to the national average. Oslo does better than the national average even when adjusting for educational and immigration backgrounds (Bonesrønning et al. 2012).

Although the biggest municipalities on average achieve the best results in national tests, there are also a number of small and medium-sized municipalities performing better than the national average.

The counties Oslo and Akershus perform better than the national average

When comparing counties, we note that Oslo and Akershus perform slightly better than the national average in national tests in Year 5 (Figure 4.1). Pupils in Oslo and Akershus perform above the average

Figure 4.1 Proficiency levels in national Year 5 tests – by county. 2013. Average.



Source: Norwegian Directorate for Education and Training/The School Portal

National tests

National tests do not measure attainment in individual subjects, but rather in fundamental skills required in all subjects. National tests in reading and numeracy do therefore not only centre around the attainment targets in Norwegian and Mathematics, but are also based on other subjects where targets for reading and numeracy are integrated. The national English tests differ from the other two tests, since they are based on the attainment targets for English.

National tests are conducted in the autumn, shortly after the pupils have started Years 5, 8 and 9. In Year 5 the pupils are grouped into three proficiency levels, and around half of them perform to the middle proficiency level. In Year 8 there are five different proficiency levels, and around 40% of pupils perform to the middle proficiency level. The average level of proficiency in national tests in Year 5 is 2.0. In Year 8 the average is 3.1 in reading and numeracy, and 3.0 in English.

National test results should be used to help improve quality in schools, by school owners and at a regional and national level. Test results should also help strengthen the schools' and their teachers' work to improve the tuition they provide.

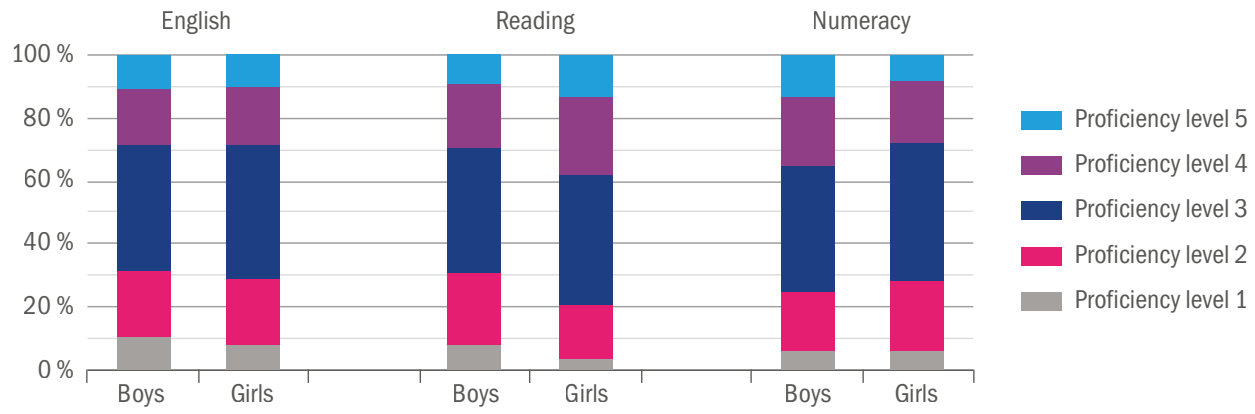
proficiency level in all national tests in Year 5. Sogn og Fjordane also performs better than the national average in the numeracy test. This pattern has remained stable year-on-year.

Results by county of the tests in Year 8 mirror the results of the Year 5 tests. Oslo is well above the national average in all tests, but particularly so in the reading test. Akershus also performs above average in all tests. Sogn og Fjordane is above the national average in reading and numeracy.

Distinct correlation between results in Year 5 and Year 8

There is a distinct correlation between the results in national tests in Years 5 and 8. Around 80 percent of pupils achieving the highest level of proficiency in Year 5, also accomplished one of the two highest levels of proficiency in Year 8 (SSB 2014a). Just under 3 percent of pupils achieving the highest level of proficiency in Year 5 only achieved one of the two lowest levels of proficiency in Year 8.

Figure 4.2 Proficiency levels in national Year 8 tests – by gender. 2013. Percentage.



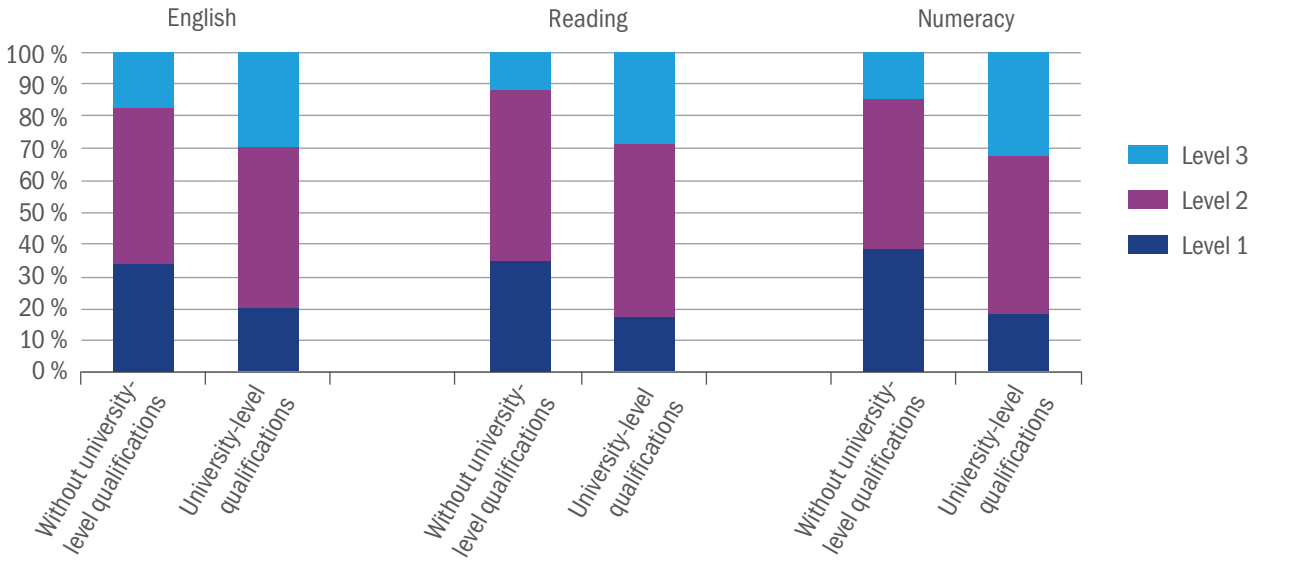
Source: Norwegian Directorate for Education and Training/The School Portal

Around 60 percent of pupils achieving the lowest level of proficiency in Year 5 achieved one of the two lowest levels of proficiency in Year 8. Conversely, between 2 percent and 4 percent of pupils achieving the lowest level of proficiency in Year 5 reached one of the two highest levels of proficiency in Year 8.

Girls perform better in reading tests – boys better in numeracy tests

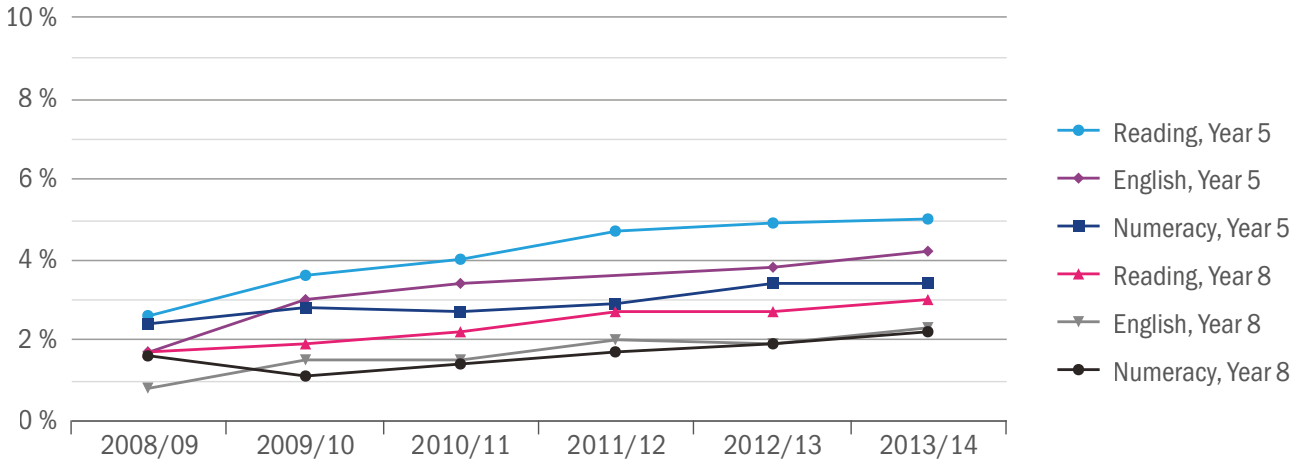
On average girls achieved better results than boys in the reading test, while boys achieved a higher average score than girls in the numeracy test. There was no difference between girls and boys in the English test in Year 5 and Year 8.

Figure 4.3 Proficiency levels in national Year 5 tests – by parents' level of education. 2013. Percentage.



Source: Statistics Norway (StatBank)

Figure 4.4 Exemptions from national tests. 2008–2013. Percentage.



Source: Norwegian Directorate for Education and Training/The School Portal

In reading, the differences at the two lowest proficiency levels affect the overall results: 30 percent of boys achieve the lowest proficiency level in reading in Year 5, compared with 25 percent of girls. In the Year 8 reading test, 34 percent of boys perform at the two lowest proficiency levels, while the figure for girls is 22 percent.

In the numeracy test in Year 8, it is particularly at the two highest proficiency levels that we see different results for girls and boys. 36 percent of boys and 28 percent of girls perform at the two highest levels of proficiency. There are more boys than girls at the highest level in particular.

Parents' level of education has a strong association with pupils' level of proficiency

The pupils' levels of proficiency in national tests in Year 5 vary according to their parents' level of education. The parents' level of education is especially relevant to the numeracy test, but the pattern is the same for all the tests. 33 percent of pupils with parents who hold higher education qualifications achieve Level 3 in numeracy, while the figure for pupils with parents without higher education is 15 percent (Figure 4.3).

Continued increase in the proportion of pupils exempted from national tests

We find the highest exemption rates in Year 5, especially for the reading test. 5 percent of pupils were exempted from the Year 5 national reading test in 2013.

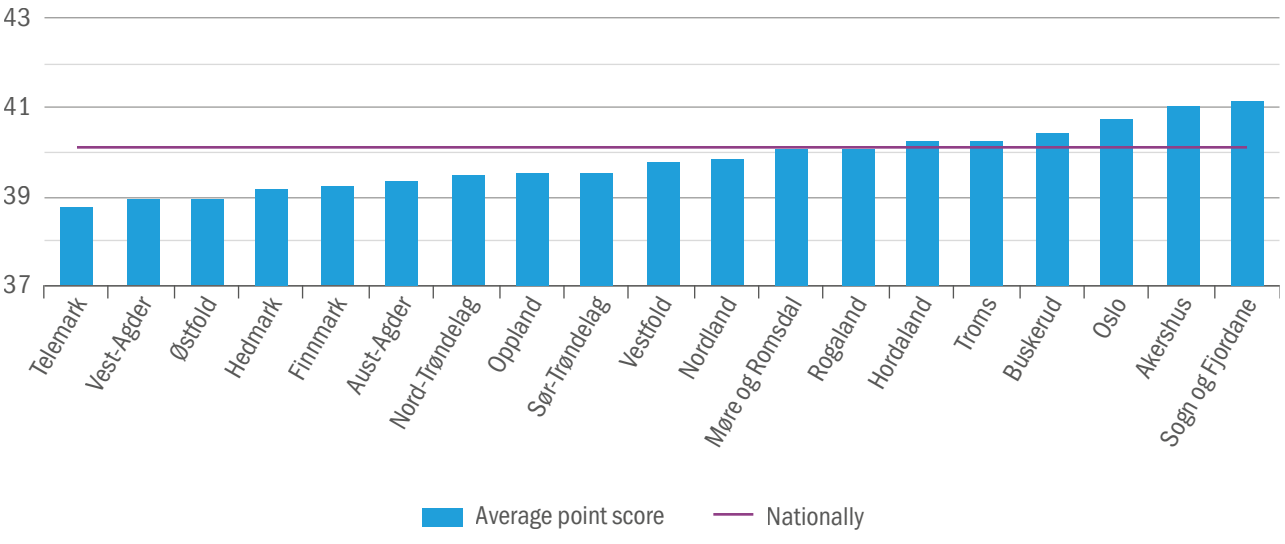
Exemptions from national tests

The general rule for national tests is that they are compulsory for all pupils. Pupils for whom individual decisions have been made to provide special needs education or special language tuition for language minorities may be exempted from national tests if it is clear that the test results will not have a bearing on their continuing education.

Average point scores from compulsory education

Average point scores are calculated by adding up all final grades that are to be included in the final diploma, i.e. coursework grades and exam grades, and then dividing the sum by the number of individual grades in order to obtain an average. The average is then multiplied by a factor of 10. Pupils who obtain fewer than half of the stipulated grades are not included in the calculations.

Figure 4.5 Average point score from compulsory education – by county. 2012/13.

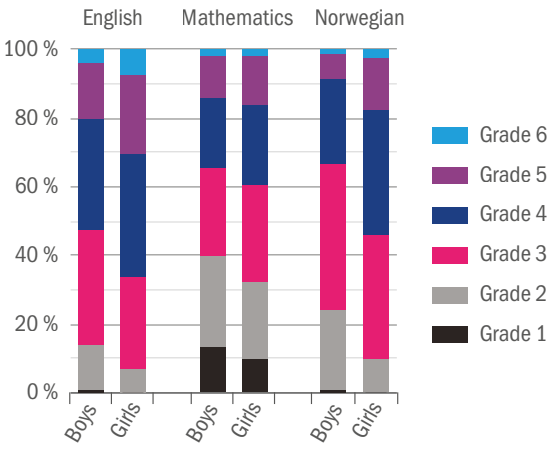


Source: Norwegian Directorate for Education and Training/The School Portal

The proportion of pupils exempted from national tests increased for all tests and in all year groups between 2008 and 2013. The intention of the exemption rules is to grant exemptions to pupils who do not benefit from the national tests. However, a high number of exemptions could mean that valuable information about pupils is lost – information that could benefit school owners and individual pupils. In order to be able to compare results, it is important to ensure uniform application of the exemption rules.

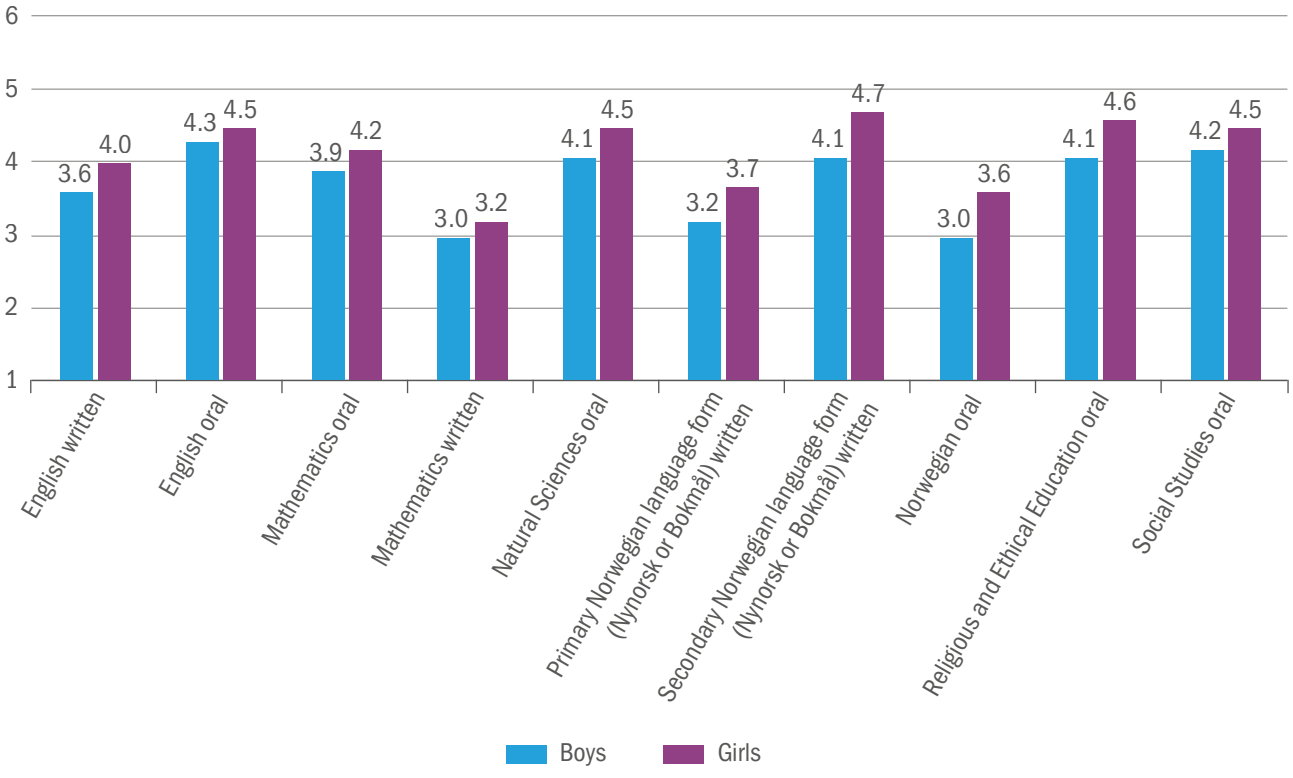
Almost twice as many boys as girls are exempted from national tests. This reflects the fact that almost 70 percent of pupils receiving special needs education are boys. Head teachers and teachers find the exemption rules to be clear and unambiguous (Seland et al. 2013). Many teachers still find it inappropriate that pupils seen not to benefit from the tests still to have to sit them because they don't have an individual decision about special needs education. There are more pupils receiving special needs education and special language tuition in Year 8 than in Year 5. However, fewer Year 8 pupils are exempted from national tests. It would therefore appear that lower secondary pupils receiving special needs education or special language tuition are increasingly seen to benefit from sitting the tests. This is in line with the objective that the tests should provide information about the pupils attainment levels for use in their further learning, an objective that also applies to pupils who receive special needs education.

Figure 4.7 Distribution of grades in Year 10 written exams – by gender. 2012/13. Percentage.



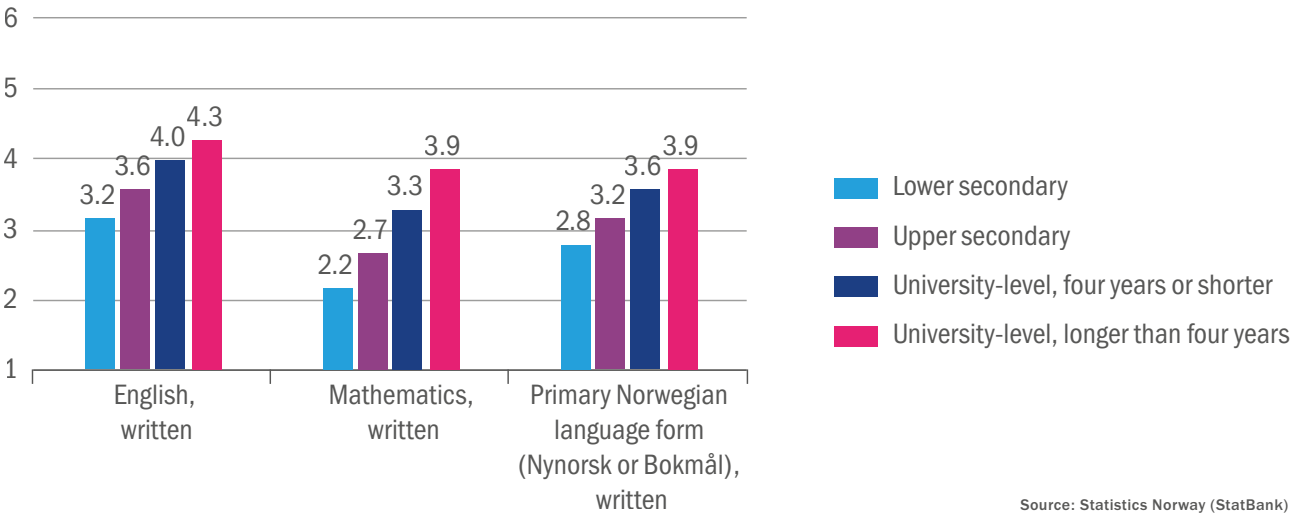
Source: Norwegian Directorate for Education and Training/The School Portal

Figure 4.6 Year 10 exam results – by subject and gender. 2012/13. Average.



Source: Norwegian Directorate for Education and Training/The School Portal

Figure 4.8 Written exam results in Year 10 – by parents' level of education. 2012/13. Average.



Source: Statistics Norway (StatBank)

4.2 Average point scores from compulsory education and final grades in Year 10

Greater differences between boys and girls than between municipalities

The average overall point score from compulsory education in 2012/13 was 40.1 points, an increase of 0.2 points since 2009/10. In the last three academic years close to 4 percent of pupils in Year 10 lack average point scores due to missing necessary subject grades.

On average pupils' oral exam results are better than their written exam results and coursework grades in the same subject. Written exam results are on average lower than coursework grades.

Looking at individual counties, we can see the same trend for both average point scores and national tests. Pupils in the counties Oslo, Akershus and Sogn og Fjordane are more likely to achieve grades above the national average over time. Sogn og Fjordane county performs better in terms of average point scores than in national tests. The counties Telemark, Østfold, Hedmark and Finnmark have remained below the national average for some time. The average point score at a county level varies between 38.8 and 41.2.

Girls obtain an average of 4 points more than boys. There are thus greater differences between girls and boys than between any of the counties. The gap between boys and girls has remained stable for a long time.

Girls obtain better exam results than boys on average

Girls perform significantly better than boys in their primary Norwegian language form (Nynorsk or Bokmål) and in English in the written Year 10 exams, while the results are more even in mathematics. When looking at all of the core subjects, girls achieve an average of 0.4 points more than boys in their exams. We find the greatest discrepancy in the written exam in the secondary Norwegian language form (Nynorsk or Bokmål), where girls outperform boys by 0.6 points (Figure 4.6).

Pupils with highly educated parents achieve better exam results

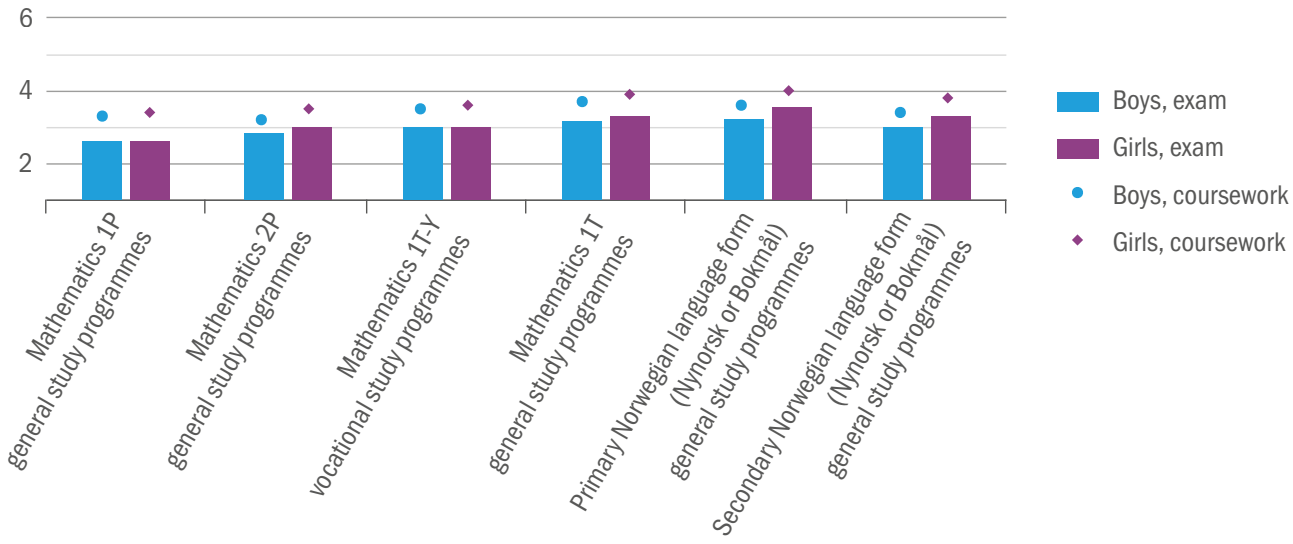
Analysing written exam results, once again we see that the parents' level of education has a significant impact. The greatest differences are found in mathematics, where pupils of parents with the highest level of education achieve an average of 1.7 points more in the exam than pupils of parents whose highest completed qualification is lower secondary. In the primary Norwegian language form (Nynorsk or Bokmål), the difference is 1.1 points.

There is a link between national tests and exam results

Coursework grades and exam results at the end of compulsory education (Year 10) strongly correlate with national test results in Year 8 (SSB 2013). 81 percent of pupils achieving the highest level of proficiency in the national numeracy test in Year 8 received a coursework

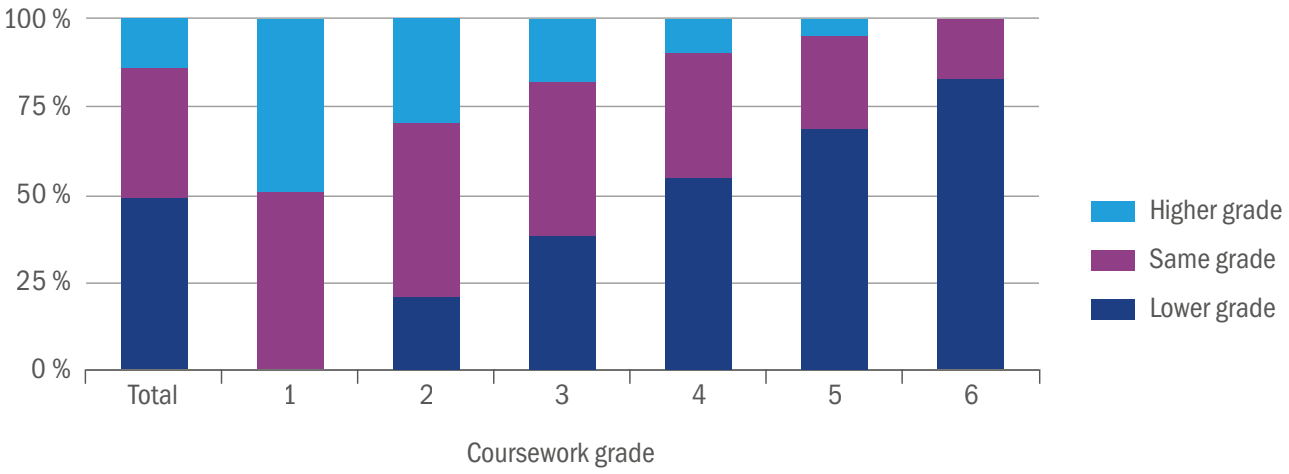
grade of 5 or 6 at the end of compulsory education. National numeracy tests are designed to measure skills required in all subjects and are not intended to measure attainment in mathematics specifically. The national English tests are based on the attainment targets for the subject. 83 percent of pupils achieving the highest level of proficiency in the national English test in Year 8 received a coursework grade of 5 or 6 at the end of compulsory education (SSB 2013).

Figure 4.9 Written exam results and coursework grades in selected core subjects. 2012/13. Average.



Source: Norwegian Directorate for Education and Training/The School Portal

Figure 4.10 Differences between coursework grade and exam result – selected subjects. 2009/10–/13. Percentage.



Source: The Norwegian Directorate for Education and Training

4.3 Learning outcomes in upper secondary education and training

Just as in compulsory education, grades in upper secondary education and training are stable over time. The exception is mathematics, where there are bigger fluctuations.

Differences in grades between boys and girls are slightly less noticeable in upper secondary than in lower secondary, but girls still receive better coursework grades than boys in all subjects. Differences between boys and girls are smaller in average written exam results than with coursework grades. Average written exam results are lower than coursework grades in all subjects. Average written exam results in many of the Maths subjects are more than one grade lower than the coursework grade. We do not have a sufficient, complete overview of oral exam results.

Half of all pupils achieve lower written exam results than coursework grades

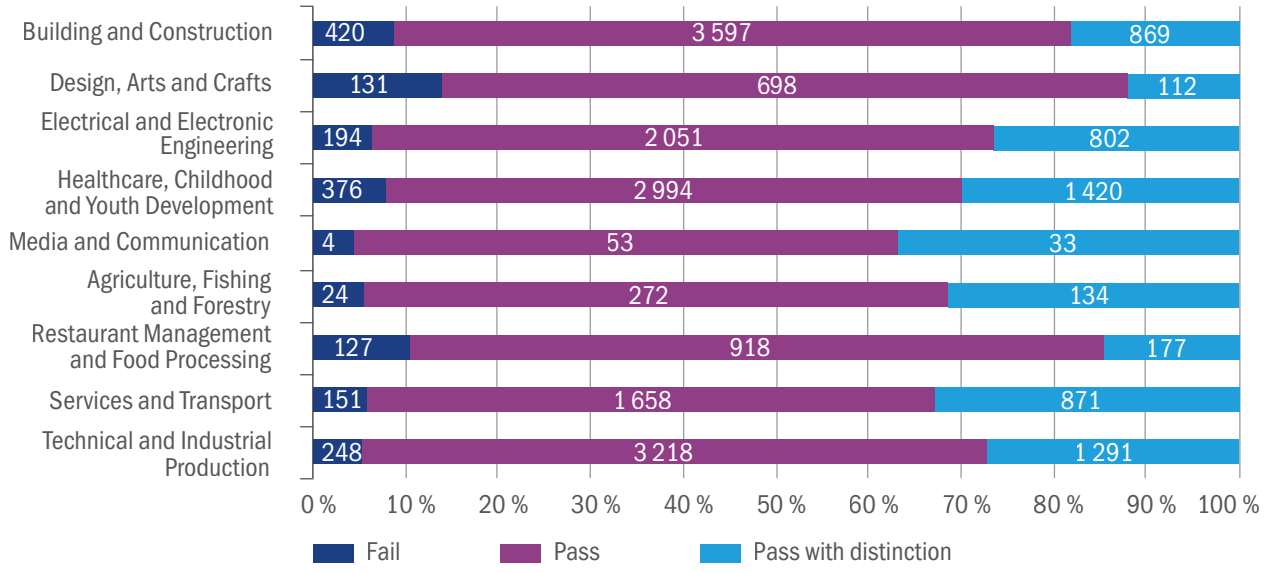
Analyses of the differences between coursework grades and written exam results in the period 2009/10 to 2012/13 show that half of all pupils sitting exams achieved poorer exam results than coursework grades. The analyses are based on the subjects Norwegian (primary and secondary language forms), English and mathematics (1P and 1T).

Pupils with a high coursework grade are more likely to receive an exam result below their coursework grade (Figure 4.10). Pupils with the lowest coursework grades are more likely to achieve better exam results. 75 percent of pupils with a coursework grade of 6 or 5 achieved a lower exam result.

Apprenticeship and journeyman's examinations

Vocational training is upper secondary training in schools and enterprises that leads to a trade certificate, a journeyman's certificate, or other vocational qualifications. Apprenticeship and journeyman's examinations are a test in which candidates are asked to: plan their work; choose methods; control their work; document their work; and to defend the choices made. Candidates are awarded either a very good pass, a pass, or a fail.

Figure 4.11 Results from apprenticeship and journeyman's examinations – by study programme. 2012/13. Preliminary figures. Numbers and percentage.



Source: Norwegian Directorate for Education and Training/The School Portal

The proportion of pupils receiving a lower grade in the exam than for coursework was smaller among boys, but this is due to lower average coursework grades. When comparing boys and girls with the same coursework grade, the boys were more likely to achieve a lower exam result.

Pupils attending private schools are slightly more likely to see exam results that are lower than their coursework grade compared with pupils studying at public schools, although the differences are minor.

The difference between written exam results and coursework grades has lessened in the last two years. A larger proportion of pupils receive the same grade for their coursework as for their exam. The percentage of pupils receiving a better exam grade than coursework grade has also increased, while fewer pupils now receive a lower grade in their exam. One contributing factor to this change could be teachers have modified their assessment criteria in response to the Knowledge Promotion reform, and the accompanying Assessment for Learning initiative (Aasen et al. 2012, Sandvik and Buland 2013). The Directorate for Education and Training has also been working systematically in recent years to raise the quality of exam moderation by holding annual courses for moderators, for example.

9 in 10 pupils pass their apprenticeship and journeyman's examinations

The pass rate among pupils who sit apprenticeship and journeyman's examinations is 93 percent. Pass rates vary between study programmes, and the largest pass rates, 14 percent, can be found on the design, arts and crafts programme. The fail rate on the hairdressing course, which accounts for a large share of examinations in this study programme, is 15 percent. In addition, 10 percent of pupils on the programme for restaurant management and food processing, 9 percent of pupils on the programme for building and construction, and 8 percent of pupils on the Programme for Healthcare, Childhood and Youth Development fail. The fail rate on other study programmes is between 4 percent and 6 percent.

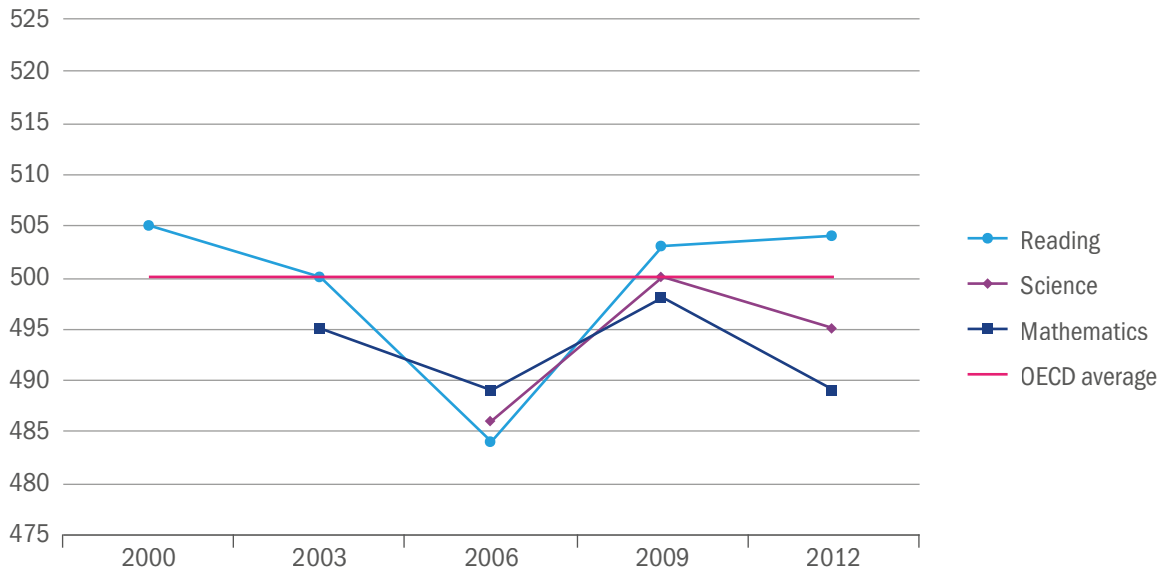
4.4 PISA 2012

Slight decline in Norwegian pupils' maths results

The PISA survey is carried out every three years and in 2012, mathematics was the key focus area. The key focus area is repeated every third time the survey is carried out. The last time that mathematics was the key focus area was in 2003. Norwegian pupils performed slightly poorer in mathematics in 2012 compared with 2009, but their score was not significantly different from the OECD average (Figure 4.12).

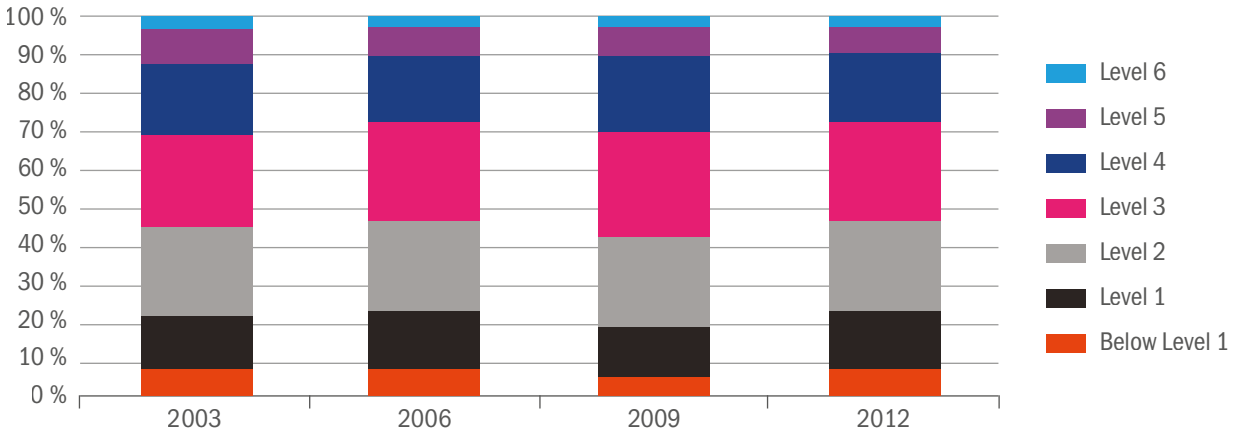
The decline in Norwegian mathematics results since the previous survey in 2009 is due to an increase in the share of low-performing pupils – Level 1 and below

Figure 4.12 PISA results. 2000–2012. Average.



Source: ILS

Figure 4.13 Performance levels in mathematics. 2003–2012. Percentage.



Source: OECD

(Figure 4.13). 7 percent of pupils scored lower than Level 1, which means they struggle with basic routine procedures. Very few of the exercises set in the PISA test are designed to measure attainment at this level. 15 percent of pupils are at Level 1, which means they are capable of performing basic routine procedures provided the task clearly explains what they are expected to do (Nortvedt 2013). The proportion of Norwegian pupils performing at the lowest attainment levels in mathematics increased between 2009 and 2012 and was on a par with 2006, which is when Norway delivered its poorest performance. Norwegian pupils achieve poor results when responding to questions that required formal maths skills, such as reformulating a written problem into a mathematical problem and then calculating the answer. They perform better when asked to assess and interpret problems.

In the early 2000s, Norwegian boys performed significantly better than girls in international maths tests (Grønmo et al. 2012, Kjærnsli et al. 2007). This difference is no longer significant at the lower secondary stage (Nortvedt 2013, Grønmo et al. 2012). Boys report to a greater degree than girls that they feel motivated for mathematics. They also rate their own abilities higher than do girls. Girls on the other hand are more likely than boys to report feeling nervous or stressed when working with mathematics (Kjærnsli and Olsen 2013).

Science results for 2012 are at a level similar to 2009. Norwegian pupils performed just under the OECD average in science.

PISA

(Programme for International Student Assessment) is an international survey conducted under the auspices of the OECD (Organisation for Economic Co-operation and Development) which looks at attainment levels among a representative selection of 15-year-olds at a time that marks the end of compulsory education in most countries. The idea behind the study is to examine how well the education system prepares pupils for further study, working life, and active and reflected participation in society. The tests can be used to assess changes in pupils' attainment levels over time. Their attainment levels are measured using a scale where the OECD average is set at 500.

PISA also includes questionnaires for pupils containing questions about their home background, teaching methods used in the classroom, and their perception of the learning environment (read more about this in Chapter 5). This allows the test results to be analysed in conjunction with known information about the pupil and the school. Just as in national tests, the pupils are grouped into categories according to attainment level. (Nordtvedt 2013).

Norwegian pupils score close to the OECD average in reading

Reading performance among Norwegian pupils has fluctuated more over time, but the main trend here, too, is that Norway performs at around, or just above, the average for all OECD countries.

Norwegian pupils perform well at texts targeted to young people, they display a good understanding of graphic representations, and they do well on tasks that require independent reflection. They perform relatively poorly when it comes to texts that require accurate reading, especially technical literature containing a great deal of information (Roe 2013).

The PISA survey also found Norway to be among the countries with the widest gap between boys and girls in reading, and that the discrepancy has increased since 2000. Girls outperform boys especially with regard to the longest and most complex texts. There is barely any difference between boys and girls in terms of non-continuous texts such as diagrams, tables, forms and lists (Roe 2013). National tests have identified the same trends as international surveys. Girls do better than boys in reading, but the differences are smaller in national tests than in the PISA survey. Boys are level with girls in mathematics in the PISA survey, and they perform slightly better than girls in the national numeracy tests.

Girls and boys perform at roughly the same level in the PISA science tests.

4.5 Few signs that social background is becoming less significant

The education policy targets prioritised by the Norwegian government apply to all pupils. This means that no group of pupils should perform systematically worse than other pupils (White Paper 20 (2012–2013). This reflects an implicit wish for schools to serve as a social leveller. As we have seen, however, we can attribute much of the variation in pupils' learning outcomes to their parents' level of education. Analysing national tests, average point scores from compulsory education, and exam results, the same pattern occur: different indicators of a pupil's socio-economic background explains the most of the variance (Bakken and Elstad 2012).

The PISA survey also shows how the pupils' domestic circumstances explain many of the variances in the results. Still, the PISA results also highlight that social background and individual school characteristics are less significant for pupil performance in Norway than in most other OECD countries. According to the PISA survey the impact of social background has also lessened since 2003 (Kjærnsli and Olsen 2013).

4.6 Motivation and learning environment have an impact on results

Norwegian pupils report low inner motivation in respect of mathematics in the PISA survey, but they also report that it is an important subject. Norwegian pupils also report that they lack perseverance when facing challenges in the subject. Pupils who report low levels of motivation in mathematics achieve poorer results on average than do pupils who say they are more motivated. This does not necessarily mean there is a causal link, as results and proficiency in mathematics can affect motivation.

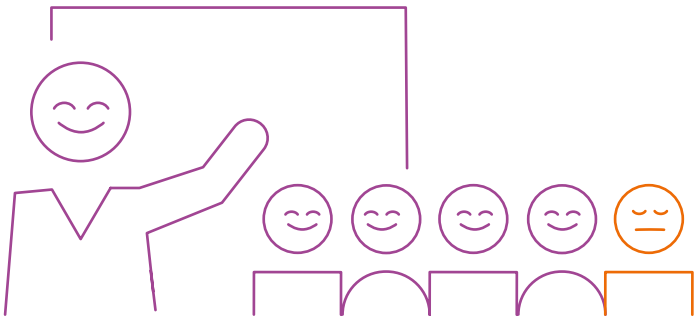
A good learning environment has a positive effect on pupils' learning outcomes. We see this in analyses of both national and international tests. Schools with a comparatively good learning environment, as identified in the Pupil Survey, have seen a greater increase in pupils' grades (Bakken and Seippel 2012). All groups of pupils, irrespective of gender, socio-economic background and immigration background, benefit from a good learning environment (Opheim, Gjerustad and Sjaastad 2013). The learning environment is the subject of Chapter 5.

5

The learning environment

All pupils are entitled to a good and inclusive learning environment. A good learning environment is important to the pupils' well-being, and has a significant impact on their learning outcomes.

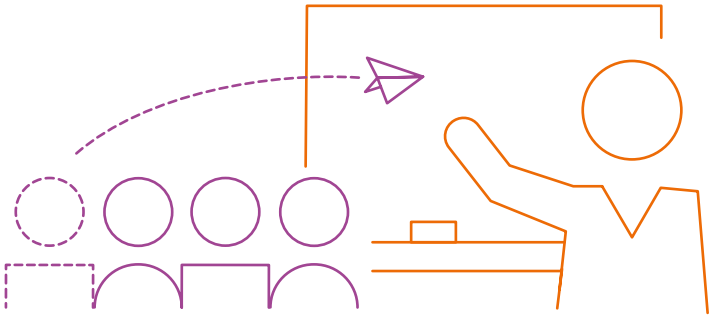
In this chapter we address issues such as the pupils' own thoughts on their relationships with teachers, on co-operation between school and home, and on academic challenges, achievement, motivation, the benefits of studying, well-being and bullying.

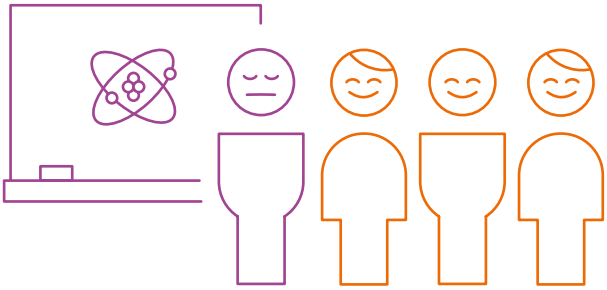


Relations between teachers and pupils have improved.

More than 80% of pupils say their teachers are supportive.

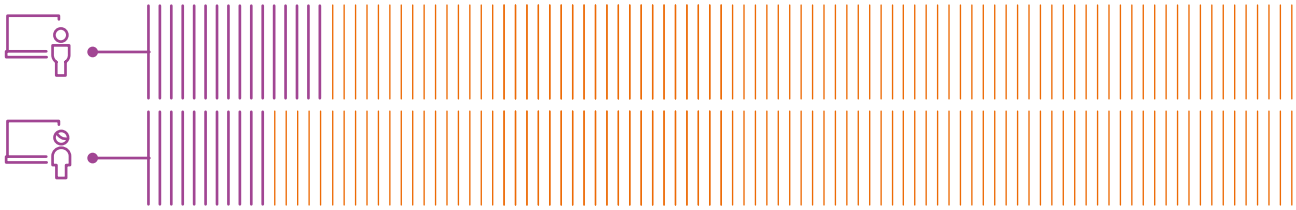
Head teachers report a decline in pupils being disruptive in class.

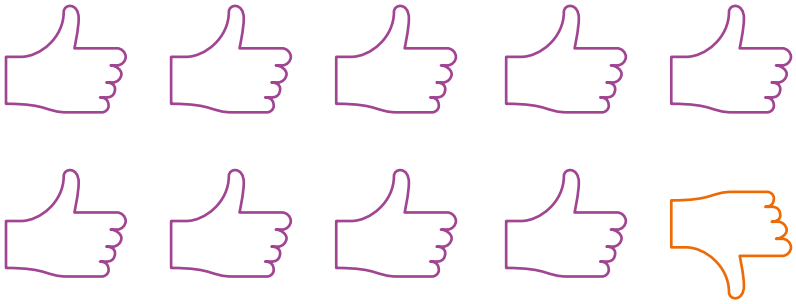




Around a quarter of pupils find the tuition too challenging.

16% of boys and 11% of girls find the tuition too easy.



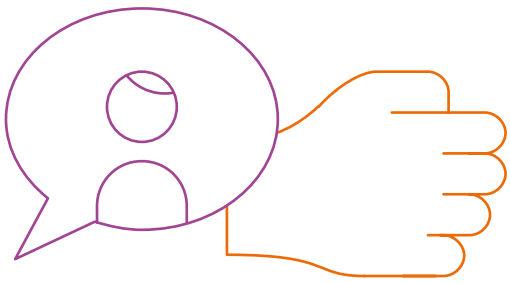


9 in 10 pupils enjoy school.

Pupils find that they receive less support from home as they grow older.

There are signs of a decline in bullying in the last few years.

Boys are more likely to suffer violence and threats, while girls tend to be excluded and receive comments about their looks.



5.1 The learning environment

By learning environment, we mean the combination of cultural, relational and physical factors in a school that have an impact on the pupils' learning, health and well-being. The learning environment involves the relationships between pupils, and between pupils and teachers. The way in which the teacher administers the teaching and manages the class, as well as the running and organisation of the school, shape the learning environment. Co-operation between school and home is also important in order to create a good learning environment.

The primary source of information about the learning environment in Norwegian schools is the Pupil Survey, carried out every year by the Norwegian Directorate for Education and Training. Furthermore, international surveys like PISA also picks up on aspects of the learning environment.

Relations between teachers and pupils

Good relationships between teachers and pupils are important for good class management. A supportive teacher provides both emotional and academic support. Giving academic support involves providing assistance during the learning process, while emotional support has to do with the pupils' social circumstances and with creating a warm and good personal relationship between pupil and teacher.

The Pupil Survey and the PISA survey

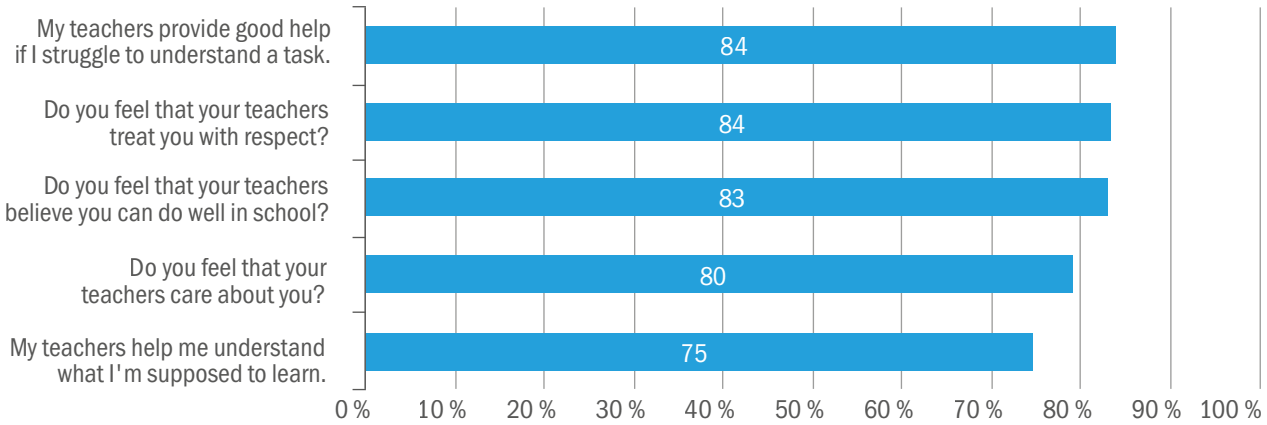
The Pupil Survey has recently been revised and a new questionnaire introduced in the autumn of 2013. Schools are obliged to conduct the survey every year in Year 7, Year 10 and at Level Vg3 of upper secondary. One change to the survey is that pupils are now also asked about harassment, not only about bullying. By first asking the pupils about harassment, it may affect the way in which they respond to questions about bullying.

The PISA survey was last conducted in Norway in 2012. The survey is conducted among a selection of Norwegian pupils, while the Pupil Survey covers all pupils from Year 5 to Level Vg3. A total of 400,000 pupils responded to the Pupil Survey in autumn 2013.

Read more about the PISA survey in Chapter 4.

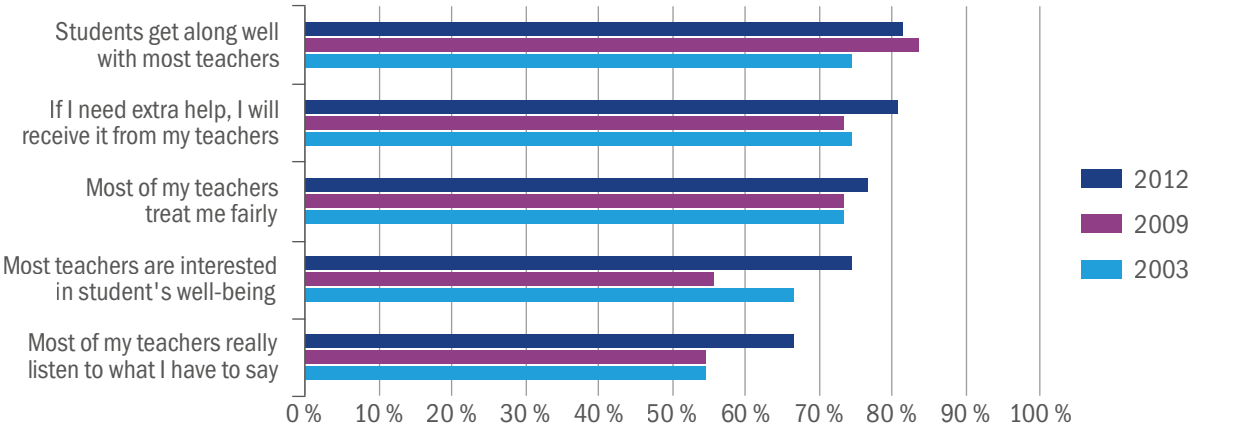
The Norwegian Pupil Survey found that four in five pupils between Year 5 and upper secondary Level Vg3 feel that most or all teachers provide both academic and emotional support. A large proportion (84 percent) find that most or all teachers provide appropriate help, simultaneously 75 percent find that the help they receive succeeds in making them understand the tasks they are working on.

Figure 5.1 Percentage of pupils experiencing support from most or all teachers. 2013.



Source: The Norwegian Directorate for Education and Training/The Pupil Survey

Figure 5.2 Relations between teachers and pupils. Percentage of pupils who agree with the statements. 2003, 2009 and 2012.



Source: PISA

Pupils who have a reassuring and supportive teacher develop fewer behavioural problems and show more enthusiasm in class. Irrespective of ability levels, research has found that pupils learn better when they get along with the teacher (Hamre and Piata 2001, Hughes et al. 2012). A review of 99 different studies has shown that the relationship between pupil and teacher has an impact on the pupils' development and academic progress throughout their schooling (Roorda et al. 2011).

Teachers' confidence in their pupils has an impact on effort and motivation

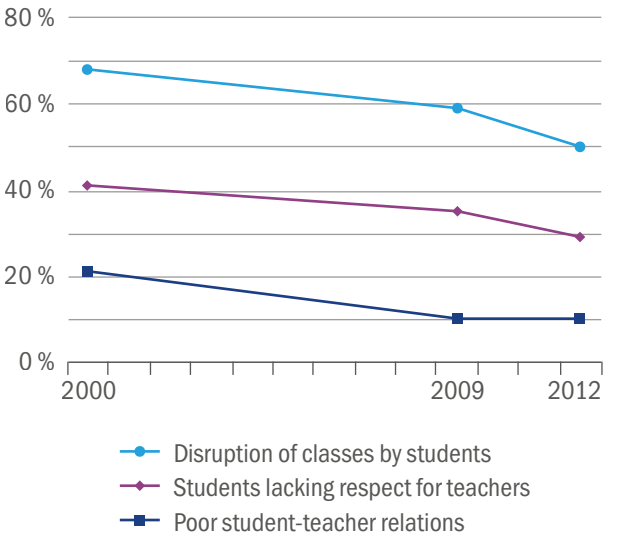
A supportive teacher has confidence in, and expectations of, his/her pupils (Marzano 2009). Analyses of the Pupil Survey show a link between the teacher feeling confident that the pupil can do well and the pupil's efforts and motivation. The fact that the teacher has positive expectations of the pupils is important to their motivation and has a positive effect on their learning outcomes.

Improved relationships between pupils and teachers

The PISA survey asks whether, and to what extent, the pupils feel they receive support from their teachers. The results demonstrate an improvement in most areas relating to the relationships between pupils and teachers in the period 2009 to 2012 (Figure 5.2).

Head teachers also say that relations between teachers and pupils have improved (Figure 5.3). The PISA survey reveals that problems with disruption, lack of respect and bullying – all factors that impede learning – have decreased in recent years.

Figure 5.3 Percentage who say that the phenomena impede pupils' learning "to a certain extent" or "greatly". 2000-2012. Percentage.



Source: PISA

5.2 Co-operation between school and home

Home and school are mutually reliant on each other and are both important for the learning and development of children and young people (Nordahl 2007). Support from parents has a significant effect on children's learning outcomes (Melhuish et al. 2001, Desforges and Abouchaar 2003).

Four in ten pupils receive support at home

Just over three in four pupils in Norway say that their household sometimes or always shows an interest in what they are doing at school (Figure 5.4). Slightly fewer receive encouragement with their schoolwork, while the fewest say they are given appropriate help with their homework.

Pupils receive slightly less support as they grow older and the schoolwork becomes more difficult. The percentage of pupils who feel they receive appropriate help with homework falls by half between Year 5 and Level Vg3 of upper secondary. There are smaller changes in the proportion of pupils who experience interest and encouragement from home. For these pupils the decrease is 21 percent and 18 percent respectively.

Analyses of the Pupil Survey show that the more support a pupil receives from home, the greater the pupil's motivation and efforts.

5.3 Academic challenges and mastery

Pupils experience academic challenges when they are set tasks that they have a realistic chance of mastering. At the same time, it is important that the tasks are not too easy and therefore boring.

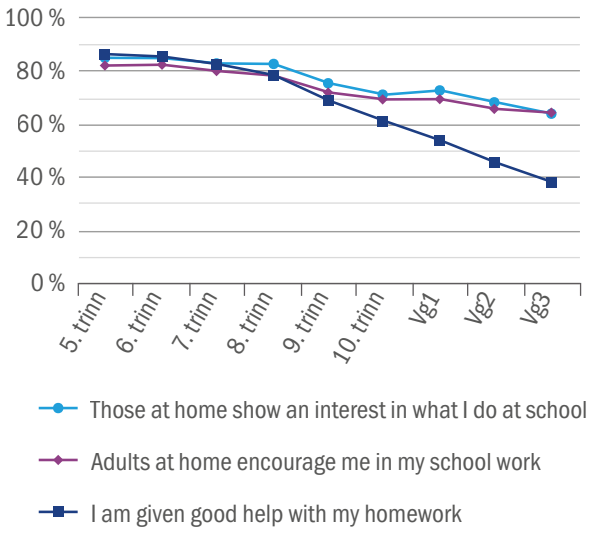
Half of all Norwegian Year 10 pupils experience a high degree of both challenges and mastery

Around half of all Norwegian Year 10 pupils find the teaching academically challenging while also experiencing accomplishment (Figure 5.5). Around 14 percent of Year 10 pupils experience mastery but little academic challenge. Most of these pupils are boys. Around a quarter of pupils find schoolwork challenging, while not experiencing mastery. Most of these pupils are girls.

It can be assumed that pupils who experience a high degree of both academic challenges and of accomplishment find the tuition challenging, but not so challenging that they do not master it. This could suggest that they feel they receive generally well-adapted tuition.

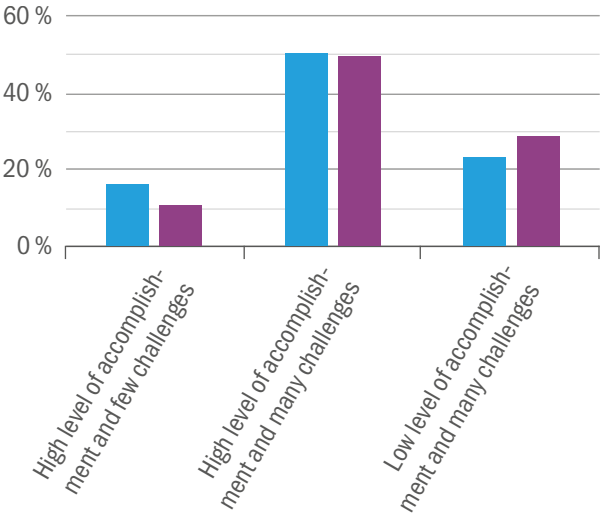
Pupils who experience many challenges without feeling a sense of accomplishment generally achieve lower grades. Yet both high and low performers are represented in all three groups in Figure 5.5.

Figure 5.4 Pupils who experience support from home. Proportion who say "always" or "sometimes". 2013/14. Percentage.



Source: The Norwegian Directorate for Education and Training/The Pupil Survey

Figure 5.5 Experience of academic challenges and accomplishment, Year 10. 2013/14. Percentage.



Source: The Norwegian Directorate for Education and Training/The Pupil Survey

5.4 Motivation and benefits of school work

Motivation and a sense of accomplishment among pupils can improve concentration when studying, and lead to less social and emotional problems (Manger 2005, Brophy 2013).

Three in five pupils often or always look forward to going to school

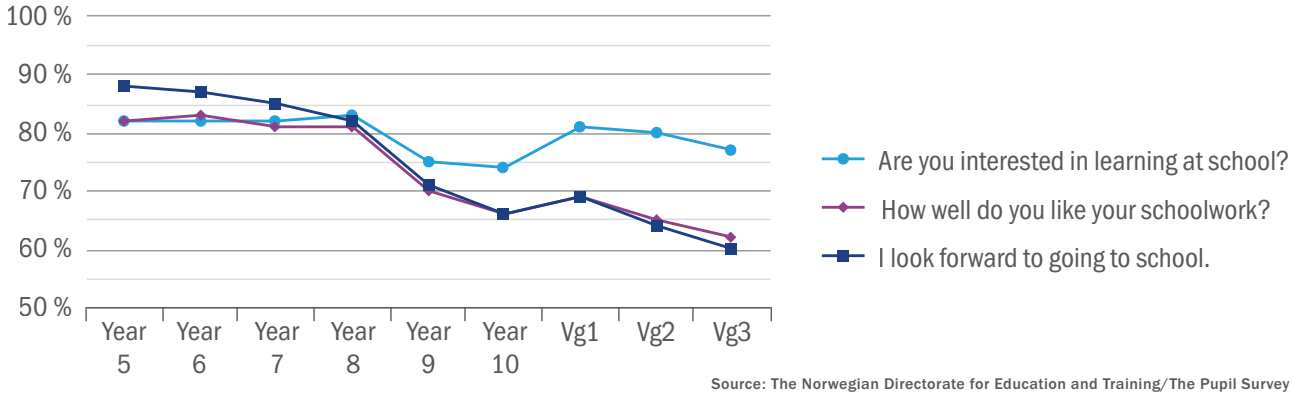
We see no significant changes in pupil motivation between 2007 and 2013, almost eight in ten pupils are interested in learning. Just over half (56 percent) enjoy school work, while a few more (62 percent) look forward to going to school. The percentage of pupils who are interested in learning, who enjoy their school work, and who look forward to going to school is smaller in Years 9 and 10 than in the lower year groups (Figure 5.6). Interest in learning is at its lowest in lower secondary, while pupils become more motivated for study when they reach Level Vg1 of upper secondary. Pupils at Level Vg3 are the group least likely to look forward to going to school and to enjoy going to school, the respective figures being 20 and 28 percentage points lower than in Year 5.

Pupils feel that what they learn in school is important, but not necessarily useful

More than 70 percent of pupils feel that what they learn in school is important. Fewer, around half, believe that what they learn is useful – either later in life or for work (Figure 5.7).

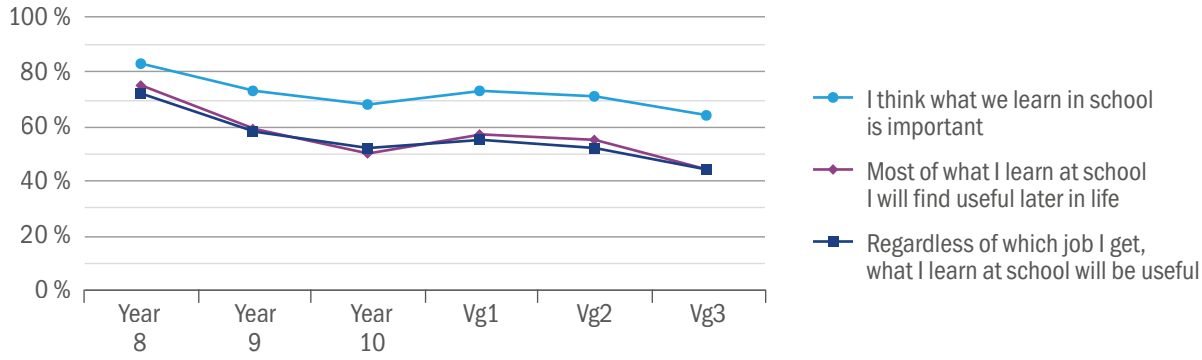
The PISA survey also looks at the extent to which pupils find school useful and relevant. Eight in ten respond that they have learnt things in school that could be useful for

Figure 5.6 Pupils' motivation. Proportion of pupils giving positive responses to the statements. 2013/14. Percentage.



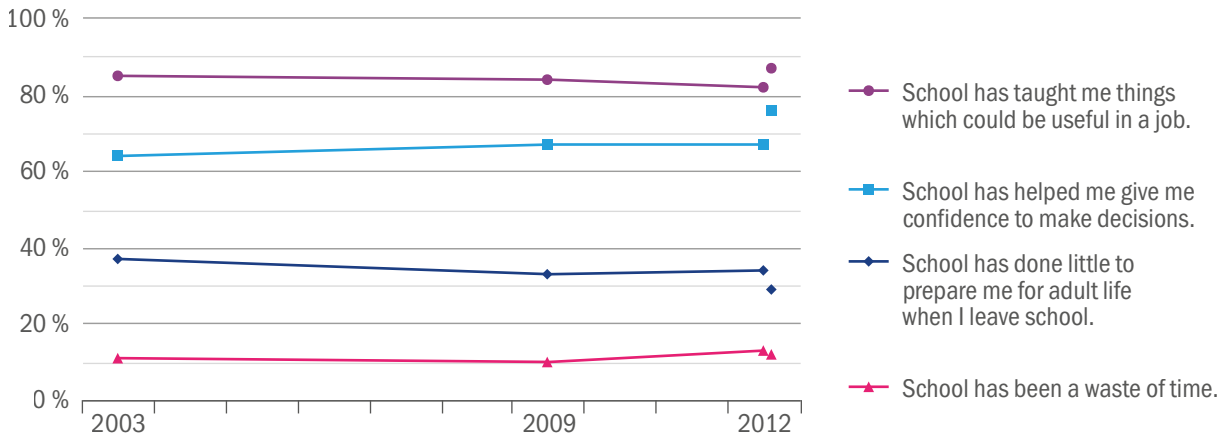
Source: The Norwegian Directorate for Education and Training/The Pupil Survey

Figure 5.7 Degree to which pupils find school relevant. Percentage of pupils who "slightly" or "completely" agree with the statements. 2013/14.



Source: The Norwegian Directorate for Education and Training/The Pupil Survey

Figure 5.8 What pupils gain from school. Percentage of pupils who agree with the statements. 2003–2012. The individual items show the OECD average in 2012.



Source: PISA

work. Only one in ten pupils find school to be a waste of time. In total Norway scores slightly under the OCED average on statements regarding the usefulness of school. Norway also scores lower than the other Nordic countries (Kjærnsli og Jensen 2013).

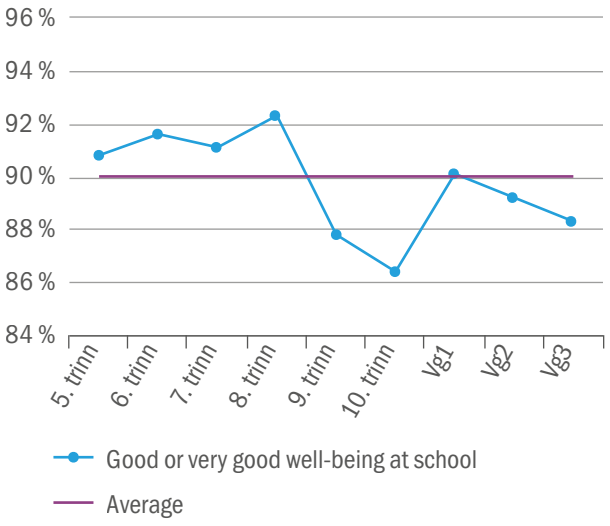
5.5 Well-being and the psychosocial environment

A good psychosocial environment where pupils feel happy and safe is an important prerequisite for learning. Being exposed to teasing, threats or violence by fellow pupils impedes learning (Nakamoto and Schwartz 2010) and has a lasting negative effect on pupils' health and well-being (Coggan et al. 2003, Arseneault et al. 2010). All pupils are entitled to a safe school environment that encourages learning.

Nine in ten pupils enjoy school much or very much

Pupil satisfaction in Norway has remained fairly stable over time. Nine in ten of all pupils from Year 5 to Level Vg3 of upper secondary enjoy school much or very much (Figure 5.9). Just under 8 percent of pupils enjoy school a little, while fewer than 3 percent do not enjoy school much or at all. The percentage of pupils who enjoy school is much smaller in Years 9 and 10.

Figure 5.9 Percentage of pupils whose well-being at school is good or very good. By year group. 2013/14.



Source: The Norwegian Directorate for Education and Training/The Pupil Survey

Clear links between well-being, bullying and harassment

While only a minority of pupils do not enjoy school, the Pupil Survey reveals that those who enjoy school the least are often exposed to harassment. In the group of pupils who do not enjoy school, seven in ten are exposed to harassment. In comparison, one in ten of those who enjoy school very much experience harassment.

Taunts and teasing are most widespread

The Pupil Survey carried out in autumn 2013 shows that almost 11 percent of pupils have experienced being taunted or teased. Taunts and teasing are the most common forms of harassment in all year groups except in upper secondary, where exclusion is most common (Figure 5.10). 9 percent of pupils between Year 5 and Level Vg3 say they have experienced being excluded. 8 percent have had lies spread about them, and just under 8 percent have received negative comments about their looks.

The more direct forms of harassment are less widespread. Around 3.5 percent of pupils say they have been threatened, and almost as many that they have been hit, pushed, kicked or held down to the point where they became scared.

Signs of less bullying

In 2012 almost 7 percent of pupils responded that they were bullied 2–3 times a month or more. In 2013 the figure was just over 4 percent. It is difficult to say whether this expresses an actual decline in bullying, or whether it is down to changes in methodology in the Pupil Survey. There was also a small decrease in the percentage of pupils who were bullied between 2011 and 2012 – before adjustments were made to the Pupil Survey.

In the PISA survey, Norwegian head teachers report a reduction in the number of pupils who bully or threaten peers from 2003 to 2012.

Less harassment and bullying the older the pupils get

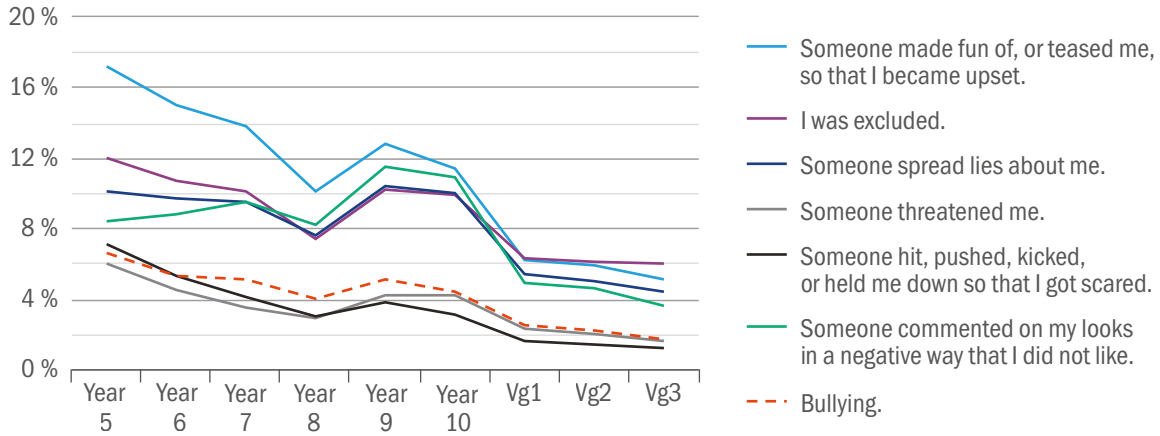
The percentage of pupils exposed to harassment and bullying declines as the pupils get older (Figure 5.10). The exception is the increase seen from Year 8 to Years 9 and 10. The percentage of pupils experiencing bullying and harassment is highest among the youngest pupils and lowest at Level Vg3.

Girls are more likely to experience exclusion, while boys are more exposed to violence and threats

More boys than girls in all year groups are exposed to violence and threats. More girls than boys experience indirect harassment such as teasing, exclusion, comments about their looks and lies. This is true from Year 7 up to and including Level Vg3 of upper secondary. Girls in all year groups are more likely than boys to be excluded. The difference between the percentage of boys and the percentage of girls who are exposed to indirect harassment is noticeably greater in lower secondary. For example, just over 7 percent of Year 9 boys experience exclusion, while almost 13 percent of the girls experience the same.

There is a sharp decline in instances of bullying and harassment among girls between Levels Vg2 and Vg3. Among boys, there is little difference between these two year groups.

Figure 5.10 Harassment and bullying – by year group. 2013/14. Percentage.



Source: The Norwegian Directorate for Education and Training/The Pupil Survey

Girls are more likely than boys to experience bullying at the lower secondary stage

The difference in the percentages of boys and girls who report being bullied was smaller in 2013 than in 2012. Boys are still more likely than girls to report that they experience bullying, but the difference is smaller than in the past. While the percentage of boys who experience bullying has increased for every year group in previous surveys, there are now more girls than boys reporting that they are being bullied at the lower secondary stage (Figure 5.11). The difference between the sexes is greatest in Year 5, when almost 2 percentage points more boys than girls experience bullying. This is reversed at the lower secondary stage. In Year 8 there are slightly more girls than boys saying that they are exposed to bullying. In Year 9 almost 1 percentage point more girls than boys are bullied. In upper secondary boys are again more likely than girls to experience bullying.

Schools are least likely to be aware of verbal harassment

Schools are primarily aware of concrete forms of harassment such as teasing, violence and threats. A quarter of all pupils who have suffered violence in school say that the school has done "something" or "a lot" to deal with it (Figure 5.12).

Schools are least likely to be aware of harassment such as negative comments on pupils' looks, having lies spread about them and exclusion (Figure 5.12). Schools never become aware of almost half of all cases where a pupil has suffered negative comments about their looks. According to pupils, the school took action to deal with the harassment in just over 15 percent of cases.

Bullying by classmates is most common

Pupils are guilty of most cases of bullying, but many also report that they are bullied by teachers or by other adults at school. There was a slight decline in the percentage of pupils saying they were bullied by teachers between 2007 and 2012.

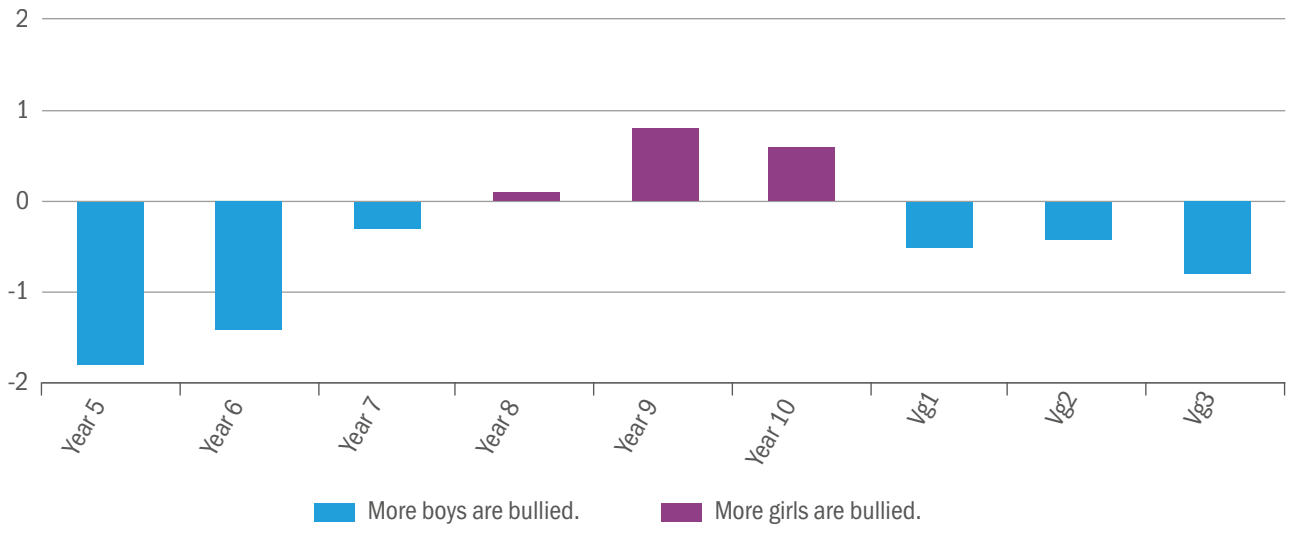
Bullying during workplace training

The Apprentice Survey poses the same question about bullying as the Pupil Survey. 3.5 percent of apprentices said they experienced bullying in 2013. This is a larger proportion than among Level Vg3 pupils on the general studies programme. More girls than boys say they are bullied during workplace training, while the opposite is the case for Level Vg3.

Differences across study programmes

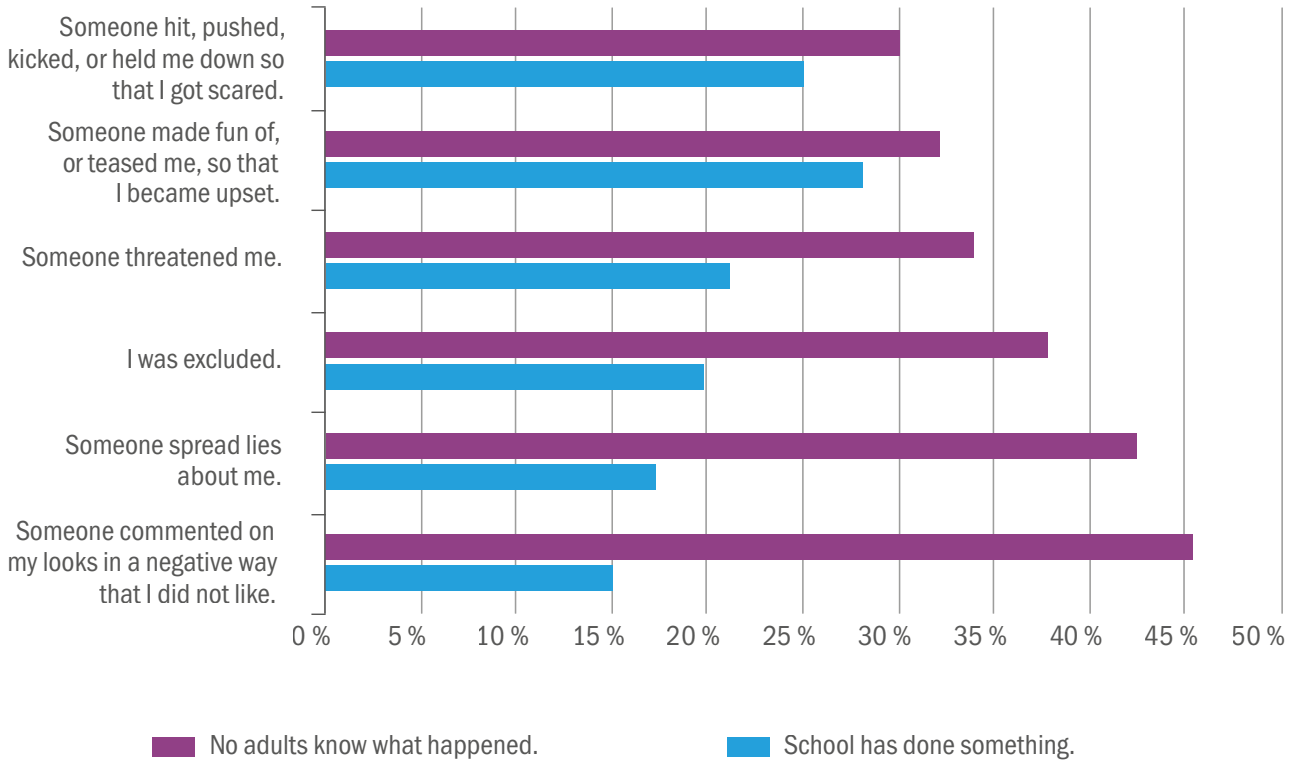
There are differences in the extent of bullying across different study programmes. More than three times as many pupils experience bullying on the study programme with the highest incidence of bullying than on the study programme with the lowest incidence (Figure 5.13).

Figure 5.11 Differences in bullying between girls and boys. 2013/14. Percentage points.



Source: The Norwegian Directorate for Education and Training/The Pupil Survey

Figure 5.12 Incidents that the school is aware of, and incidents that the school does something about. 2013/14. Percentage.



Source: The Norwegian Directorate for Education and Training/The Pupil Survey

5.6 Educational and vocational guidance

All pupils are entitled to educational and vocational guidance. Pupils who are satisfied with their choice of upper secondary education perform better (Hastings et al. 2012) and are less likely to drop out.

More than half of pupils are satisfied with the advice they have received

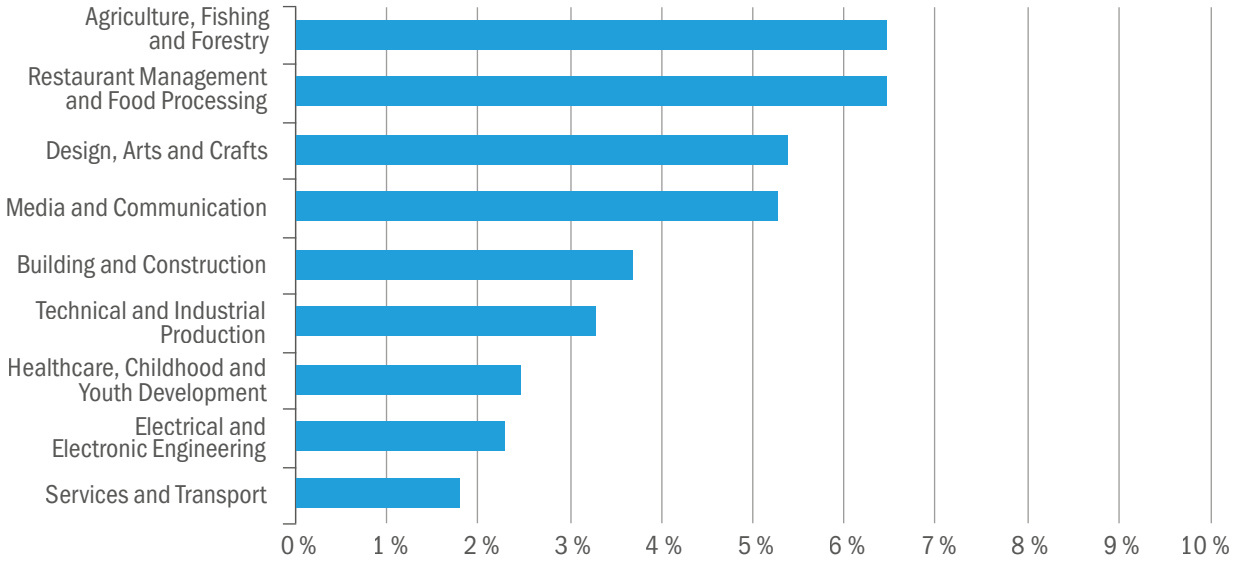
More than half of all pupils are satisfied with the guidance received at both the lower secondary and upper secondary stages. Six in ten pupils in lower secondary say they are satisfied with the guidance they have received for career choices. Around 16 percent of Vg1 pupils are dissatisfied with the guidance received in lower secondary.

The Apprentice Survey

The Apprentice Survey allows apprentices to share their views about their training and about other issues that are central to their learning outcomes and learning environment.

County councils may elect to conduct the Apprentice Survey, but participation is voluntary. The figures presented here are based on around 7,000 responses from spring 2013. The timing of the survey has changed from autumn to spring. Due to the low number of respondents both at a national level and in individual municipalities, the Apprentice Survey is unable to provide a representative picture of the apprentices' learning outcomes and learning environment.

Figure 5.13 Apprentices who are bullied – by study programme. 2013. Percentage.



Source: The Norwegian Directorate for Education and Training/The Apprentice Survey

5.7 Challenges to the learning environment are particularly great at the lower secondary stage

Most pupils enjoy school and feel they get support from their teachers. Relationships between pupils and teachers appear to have improved over time. Most pupils receive appropriate help and get on well with their teachers. However, around 13 per-cent of pupils in Year 10 feel that much of the instruction is too easy, while almost twice as many sometimes find it too diffi-cult.

It is important that pupils receive support both at school and at home. Only four in ten pupils always experience support from home, and the percentage of pupils enjoying good parental support falls as they get older. The answers that the pupils give about how they perceive the learning environment suggest that pupils of lower secondary age face particularly tough challenges. During the course of the lower secondary stage, fewer and fewer pupils enjoy school, feel motivated, receive support from home and find the tuition useful and relevant. The percentage of pupils being bullied and harassed also increases during Years 9 and 10.

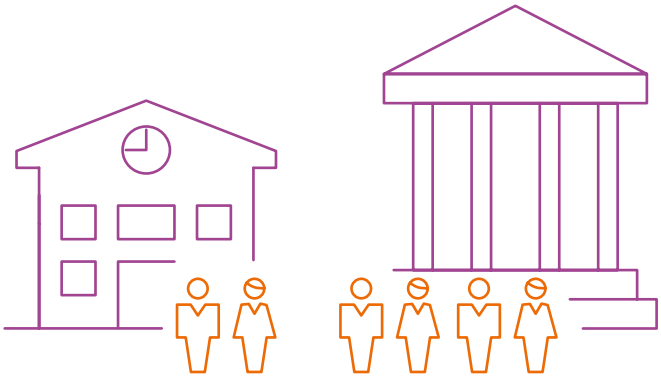
6

Completion rates in upper secondary education and training

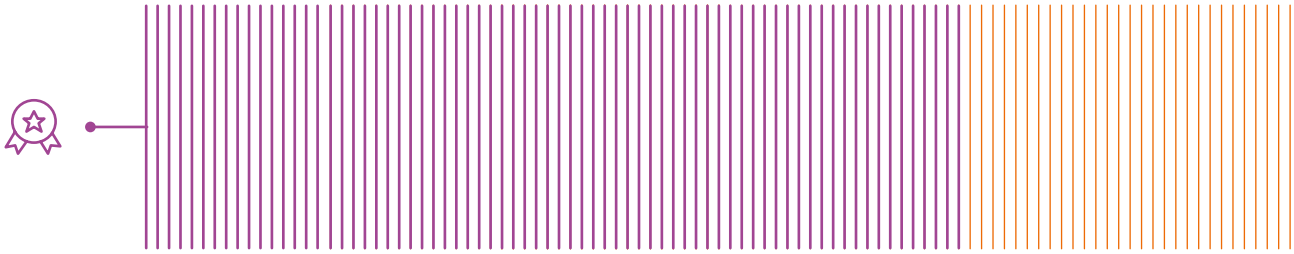
One of the main objectives of primary and secondary education in Norway is that all pupils who are able to do so should complete upper secondary education and obtain qualifications that will prepare them for further study or work.

This chapter primarily looks at the degree to which pupils and apprentices complete upper secondary education. It describes how many of them complete and pass within a given period of time, how many proceed from one level to the next, and how many do not make such progression. We also look at how newly qualified skilled workers fare in the labour market and at what we know about those who drop out of upper secondary education and training.

Education levels amongst the Norwegian public are increasing. There are now more people with university-level qualifications than with lower secondary as their highest qualification.

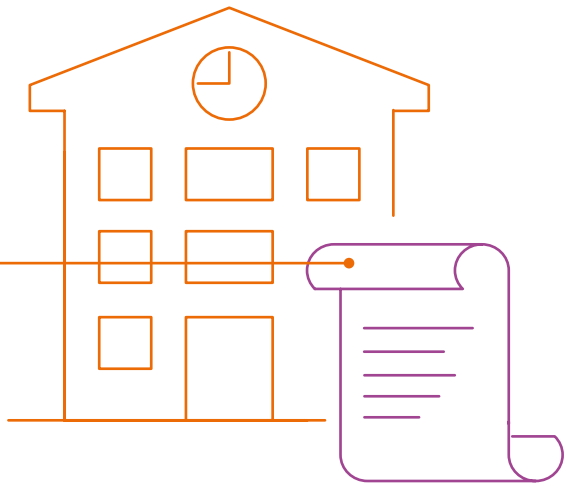


72 % complete and pass within 5–6 years of starting Level Vg1. Pupils who enrol on general study programmes are more likely to pass than those on vocational study programmes.

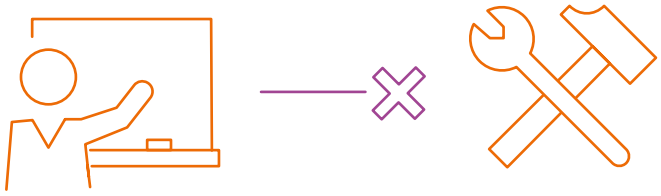


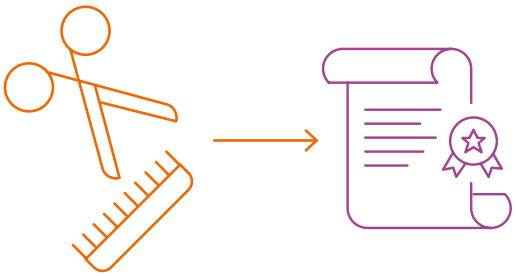
Grades from lower secondary have a significant impact on whether pupils complete and pass and how long they stay in education or training.

Very few of the weakest pupils complete and pass.



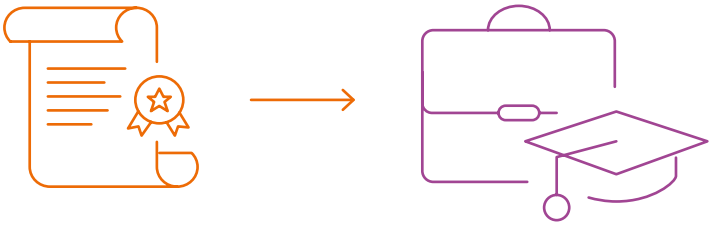
Almost everyone enrols in upper secondary education or training, but many take an indirect route. Many pupils on vocational study programmes drop out when transferring to apprenticeships.

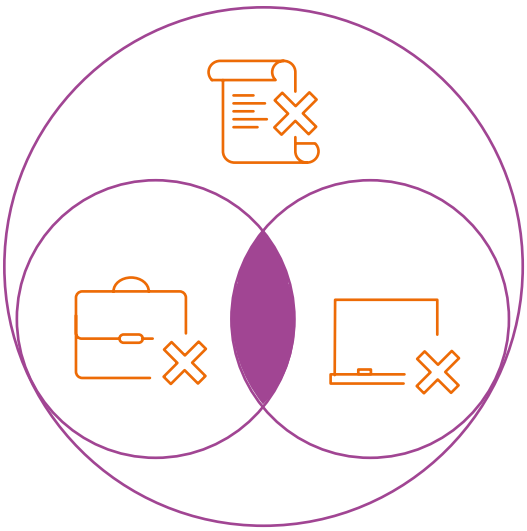




80 % of those who progress to an apprenticeship obtain a trade or journeyman's certificate.

Almost everyone who obtains a trade or journeyman's certificate goes straight into work or continues in education or training.





7 % of young people aged 16–25 have not passed upper secondary education or training and are not in education, employment or training.

6.1 Most pupils successfully complete upper secondary education or training

Rising levels of education

The educational attainment level has never been higher in the Norwegian population. In 1980 a total of 44 percent of those aged 16 to 66 had lower secondary as their highest qualification. In 2012 the figure was 26 percent. The proportion of people with upper secondary as their highest qualification has not changed noticeably from 1980 to 2012. The percentage of people with higher education qualifications rose from 12 percent to 31 percent in the same period, thus people with higher education qualifications outnumber those with only lower secondary qualification.

These developments prove that Norway is no longer a low qualified society. Job seekers are increasingly required to have further qualifications than lower secondary. Research has found that people without upper secondary qualifications find it more difficult to get work, and that those who do find employment earn less and are the first to go when jobs are being cut. Young people without upper secondary qualifications are also overrepresented among recipients of social security benefits and other forms of financial support (Falch and Nyhus 2011). Ensuring that young people pass their upper secondary education or training thus means preparing them for the labour market's demands for formal qualifications, and improve their chances of actively engaging in working life.

Completion

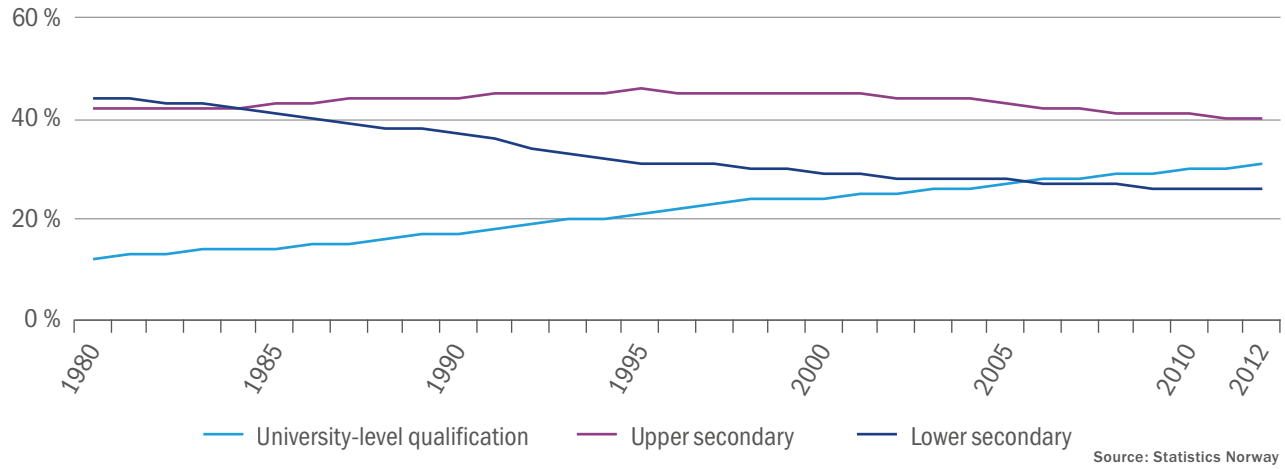
Completing upper secondary education and training means that the pupil or apprentice graduates with a diploma, trade certificate or journeyman's certificate. We measure completion rates over a given period of time. Completion rates are normally measured 5 and 10 years after enrolment at Level Vg1 or after the standard course duration + 2 years. The standard course duration + 2 years normally means five years for general study programmes and six years for vocational study programmes. This is because most vocational pathways last four years. The standard course duration + 2 years is the duration that best represents the pupils' entitlement to upper secondary education and training (cf. the Education Act Section 3-1). We will therefore be using primarily this time scale when measuring completion rates in this chapter.

Pupils with only basic qualifications are classed as not completed and passed in the completion statistics. The same applies to those who had completed their planned pathway.

72 percent of pupils complete upper secondary education or training within five–six years

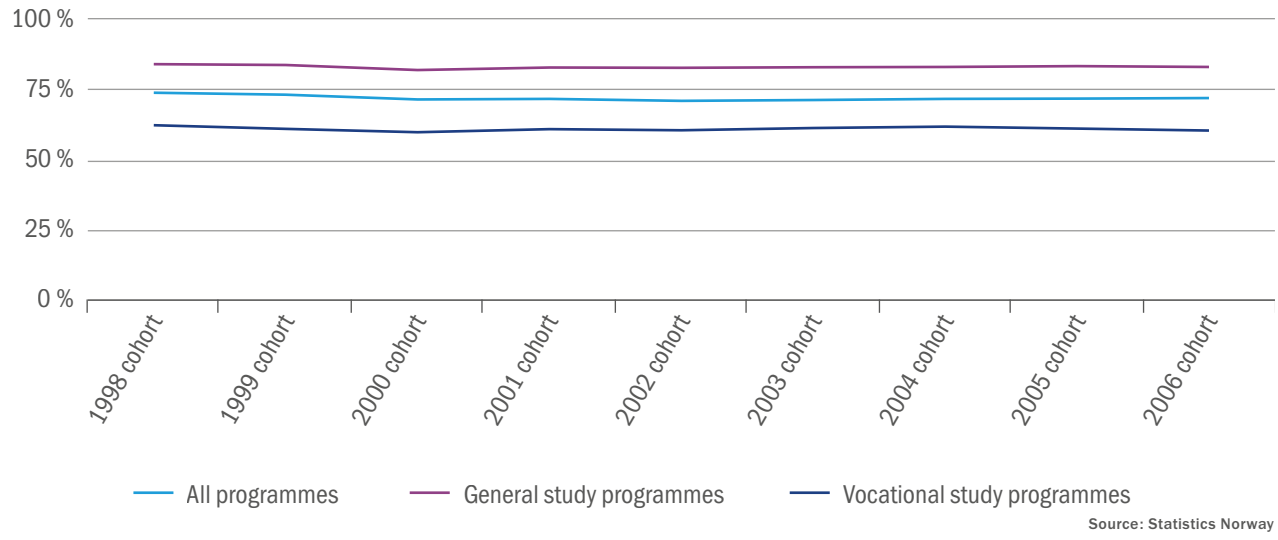
Completion rates in upper secondary education and training provide us with a picture of the effectiveness of the education system. We measure completion

Figure 6.1 Changes in the highest qualification held (16 to 66 years of age). Percentage.



Source: Statistics Norway

Figure 6.2 Successfully completed within 5–6 years – by study programme. 1998-2006 cohorts. Percentage.



Source: Statistics Norway

rates two years after the standard course duration. This means that pupils who enrol on general study programmes are measured after five years and pupils pursuing vocational pathways after six years.

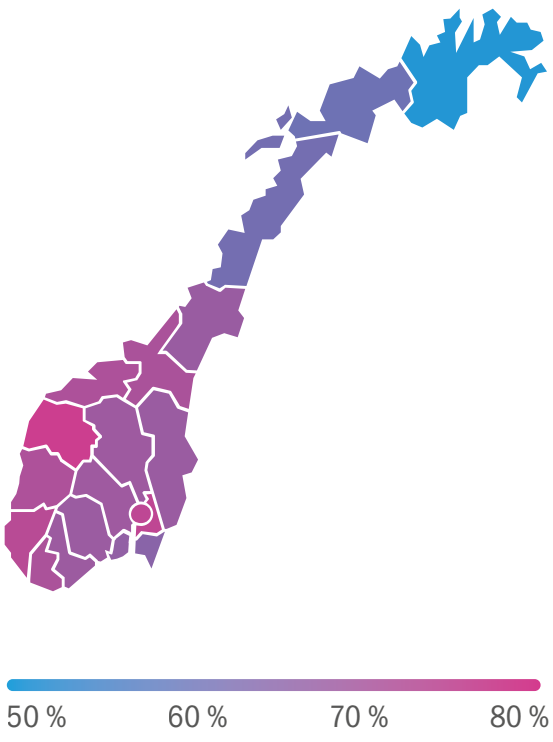
72 percent of pupils who enrolled in upper secondary education and training in 2006 (the 2006 cohort) successfully completed within five to six years. This percentage has remained stable at between 71 percent and 74 percent since the 1994 cohort. For pupils enrolled on general study programmes, the completion rate is between 81 percent and 84 percent. The corresponding figures for pupils on vocational programs are significantly higher, fluctuating between 57 and 62 percent in the same period.

Although the share of pupils successfully completing upper secondary school is relatively stable, Figure 6.1 shows that education levels among the general population are rising. This is primarily due to the younger generation increasingly enrolling in education compared with the older generation, who are eliminated from the statistics when they turn 67 years of age. Many people also begin to study in adult age. For example, there are fewer 30-year-olds than there are 25-year-olds with lower secondary as their highest qualification.

Big differences between counties

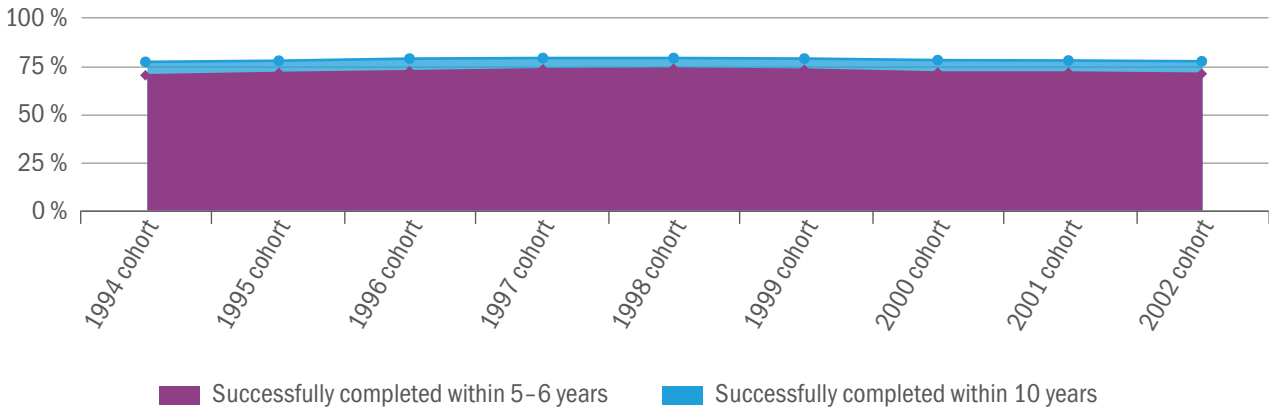
The proportion of pupils who complete and pass within a period of five–six years varies significantly across counties (Figure 6.3). The lowest completion rate is found in Finnmark county, where 53 percent of pupils complete and pass, while Sogn og Fjordane has the highest completion rate at 79 percent.

Figure 6.3 Successfully completed within 5–6 years – by county. 2006 cohort. Percentage.



Source: Statistics Norway

Figure 6.4 Pupils and apprentices who successfully complete within 5–6 years and 10 years after enrolling in upper secondary education or training – 1994–2002 cohorts. Percentage.



Source: Statistics Norway

An additional 6 percent of pupils successfully complete after ten years

If we measure completion rates after ten years instead of five–six years after the pupil started upper secondary education or training, the completion rate increases by 6 percentage points. This pattern has remained relatively stable over time.

Vocational study programmes can entail more time to complete and pass

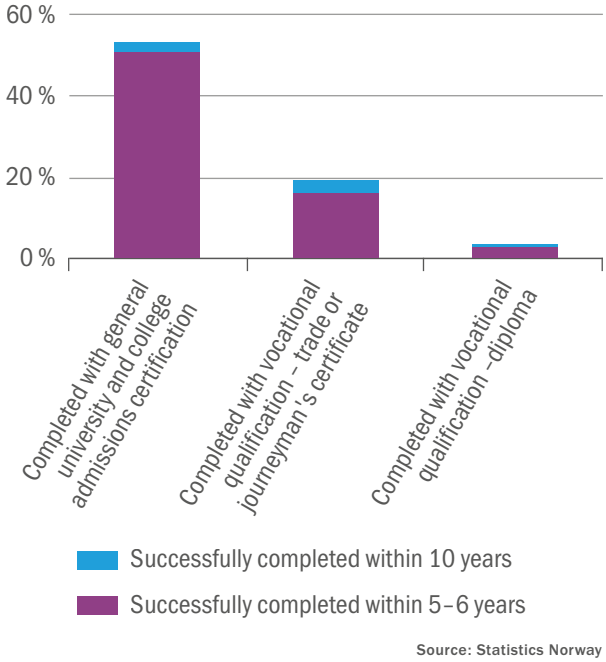
Within a period of five–six years, 51 percent of the 2002 cohort had obtained general university and college admissions certification, 17 percent had obtained trade or journeyman's certificates, and 4 percent had obtained a vocational diploma (Figure 6.5).

More than half of all pupils who spend between five–six and ten years completing and passing their courses obtain trade or journeyman's certificates. The share of pupils obtaining their vocational certificates thus increases to 20 percent.

6.2 Most pupils who drop out complete parts of their education or training

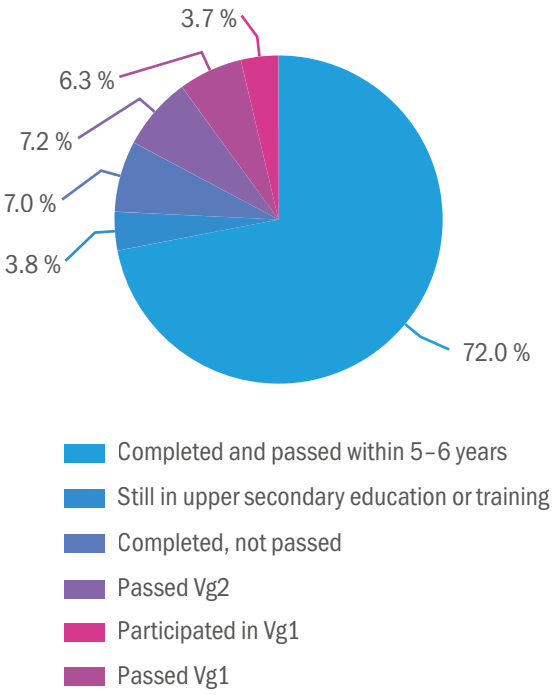
When measured after five-six years, one in four pupils in the 2006-cohort were neither involved in, nor successfully done with, upper secondary education and training. Most of these pupils have completed parts of their education or training, and achieved some basic qualification lower than a complete vocational qualification or general university and college admissions certification.

Figure 6.5 Successfully completed upper secondary education or training – by qualifications and measuring stage. 2002 cohort. Percentage.



Source: Statistics Norway

Figure 6.6 Qualifications obtained by those who do not successfully complete and pass within 5–6 years (2006 cohort). Percentage.



Source: Statistics Norway

For some of the pupils these basic qualifications are planned, due to assumed difficulties obtaining a complete qualification. In the 2013/14 academic year 2.8 percent of pupils were on a planned pathway to obtain a basic qualification (see Chapter 7).

Most of those who have not successfully completed have acquired a basic qualification that they can later build on to obtain a complete upper secondary qualification (Figure 6.6). The 17,500 pupils in the 2006 cohort who had not successfully completed within five–six years fall into the following categories:

- 2,400 were still in upper secondary education or training.
- 4,400 had completed, but not passed. This means that they are lacking one or more subjects in order to obtain a diploma or a trade or journeyman's certificate.
- 4,500 had passed Level Vg2.
- 4,000 had passed Level Vg1.
- 2,300 had participated at Level Vg1 without passing.

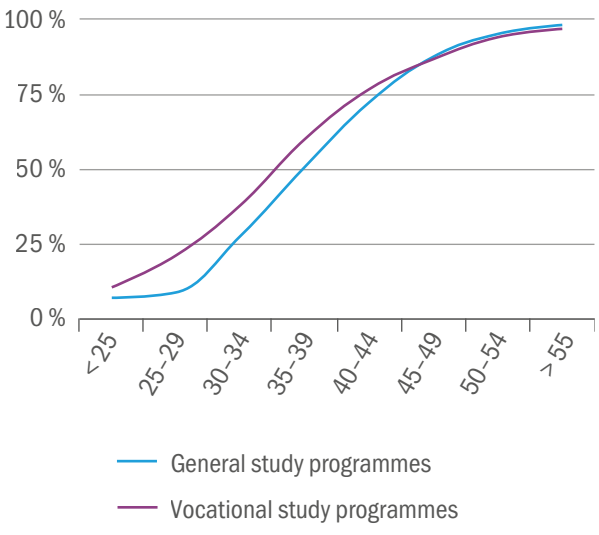
Some of the 2.8 percent of pupils on a planned basic qualification pathway fall into the category "unsuccessfully completed". They are pupils and training candidates who had completed all levels of upper secondary but not passed. Pupils who had pursued Level Vg1 for five years – by being in workplace training, for example – are placed in the "participated in Vg1" category.

The main aim is for pupils to successfully complete their upper secondary education or training. However, since the employment rates seem to vary according to how far pupils advance in their studies (Markussen 2014), an additional aim is that those who fail to complete still acquire the highest possible upper secondary qualifications.

Pupils who have completed Level Vg1 are more likely to be employed than those with only lower secondary, and pupils with Vg2 are more likely to be in work than those with Vg1. Those who have successfully completed their entire upper secondary education or training are even more likely to be in work.

The link between basic qualifications and employment is not clear cut. One interpretation is that basic qualifications help improve young people's job opportunities. An alternative explanation is that those with the best job opportunities are better able to obtain basic qualifications.

Figure 6.7 Successfully completed within 5–6 years – by average point score from compulsory education. 2006 cohort. Percentage.



Source: Statistics Norway

6.3 Lower secondary grades strongly predict upper secondary completion rates

There are major differences in completion rates between pupils with low and pupils with high average point scores from compulsory education. Less than 10 percent of pupils with an average point score below 25 (out of 60) complete successfully, while the share is almost 100 percent among those with a score higher than 55.

Prior achievement predicts completion rates regardless of study programme

We have seen that around 60 percent of pupils who enrol on vocational study programmes successfully complete within a period of five–six years and that the corresponding figure for pupils on general study programmes is 83 percent (Figure 8.2). Pupils with the same average point score from compulsory education are almost equally likely to complete their study programme, regardless of whether they are pursuing a general or vocational programme.

The completion rates being so much higher on general study programmes than on vocational programmes, is therefore mainly explained by the pupils average point score from compulsory education.

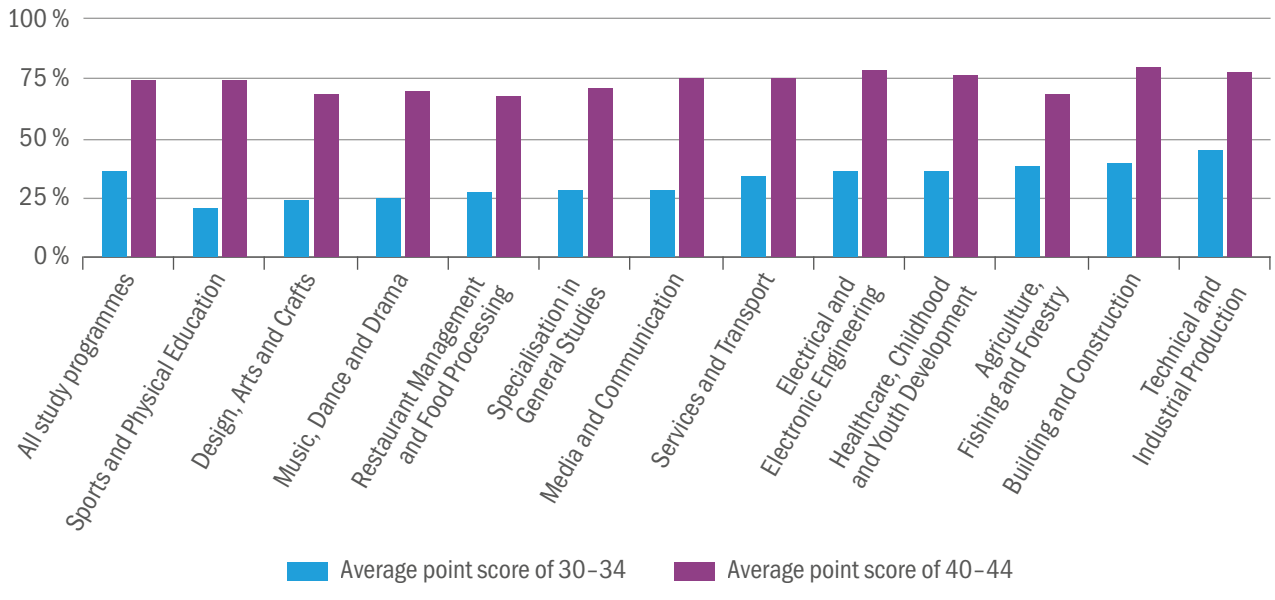
However, pupils with a low average point score are slightly more likely to complete a vocational study programme than a general study programme (Figure 6.7).

Pupils with poor lower secondary results perform best on vocational study programmes with good apprenticeship traditions

As we have already seen, there are some differences in completion rates between general and vocational study programmes among pupils with the same average point score from compulsory education (Figure 6.7). When looking at individual study programmes the differences are even greater (Figure 6.8).

The completion rate of pupils with an average point score of 30–34 ranges from 22 percent on the Sports and Physical Education programme to 46 percent on the Technical and Industrial Production programme. Pupils with poor results from lower secondary perform best on vocational study programmes, especially programmes with well established apprenticeship schemes, e.g. the Building and Construction programme and the Technical and Industrial Production programme. Pupils with an average point score of 30–34 make up 10 percent of all pupils.

Figure 6.8 Successfully completed within 5–6 years – by average point score from compulsory education and study programme. 2006 cohort. Percentage.



Source: Statistics Norway

Pupils with 40–44 points account for 18 percent of all pupils, and their completion rate ranges from 69 percent on the programmes for Restaurant Management and Food Processing; Design, Arts and Crafts; and Agriculture, Fishing and Forestry, to 81 percent on the Building and Construction programme.

Girls are more likely to complete than boys

Boys are on average less likely to successfully complete upper secondary education and training than girls. In the 2006 cohort the completion rate was 76 percent for the girls and 68 percent for the boys.

As shown in Chapter 4, girls achieve better average grades in lower secondary than boys. If we compare boys and girls with the same average point score from compulsory education, there is no difference in the proportion of boys and girls who complete.

Average point scores also impacts on how long pupils study before dropping out

As we have already seen, many pupils obtain basic qualifications even if they do not complete and pass upper secondary (Figure 6.6). We have also seen how the proportion of pupils who complete and pass varies significantly according to their average point scores from compulsory education (Figure 6.7). It appears that average point scores also have an impact on how long pupils study before dropping out (Figure 6.9).

We can see that almost 40 percent of pupils with an average point score of below 25 fail to obtain any basic qualifications. Over a period of five–six years, this group has not advanced further than participating in Vg1.

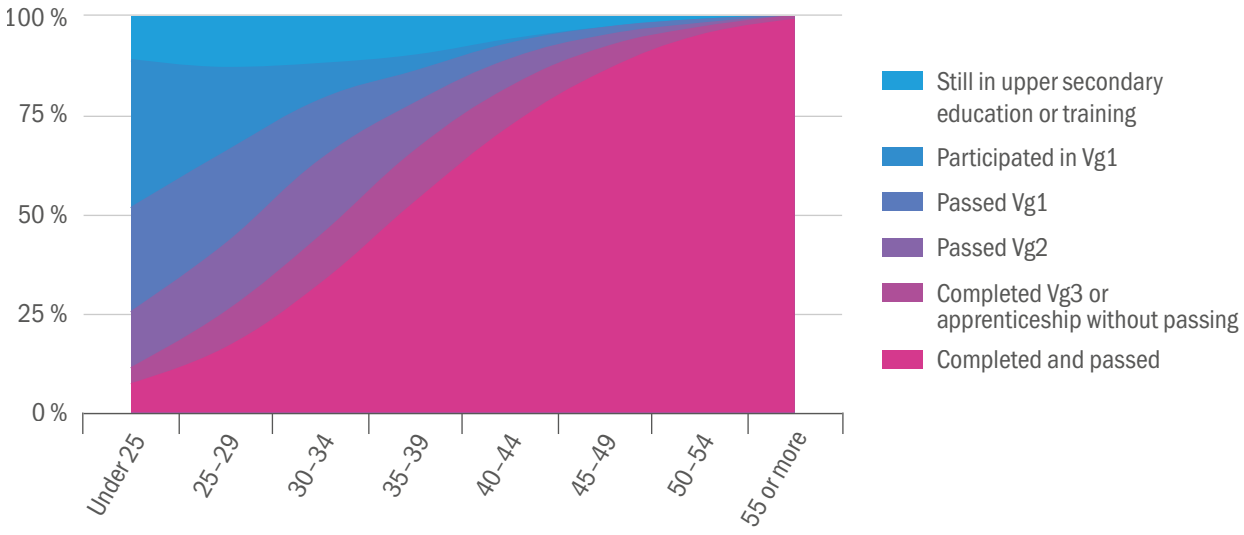
Among pupils with an average point score of 30–34 from compulsory education, 79 percent have completed with basic qualifications within five–six years. 32 percent have completed and passed, 12 percent have completed but not passed, 19 percent have passed Level Vg2, and 13 percent have passed Level Vg1.

As the completion rate in this group varies between 22 percent and 46 percent across the different study programmes (Figure 6.8), there is potential for making this group stay in education for longer.

6.4 Almost everyone enrols in upper secondary education or training, but many take an indirect route

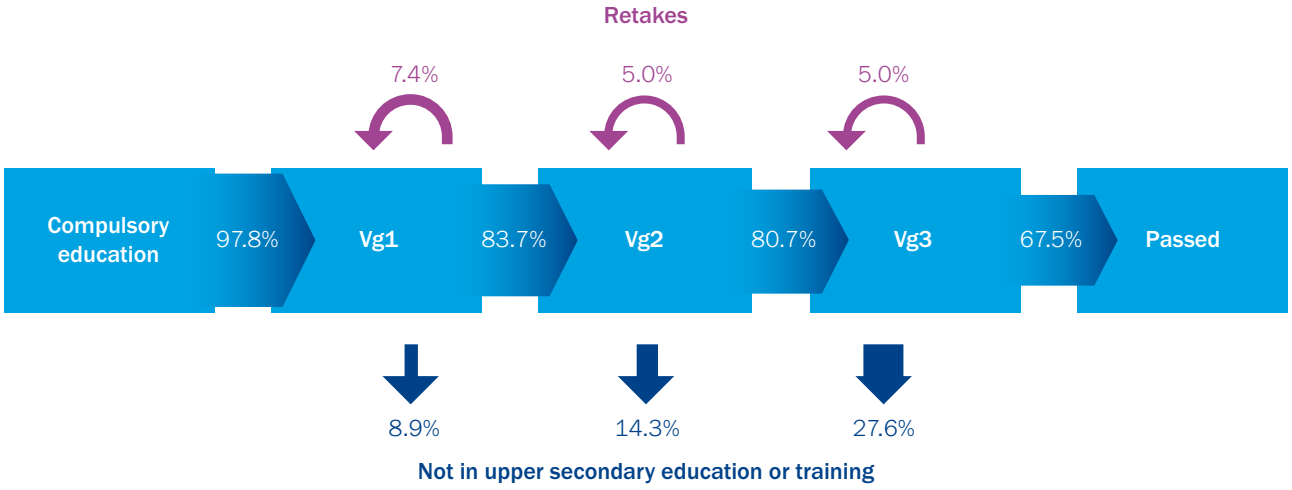
Almost 98 percent of 16-year-olds who completed lower secondary in spring 2012 were in upper secondary

Figure 6.9 Qualifications obtained after 5–6 years – by average point score from compulsory education. 2006 cohort. Percentage.



Source: Statistics Norway

Figure 6.10 Transitions to and through upper secondary education and training. 2012. Percentage.



Source: Statistics Norway

education or training by 1 October the same year.

Most pupils (84 percent) who enrol on Level Vg1 continue on to Level Vg2 the following year. This percentage has increased in recent years but fell slightly between 2011 and 2012. 7 percent retake Level Vg1, either on the same or on a different study programme, while 9 percent are not in upper secondary education or training.

After Vg2 81 percent of pupils continue on to Vg3 or workplace training, a figure that has been stable over the last years. 5 percent retake Levels Vg1 or Vg2, while 14 percent are outside of upper secondary education or training. Most of those who left upper secondary education and training after Level Vg2 were pursuing a vocational study programme, which highlights the need for creating more apprenticeships.

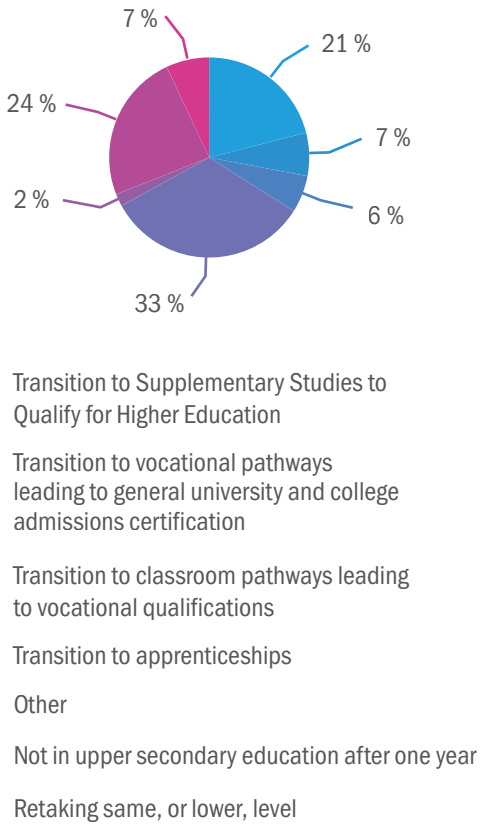
In 2012, 68 percent of pupils at Level Vg3 pass their course or transfer to apprenticeships. This is a slightly lower share than in 2011.

Figure 6.10 provides detailed information about how pupils move through the education system. It also shows where in their education the main challenges lie.

Pupils on vocational study programmes drop out when transferring to apprenticeships

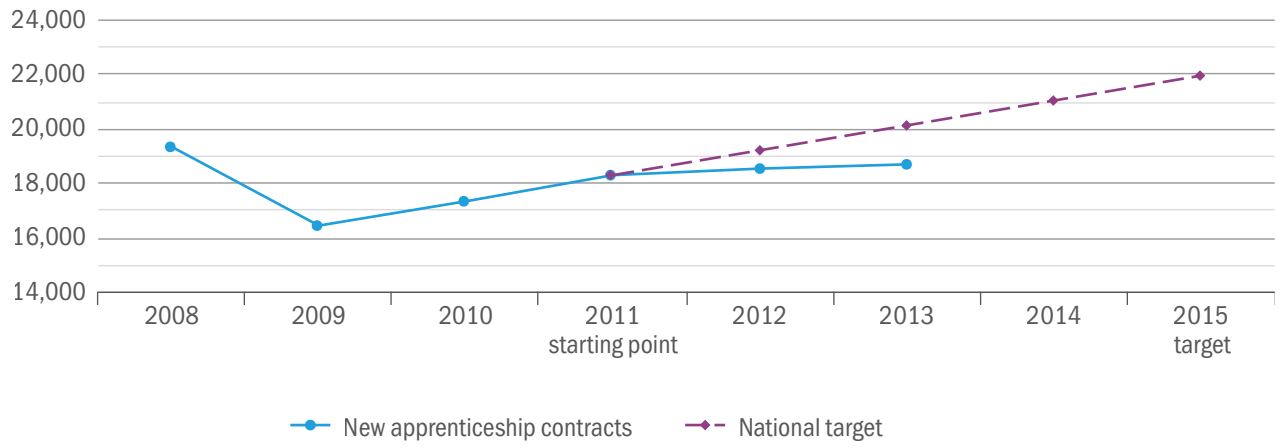
One in four pupils on vocational study programmes at Level Vg2 were not in upper secondary education or training the following year. For pupils on general study programmes the figure was 4 percent (Figure 6.11) which makes it particularly interesting to look at the transition from vocational Vg2 programmes to Level Vg3 and apprenticeships.

Figure 6.11 Transitions from Vg2 on vocational study programmes to the third year of training. 2012. Percentage.



Source: Statistics Norway

Figure 6.12 New apprenticeship contracts as at 1 October. 2008–2013. Numbers.



Source: Norwegian Directorate for Education and Training

Only one in three pupils started workplace training directly after completing level Vg2 on a vocational programme. In total only 46 percent continue their vocational studies either directly in workplace training, on vocational study programmes at Level Vg3, or on vocational pathways that give them general university admissions certification (Media and Communication; and Agriculture, Fishing and Forestry). In other words, fewer than half of the pupils continue on the vocational pathway that they have pursued for two years.

21 percent of pupils on Vg2 vocational study programmes proceed to pursue Supplementary Studies to Qualify for Higher Education. Although Supplementary Studies is not a vocational programme, many pupils have consciously planned to pursue this pathway (Markussen and Gloppen 2012).

6.5 Slight increase in the number of new apprentices

Around one in three apprenticeship applicants are unsuccessful in obtaining a place (The Norwegian Direc-torate for Education and Training). Increasing the availability of new apprenticeships is therefore crucial for improving completion rates on vocational study programmes. In spring 2012 the main employers' associa-tions, main trade unions, and the ministries responsible for education and government admin-istration, signed an agreement seeking to increase the number of apprenticeships. The main aim of the agreement, known as the Social Contract for VET, is to increase the number of new apprentices by 20 percent from the end of 2011 to 2015.

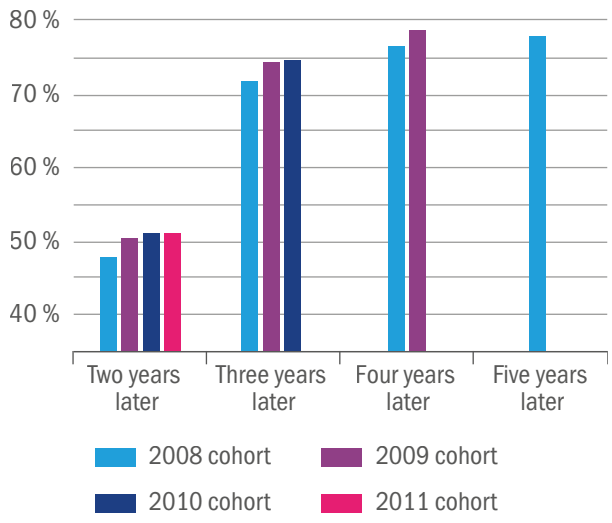
18,300 apprentices started their apprenticeship train-ing in the period 1 October 2010 to 30 September 2011. Two years later the number has increased to 18,700. This is an increase of 2 percent. In order to reach the target of a 20 percent increase, there need to be 3,000 more new apprentices in 2015 than there were in 2013.

6.6 Most apprentices obtain a trade or journeyman's certificate

As we have seen, only one in three pupils start their apprenticeship training directly after completing a Level Vg2 vocational study programme, and many pupils leave upper secondary education and training altogether. In order to complete, apprentices also need to complete their training period and pass the appren-ticeship examination.

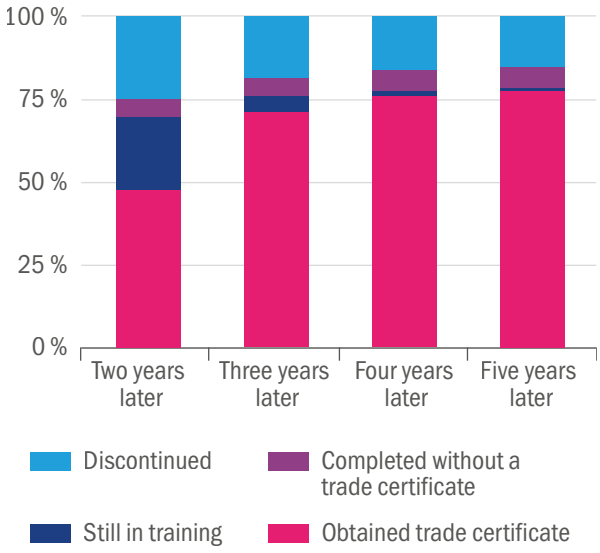
The indicator for completed training looks at the cohorts of new apprentices (and vocational training in school) and examines their status 2, 3, 4 and 5 years after they gained status as new apprentices. A new apprentice started his/her training period between 1 October in one year and 30 September in the following

Figure 6.13 Trade certificate obtained two, three, four, and five years after starting an apprenticeship. Percentage.



Source: Norwegian Directorate for Education and Training

Figure 6.14 Status two, three, four, and five years after starting an apprenticeship. 2008 cohort. Percentage.



Source: Norwegian Directorate for Education and Training

year. This means that if an apprentice has obtained a trade certificate two years after they had status as a new apprentice, it will be between two and three years since the person actually began the apprenticeship.

Four in five apprentices obtain trade certificates within five years

After two years, around half of all apprentices have sat and passed their apprenticeship examinations. One year later three in four have obtained their trade certificates. The figure continues to rise slightly over the next few years, although it levels out. Figure 6.13 also shows that each cohort achieves a higher completion rate than the previous cohort at every measuring stage. In fact, the 2009 cohort does achieve a higher percentage of trade certificates after four years than the 2008 cohort does after five.

Many apprentices are still in training more than two years after commencing their apprenticeship

In the 2008 cohort, around one in five apprentices were still in training two years after starting their apprenticeships. This figure falls sharply over the next year, and after five years almost no apprentices are still in training (Figure 6.14).

The percentage of apprentices having completed their apprenticeship period but not obtained a trade or journeyman's certificate, remains stable at 6 percent for all year groups. However, this category does not contain the same pupils from year to year. Pupils who complete their apprenticeship period enter the category, while pupils who eventually obtain their trade certificate leave the category.

After two years one in four pupils have discontinued, and not completed, their apprenticeship. The proportion of pupils who have not completed shrinks at every measuring stage and after five years only 15 percent have discontinued without completion.

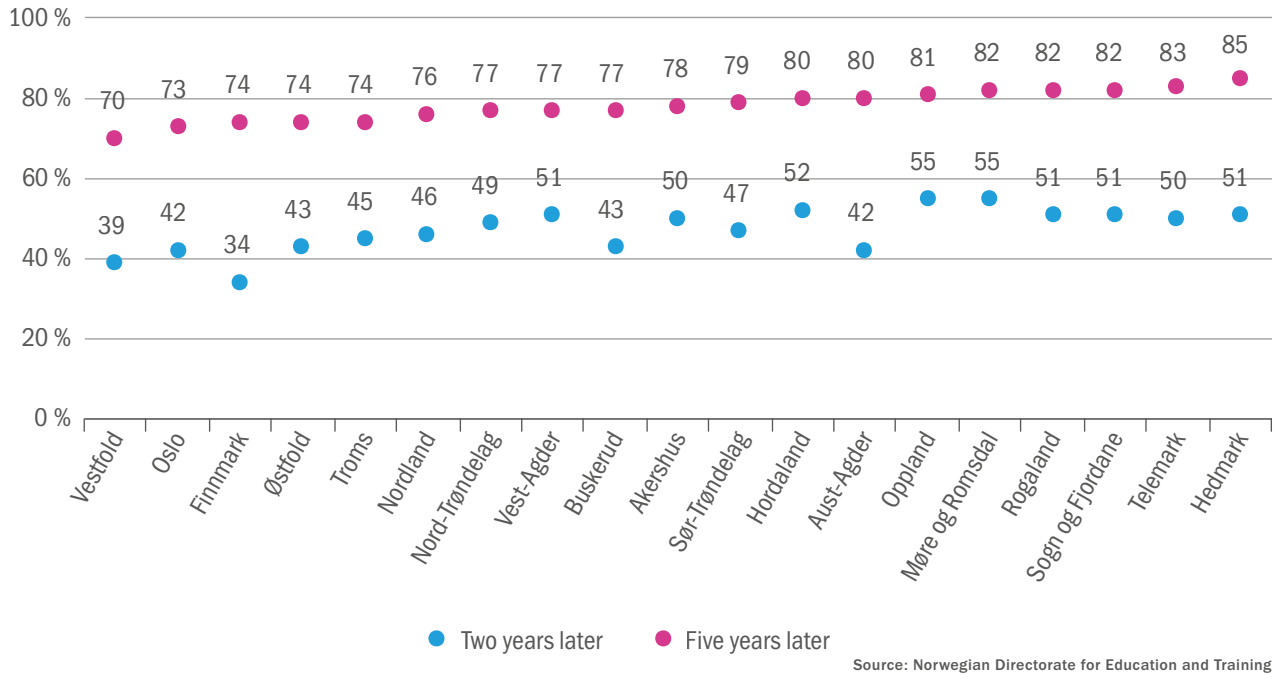
Some vocational programmes require more than 2 years of workplace training

Many pupils only obtain trade certificates between two and three years after commencing workplace training. One reason is that the apprenticeship period on some vocational programmes lasts longer than two years. This is reflected on the Electrical and Electronic Engineering programme, which involves a number of long training periods and sees the lowest completion rates after two years and the highest completion rates after four and five years. Other reasons could be that many apprentices need longer than the stipulated apprenticeship period, that the apprenticeship or journeyman's examinations have been delayed, or that the candidates fail the examination at the first attempt.

Electrical and Electronic Engineering has the highest proportion of apprentices who obtain trade certificates

There are major differences between different study programmes in terms of how many pupils obtain trade certificates – and how quickly they obtain them. On the Electrical and Electronic Engineering programme 87 percent of apprentices have passed their trade or journeyman's examinations after five years, while on the Agriculture, Fishing and Forestry programme and the Design, Arts and Crafts programme the figures are 65 percent and 66 percent respectively (Table 6.1).

Figure 6.15 Trade certificate obtained two and five years after starting an apprenticeship – by county. 2008 cohort. Percentage.



Source: Norwegian Directorate for Education and Training

Table 6.1 Achieved trade certificates two, three, four and five years after, by study program. 2008 cohort. Percent.

	Two years later	Three years later	Four years later	Five years later	Population
Building and Construction	36.5	63.4	71.7	74.0	4,312
Design, Arts and Crafts	39.5	60.7	65.2	66.4	1,537
Electrical and Electronic Engineering	28.8	79.0	85.5	86.8	3,138
Healthcare, Childhood and Youth Development	58.5	73.0	77.2	78.7	2,398
Media and Communication	65.3	75.0	79.9	81.3	144
Agriculture, Fishing and Forestry	41.6	57.9	62.8	64.8	409
Restaurant Management and Food Processing	60.1	71.4	74.3	75.4	1,364
Services and Transport	59.3	73.4	75.9	77.3	1,526
Technical and Industrial Production	62.6	79.2	81.7	82.8	4,494
Total	**48.1**	**71.9**	**76.8**	**78.3**	**19,322**

Source: Norwegian Directorate for Education and Training

Big differences in completion and efficiency between counties

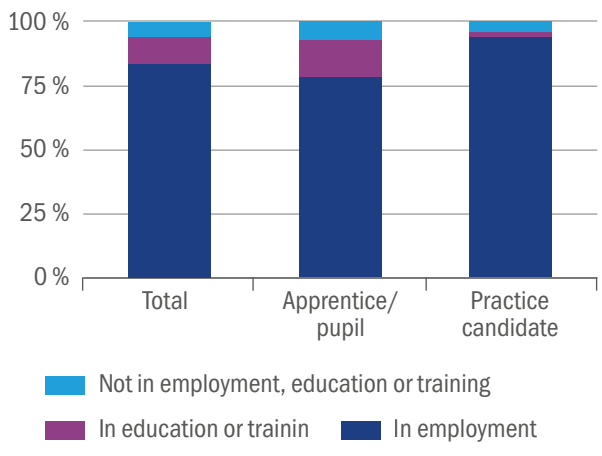
There are also differences in completion rates across counties. In the Hedmark county 85 percent of apprentices have obtained a trade certificate after five years, while the corresponding figure for Vestfold is 70 percent.

The length of time apprentices need to obtain their trade certificates also differs across counties. For example, the difference in completion rates between Finnmark and Vest-Agder is 17 percentage points after two years, while after five years Vest-Agder sees a completion rate that is only 3.5 percentage points higher. We can also see that the differences diminish the later the measuring stage. This means that many counties do not see significantly lower completion rates, but are less effective in putting the apprentices through their training and on to a trade or journeyman's certificate.

6.7 Employment of newly qualified skilled workers

In the previous sub-chapter we learned that a large proportion of apprentices obtain trade or journeyman's certificates. In this sub-chapter we will be looking at the employment situation after the obtainment of the trade or journeyman's certificate.

Figure 6.16 Employment status as at November 2012 for skilled workers obtaining trade/journeyman's certificates in the 2011/12 academic year – by candidate category. Percentage.



Source: Norwegian Directorate for Education and Training

In addition to apprentices, pupils and practice candidates may also sit the trade or journeyman's examination. Apprentices have completed a period of workplace training. On most vocational programmes the training period lasts two years: one year of training and one year of productive work. . Pupils who have not been able to obtain an apprenticeship place can receive vocational training in school. These pupils do not undertake the productive work part of the training. Practice candidates are those with sufficient work experience to sit the examination without undergoing a prior training period. Practice candidates tend to be older, and have more work experience than the two other groups.

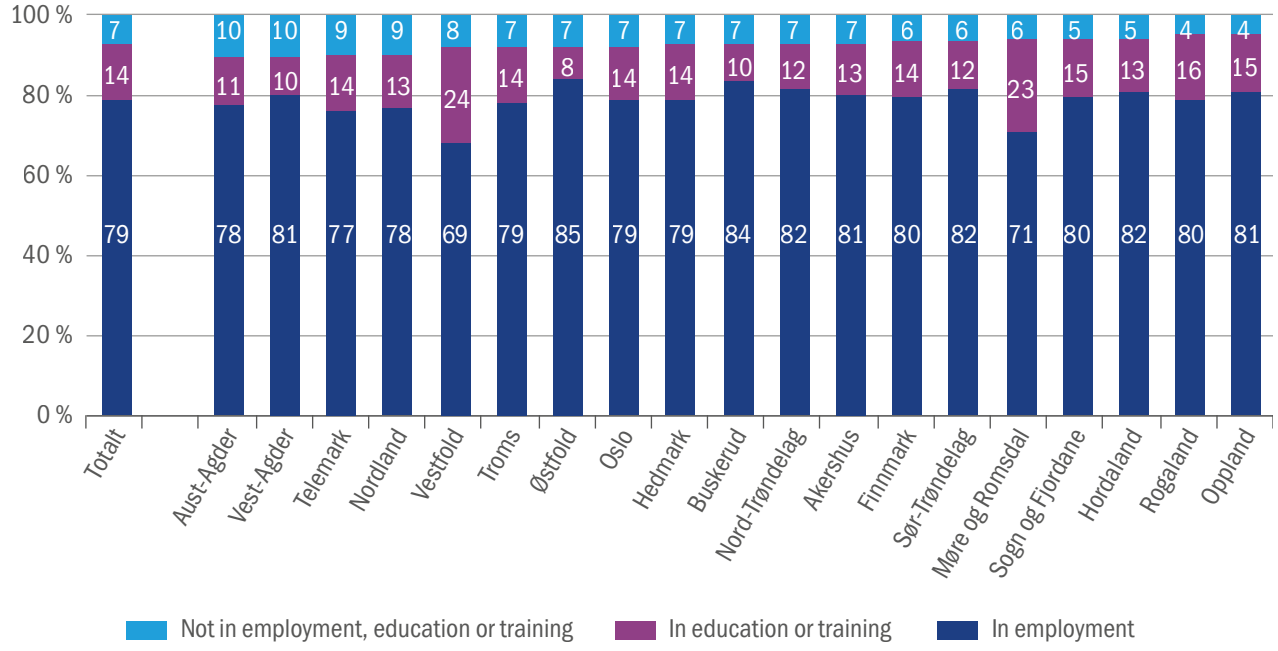
Practice candidates are in employment after obtaining their trade or journeyman's certificates

Around 21,000 candidates sat their trade or journeyman's examination in the period 1 October 2011–30 September 2012. 85 percent of these were in employment by autumn 2012, 10 percent were in education or training whereas 5 percent were in neither of these activities. Around 13,500 of the candidates obtained a trade certificate as an apprentice or pupil, while 7,500 of them were practice candidates. Almost all practice candidates are in employment the first year after sitting their examination (Figure 6.16), they are primarily adults who were in employment before obtaining their trade certificate. Around four in five apprentices are in employment whereas 14 percent are in education or training.

Each employment category may include people engaged in a variety of different activities. The category "Not in employment, education or training" includes those registered as being unemployed, those who are participating in back-to-work schemes, and those who are doing military service. The "In employment" category does not distinguish between full-time and part-time employment, nor does it specify whether the work matches an employee's particular skills. People who are "In education or training" may be pursuing higher education, vocational training, or upper secondary education. People who are both in employment and in education or training are included in the category "In education" if they have been registered as pursuing full-time education, and in the category "In employment" if pursuing part-time education.

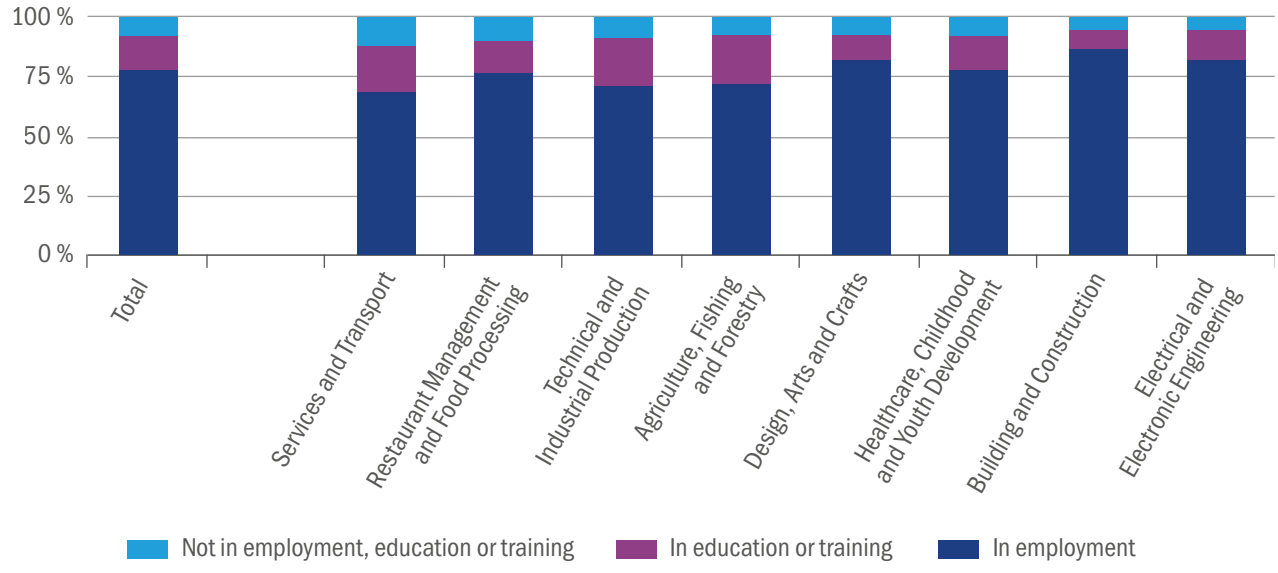
Across all counties and all study programmes a large share of practice candidates are in employment after obtaining their trade certificate. From a throughput perspective, apprentices who have obtained their trade certificates is a more interesting group and will be examined more closely in the remainder of this sub-chapter.

Figure 6.17 Employment status as at November 2012 for apprentices/pupils obtaining trade/journeyman's certificates in the 2011/12 academic year – by county. Percentage.



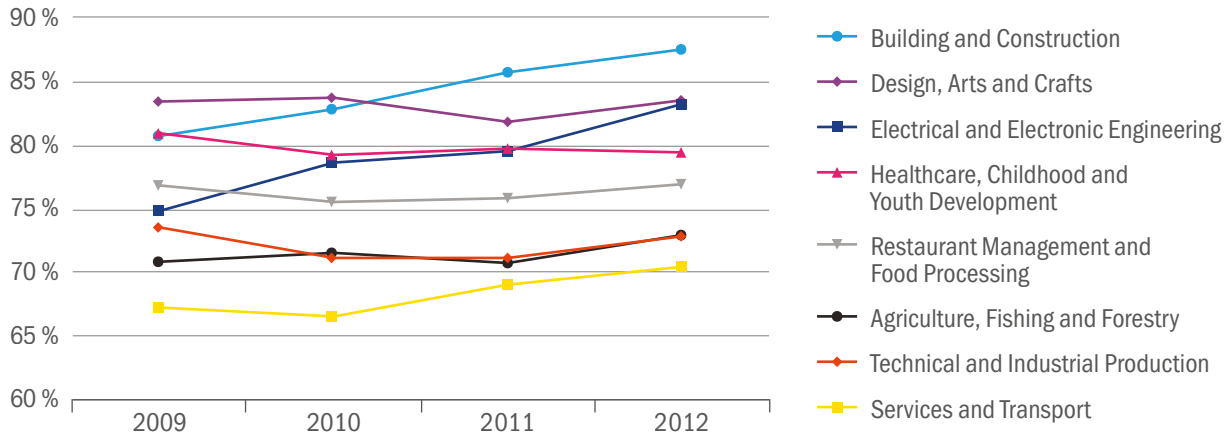
Source: Norwegian Directorate for Education and Training

Figure 6.18 Employment status as at November 2012 for apprentices/pupils obtaining trade/journeyman's certificates in the 2011/12 academic year – by study programme. Percentage.



Source: Norwegian Directorate for Education and Training

Figure 6.19 Newly qualified skilled workers in employment as at November in the first year after obtaining a trade/journeyman's certificate as an apprentice/pupil – by study programme. Percentage.



Source: Norwegian Directorate for Education and Training

Significant variations in employment rates across counties

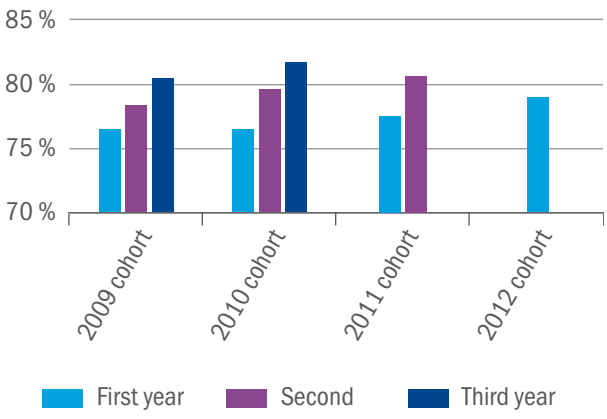
The proportion of apprentices in employment varies from 69 percent in Vestfold county to 85 percent in Østfold. With the lowest proportion of employed apprentices, the counties Vestfold and Møre og Romsdal, also have the highest proportion of apprentices in education or training. Thus, there are only small differences between counties in terms of the percentage of apprentices who are not in employment, education or training.

The proportion of apprentices who are not in employment, education or training varies from 4 percent in Rogaland and Oppland to 10 percent in Aust-Agder (Figure 6.17).

Apprentices from the Building and Construction programme are more likely to find employment immediately after completing their training

Examining the employment rates between different study programmes we find they range from 70 percent for apprentices in the services and transport programme to 87 percent for apprentices from the building and construction programme (Figure 6.18). Again, the study programmes with the lowest employment rates also have the highest proportion of apprentices in education or training. However, there are significant differences between the study programmes in terms of the proportion of apprentices not in employment, education or training. Of those who obtained a trade certificate in services and transport, 11 percent were not in employment, education or training the first year after obtaining their certificate. For the electrical and electronic engineering programme the share was 3 percent.

Figure 6.20 Newly qualified, skilled workers in employment in the first, second, and third year after obtaining a trade/journeyman's certificate as an apprentice/pupil. Percentage.



Source: Statistics Norway

Employment rates are rising on the electrical and electronic engineering and building and construction programmes

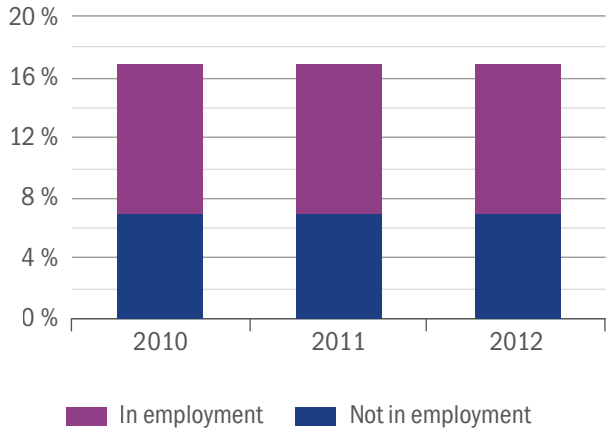
The employment rate of newly qualified, skilled workers rose by just under 3 percent between 2009 and 2012. It is particularly the electrical and electronic engineering programme, and the building and construction programme that have helped drive this increase (Figure 6.19). Employment rates among apprentices from these programmes have risen by 8 percent and 7 percent respectively. For most study programmes, employment rates have slightly increased or remained stable in this period. The largest fall occurred on the healthcare, childhood and youth development programme, where the employment rate dropped by 1.5 percentage points.

Employment rates increase with every year after obtaining a trade certificate

Alongside the increase in the employment rate for every cohort since 2009, employment rates also increase the longer it has been since the apprentices obtained their trade or journeyman's certificate.

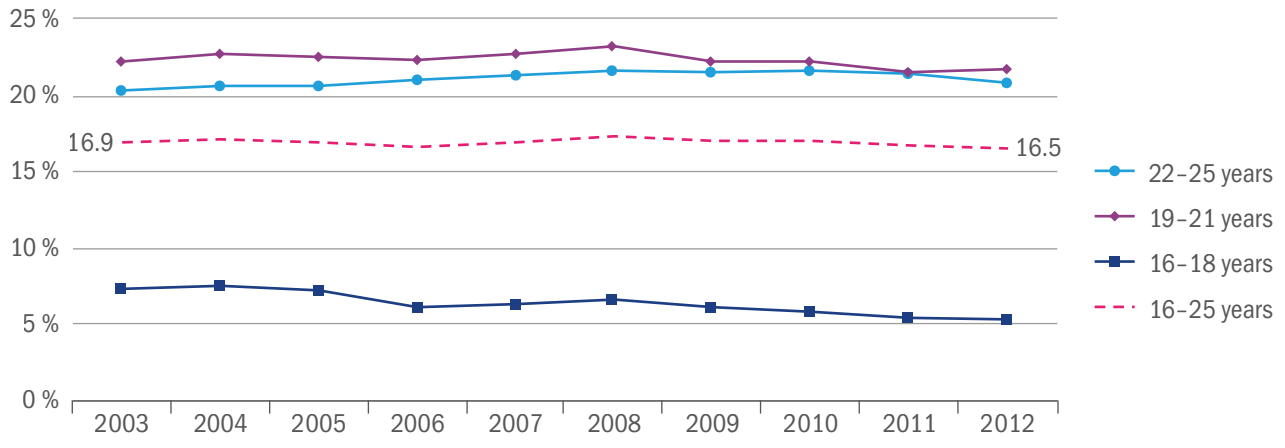
77 percent of newly qualified apprentices from the 2009 and 2010 cohorts were in employment the first year after obtaining their trade certificate (Figure 6.20). Two years later, the employment rate increased to 81 percent and 82 percent respectively. Many of those who do not enter into employment immediately after obtaining their trade certificates do find employment after a while. Research has shown, however, that employment rates among skilled workers fluctuate in line with changes in the economy (Nyen et al. 2013). An economic downturn is thus a factor that may counteract and neutralise the positive trend that normally occurs during the first years after obtaining a trade certificate.

Figure 6.22 Employment status for young people aged 16 - 25 that have not completed, and are not participating in upper secondary education and training. Percentage.



Source: Statistics Norway

Figure 6.21 Young people that have not completed, and are not participating in upper secondary education and training. Percentage.



Source: Statistics Norway

6.8 Young people who do not complete or participate in upper secondary education or training

1 in 6 young people do not complete upper secondary education or training

Just under 17 percent of Norway's 16 to 25-year-olds have not successfully completed and are not currently enrolled in upper secondary education or training. This figure has remained stable since 2003. The 16–25 age group has a legal entitlement to upper secondary education or training.

In the 16–18 age group the proportion who have either completed or currently participate in upper secondary education and training is high, and increasing. In the other age groups the percentage has been relatively stable.

... but most of these are in employment

The most vulnerable young people are perhaps those who have not passed and completed upper secondary training and who are not in work. Three in five young people who have not completed upper secondary education or training are in employment (Figure 6.22). The figures do not provide information about the extent, duration or income of their employment, but employment in itself is an indication of involvement in the labour market and in society in general. The remaining 7 percent of young people aged between 16 and 25 have neither completed, nor are participating in, upper secondary education or training, and they are not in employment.

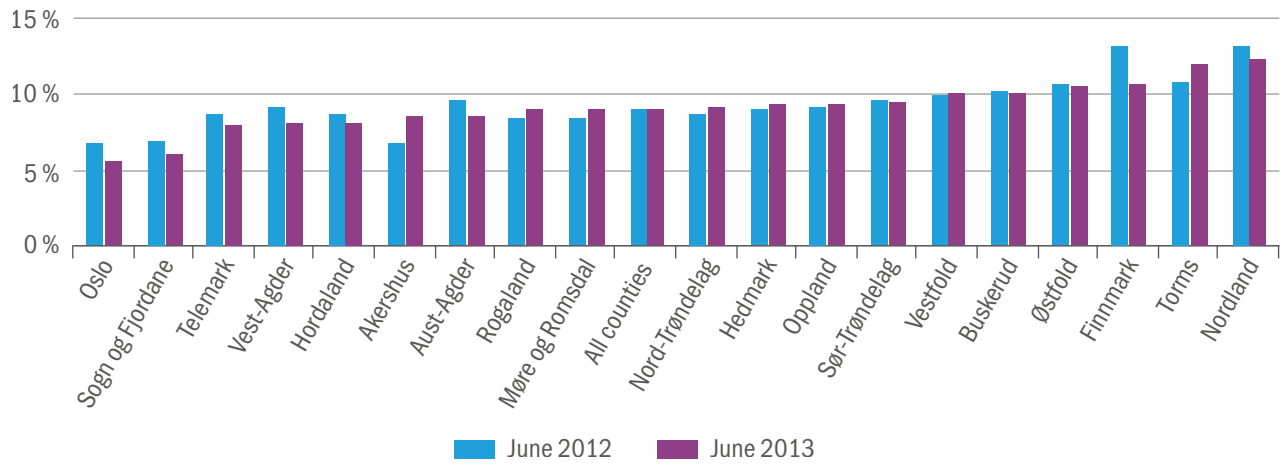
6.9 The Follow-up Service – for young people not in education, employment or training

The Follow-up Service (Oppfølgingstjenesten) is run by county authorities for young people in the age group 16-21, who are neither in education or training, nor in employment. The Follow-up Service should keep records of all young people in the target group, offer them guidance, and ensure that they are offered training, work or other skills-enhancing activities.

The northernmost counties have the largest proportion of young people involved with the Follow-up Service

A total of 19,900 young people made up the target group for the Follow-up Service in the 2012/13 academic year. This is equivalent to 9 percent of all young people entitled to upper secondary education or training in this age group. There are distinct differences between

Figure 6.23 Young people referred to the Follow-up Service – by county. Percentage.



Source: Norwegian Directorate for Education and Training

counties as to the proportion of young people engaged with the Follow-up Service. The share is highest in the three northernmost counties of Nordland, Troms, and Finnmark, and lowest in Oslo, and Sogn og Fjordane (Figure 6.23). This mirrors the general patterns of completion rates, young people who drop out of upper secondary education and training are referred to the Follow-up Service.

The proportion of young people in the target group remained largely unchanged between the 2011/12 and 2012/13 academic years.

The Follow-up Service has obtained a better overview of young people, and more of them have become engaged in activity

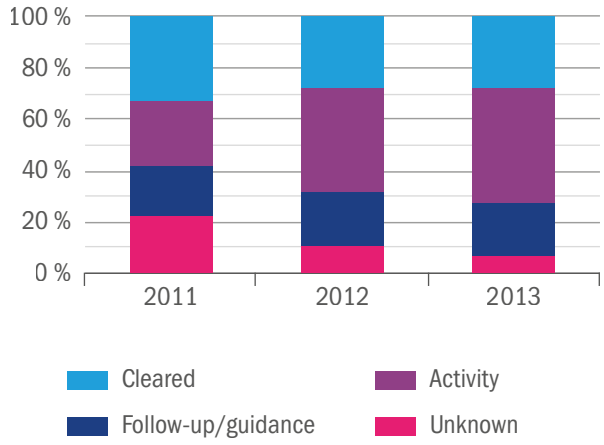
One important task for the Follow-up Service is to contact and keep record of all young people in the target group. The Follow-up Service has obtained a better overview of the young people in the target group in recent years. The percentage of young people whom the Follow-up Service has been unable to contact, fell from 4,700 (23 percent) to 1,500 (8 percent) between 2011 and 2013. The proportion varies across counties. At the end of the 2012/13 academic the county authorities in Sogn og Fjordane and Nord-Trøndelag had no young people with an unknown activity status whereas 20 percent of the target group fell into this category in Buskerud and Oslo.

Once contact is established by the Follow-up Service, the next step is to help youths engage in activity. Activities include Norwegian Labour and Welfare Administration (NAV) schemes, county council schemes, ordinary upper secondary education or training, or employment. In the 2012/13 academic year 9,000 of the 19,900 young people registered with the Follow-up Service were engaged in activity by the end of the academic year. In the last three years the proportion of young people engaged in activity has increased from 26 percent in 2011 to 45 percent in 2013.

Three in five are in upper secondary education or training, or in employment in the next academic year

One measure of success for the Follow-up Service is the share of young people entering employment or upper secondary education or training after registering with the Follow-up Service. For the 2011 cohort this share is ranging from 53 percent in Vest-Agder county to 79 percent in Finnmark, with a national average of 61 percent (Figure 6.25). Counties in the west and north of Norway perform best, while counties in the south and east achieve poorer results in encouraging

Figure 6.24 Status for young people referred to the Follow-up Service in the period June 2011 – June 2013. Percentage.



Source: Norwegian Directorate for Education and Training

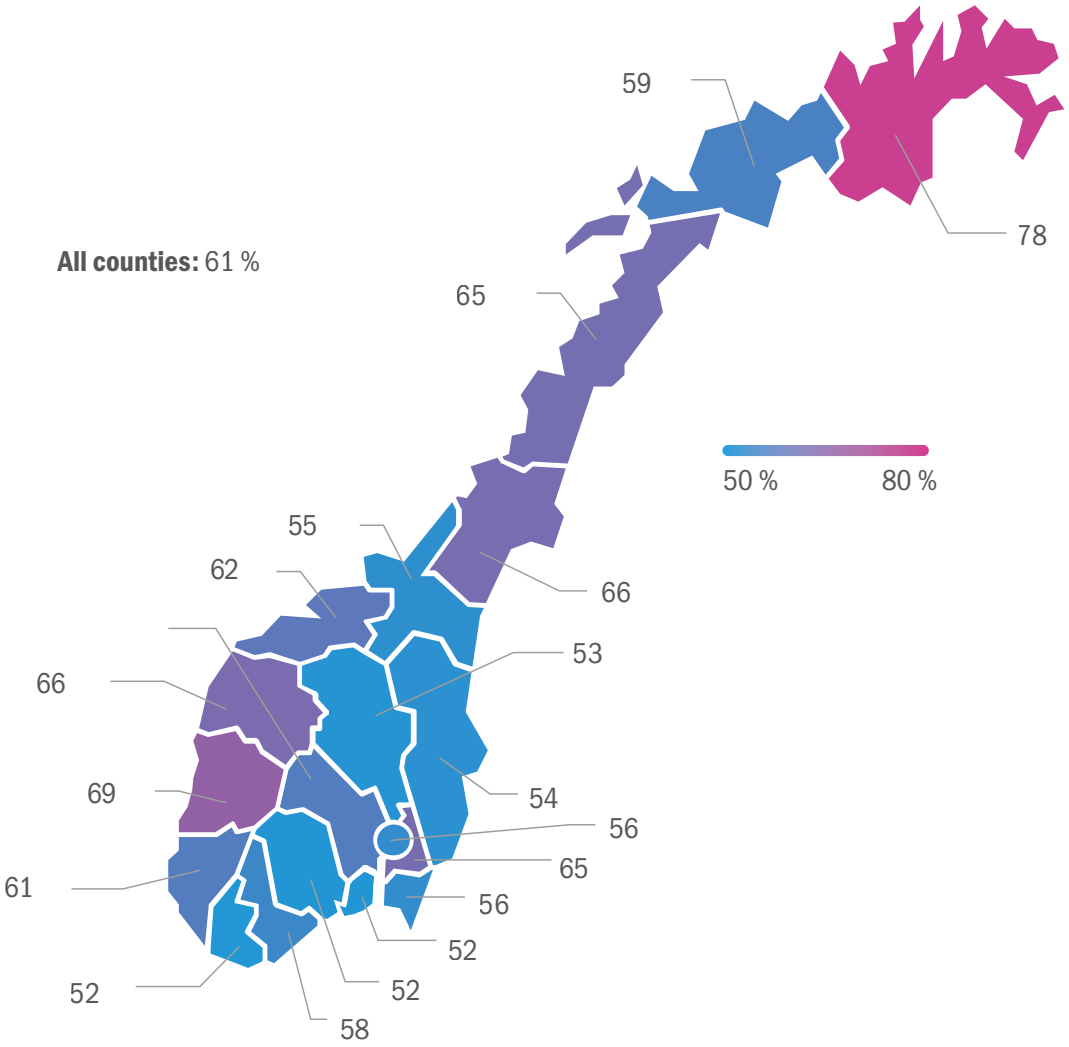
young people registered with the Follow-up Service to enter education, employment or training. Finnmark's comparative success in getting young people in the Follow-up Service back into education, employment or training contrasts the county's high dropout rate.

Some of the young people in the target group are in a situation where employment or upper secondary education or training is not an option. Some are engaged in non-formal learning, some care for children, while others are too ill to work or study.

Two in five young people engaged with the Follow-up Service are regulars

Of the 20,300 young people registered with the Follow-up Service in June 2012, 7,700 were still registered in June 2013. Young people registered with the Follow-up Service in two consecutive years are referred to as "regulars". "Regulars" can have been in education, employment or training during that period. The person may have been in employment or upper secondary education or training and then left, thus being referred back to the Follow-up Service. This was the case with 15 percent of regulars in June 2013.

Figure 6.25 Young people in the Follow-up Service target group in 2011/12 who are in education and/or employment in the next academic year – by county. Percentage



Source: Norwegian Directorate for Education and Training/SSB

6.10 Challenges remain in making more young people complete upper secondary education or training

To make as many pupils as possible complete upper secondary education or training is a key goal. However, only seven in ten of those who enrol at Level Vg1 complete their education or training within five–six years. This figure has remained stable since the introduction of Reform 94.

Research shows that discontinuing upper secondary education or training often has negative consequences (Markussen 2014). However, many of those who drop out complete their upper secondary education or training at a later stage. There is a lag, especially on vocational study programmes, where the completion rate increases by around 6 percentage points between the measuring stages after five–six years and ten years. Many also obtain trade certificates as practice candidates after having acquired skills in the workplace. The availability of schemes to compensate for interrupted studies can mitigate negative consequences of early school leaving. However, the aim is to have as many as possible complete their upper secondary education or training within the standard time frame.

Studies have also found that many people benefit from attending upper secondary education and training, even if they do not complete. Markussen (2014) shows that the longer pupils stay in upper secondary education or training, the more successful they are likely to be in the labour market. However, their involvement in working life may be more vulnerable and dependent on fluctuations in the labour market.

We know that the reasons for dropping out are complex. The difficulty associated with obtaining an apprenticeship is often cited as one reason linked to the education system. At the same time many pupils cite school fatigue, mental problems, or problems at home as the main reasons why they drop out (Markussen and Seland 2012). We also know that grades from lower secondary significantly affect pupils' ability to complete upper secondary education or training. Enhancing pupils' skills and attainment levels at the lower secondary stage will therefore have a positive impact on completion rates in upper secondary.

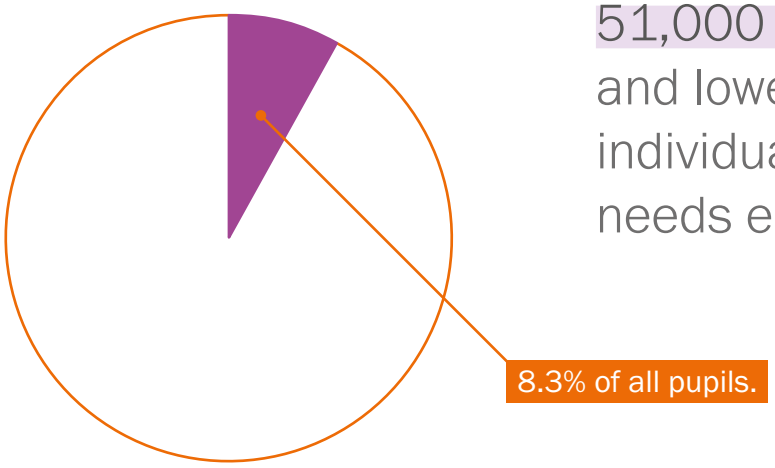
7

Special educational support and special needs education

Norway spends significant resources on providing special educational support and special needs education. It has long been a political goal to improve adapted tuition in schools. The aim is to improve learning outcomes for all pupils so that fewer of them require special needs education.

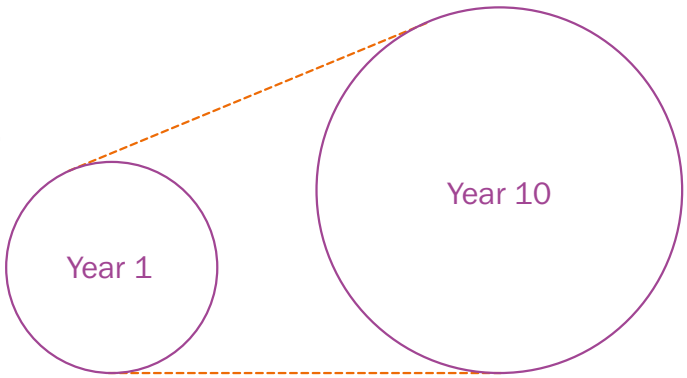
In this chapter we will start by looking at figures on children who require special educational support in kindergarten. Then we will move on to statistics and research on the extent and organisation of special needs provision in primary and secondary schools.

7,000 kindergarten children receive special educational support.

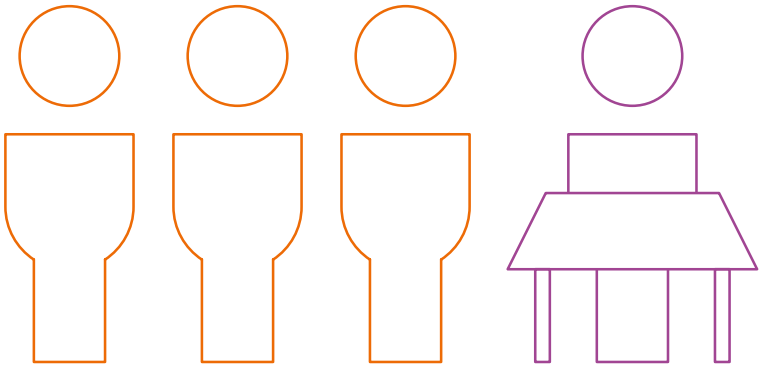


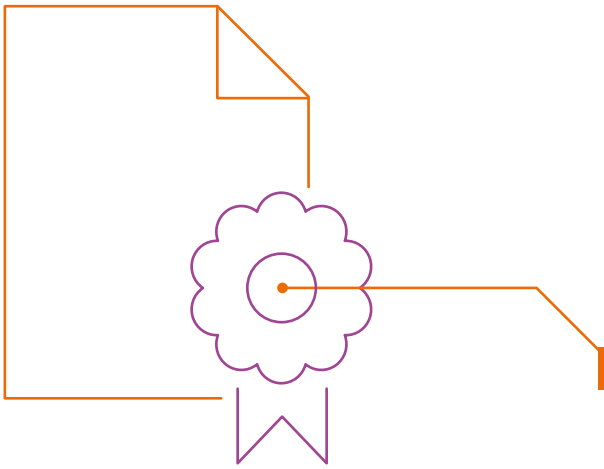
51,000 pupils in primary and lower secondary have individual decisions on special needs education.

The proportion of pupils receiving special needs education increases throughout the primary and lower secondary stages. 3.8% receive special needs education in Year 1. By Year 10 the proportion is 11.2%.



3 in 4 pupils who receive special needs education in primary and lower secondary are given such education outside ordinary classes.

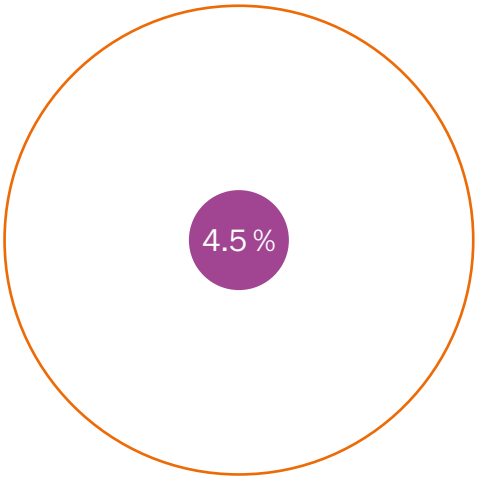




6,800 participants in upper secondary education or training aim to obtain a basic qualification.

2.8% of participants.

There are 1,750 training candidates in upper secondary training. They account for 4.5% of pupils undergoing workplace training.



7.1 Kindergartens and children with special needs

Kindergartens should offer individually adapted and equitable provision, and they should help create a meaningful childhood for all children regardless of functional ability, place of residence and social, cultural and ethnic background. Kindergarten staff must ensure that all children feel that they and everyone else in their peer group are important members of the kindergarten community.

Kindergartens must be adapted to welcome all children. This means designing a physical environment that facilitates all children's active participation in play and other activities.

Kindergartens have a particular responsibility for preventing learning difficulties and can make special arrangements for children with particular needs.. Adaptation may include special social, pedagogical and/or physical provision.

Special educational support

Special educational support for children under compulsory school age is enshrined in Section 5-7 of the Education Act. The right to special educational support applies to all children under compulsory school age who have a particular need for such support. In other words, a child does not need to attend kindergarten in order to receive special educational support. Nor does the child need to have been given a diagnosis. The key question is the extent to which the child is in particular need of special educational support. The entitlement to special educational support covers a wide range of supportive measures in addition to special needs education. Special educational support could involve supporting a child's language, social or motor development, all of which are key factors in the child's well-being and overall development. Special educational support should always include an offer of parental guidance and advice.

Table 7.1 Kindergarten children with decisions on special educational support. 2010–2013. Numbers and percentage.

Year	Number	Percent
2013	6,958	2.4
2012	6,577	2.3
2011	6,482	2.3
2010	6,213	2.2

Source: BASIL/Norwegian Directorate for Education and Training

The extent of special needs provision in kindergartens

In 2013 just under 7,000 (2.4 percent) of all kindergarten children were given special educational support, 381 more than in 2012. There has been a steady, yet modest, increase in the number of children receiving special educational support in kindergartens in recent years.

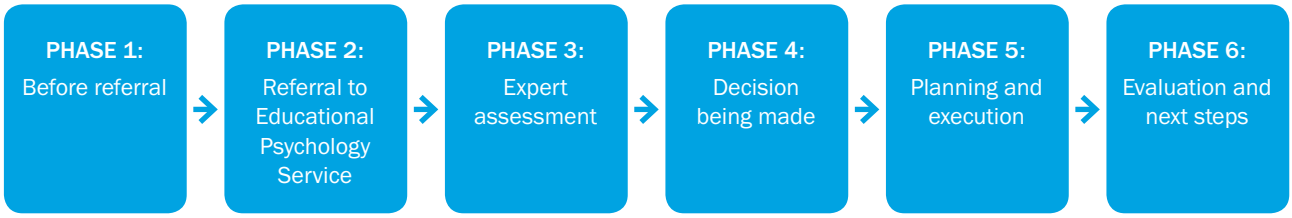
In comparison, 3.8 percent of all children in Year 1 received special needs education in 2013. One explanation of this gap is that the demands set by schools identify additional challenges, the need for additional support therefore grows and is perceived as more pressing (Cameron et al. 2011).

96.5 percent of all 3 to 5-year olds attend kindergarten. Since most of the children receiving special educational support are over 3 years of age (Rambøll 2011), we have reason to believe that most of them attend kindergarten.

A study conducted by Rambøll (2011) found that around half of children receiving special educational support, received fewer than five hours of special educational support a week, while a third received between five and 10 hours.

Special needs provision in kindergartens is often associated with language development and behavioural problems (Cameron et al 2011). Support is primarily provided in the form of direct help, or initiatives to assist the child, and usually entail enlisting additional staff. Guidance for kindergarten staff and parents or guardians is also a major part of special needs provision. Provision for most children who require special educational support involves language stimulation, conceptual stimulation and social training (Rambøll 2011).

Proceedings for special needs provision and education



The percentage of children receiving special educational support varies between municipalities

The proportion of children receiving special educational support in kindergarten varies from 0 percent to just over 10 percent across municipalities. In 52 municipalities, no children have been assigned special educational support. Kindergartens may still have made special adaptations for children without formally assigning special educational support.

In just over half of all municipalities, between 1 percent and 3 percent of kindergarten children receive special educational support whereas in 18 municipalities the figure is more than 6 percent.

Inclusion of children with special needs in kindergarten

Kindergartens appear generally good at including children with special needs. Cameron et al. (2011) point out that kindergartens are among the most inclusive institutions in the education system. Kindergarten staff is very conscious about ensuring inclusive practices (Solli and Andresen 2012). The kindergarten's role as an inclusive arena relies upon staff to understand their roles and duties when dealing with a diverse group of children and upon how they facilitate interaction (Solli 2012).

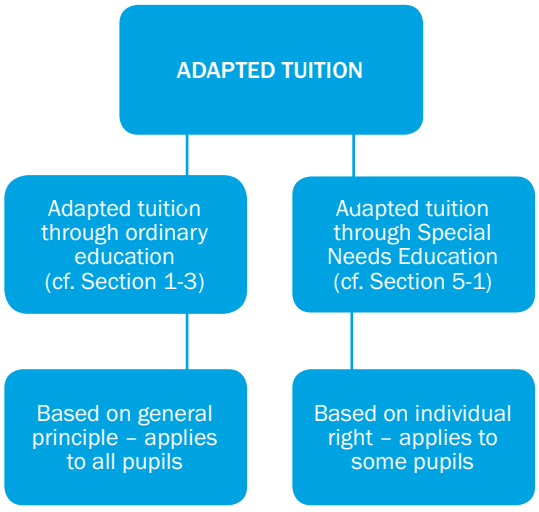
7.2 Adapted tuition and special needs education

All tuition must be adapted; this principle covers both ordinary tuition and special needs education. In ordinary tuition, pupils are not entitled to special adaptation. Special needs education, which is enshrined in Section 5-1 of the Education Act, is a more comprehensive form of adapted tuition. Under this statutory provision, pupils are entitled to specially adapted tuition.

Adapted tuition

Adapted tuition is an abiding principle throughout primary and secondary education and is enshrined in the Education Act. The Act stipulates that tuition should be adapted to the abilities and personal circumstances of each pupil, apprentice and training candidate. This means that schools should allow for variations between pupils by adapting the learning environment, methodology and pedagogy.

Relationship between adapted tuition and special needs education



Source: Nilsen og Herlofsen (2012)

Special needs education

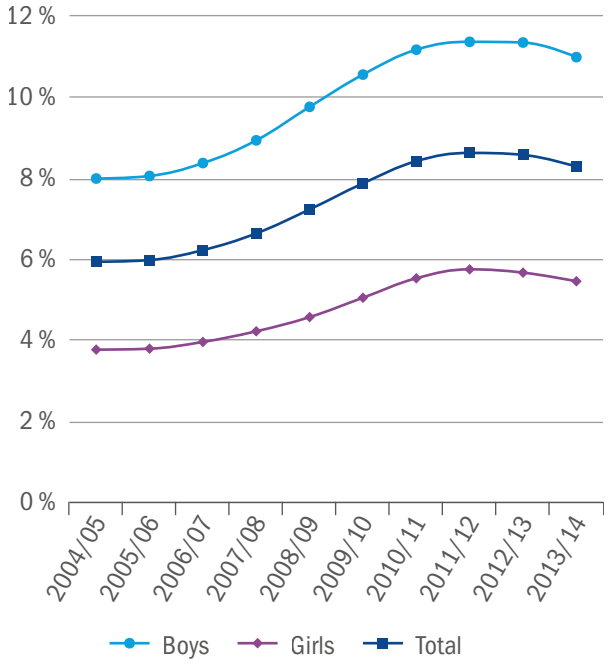
Pupils and training candidates who do not benefit sufficiently from ordinary tuition are entitled to special needs education. Special needs education could involve schemes relating to progression and working methods, deviations from the curriculum, teachers with particular qualifications, or organisational adaptation.

Whether or not a pupil benefits sufficiently from ordinary tuition is a matter of judgement. In order to make a decision, the school must assess the ordinary tuition and ascertain how each pupil can sufficiently benefit from it.

The quality of the ordinary tuition is a factor in determining whether a pupil is entitled to special needs education. The teacher-to-pupil ratio, the teacher's capabilities, class size and methodology may all affect the number of pupils who require special needs education. It is therefore important that schools make a systematic effort in this area.

Entitlement to special needs education does not extend to pupils who learn faster or more than the average pupil. The principle of adapted tuition, not special needs education, should be applied to such pupils. Pupils performing on a high academic level, requiring additional challenges are therefore not covered in this chapter.

Figure 7.1 Pupils in primary and lower secondary with individual decisions on special needs educa-tion. 2004/05 to 2013/14. Percentage.



Source: GSI/Norwegian Directorate for Education and Training

7.3 Special needs education in primary and lower secondary

Decline in the number of pupils receiving special needs education

It has been a political goal for some time to improve adapted tuition in order to enhance learning outcomes for all pupils. As long as schools are able to improve ordinary, adapted tuition so that pupils benefit sufficiently from it, there is no need to provide special needs education. If one needs to deviate from the normal curriculum a decision on special needs education is required (White Paper 20 (2012–2013) På rett vei).

In the autumn of 2013, 51,000 primary and lower secondary pupils had individual decisions on special needs education. They make up 8.3 percent of all pupils, which is a slight decline on the previous year, when the proportion was 8.6 percent. After a noticeable increase in the provision of special needs education between 2006 and 2011, the figure has stabilised over the last few years, and in the 2013/14 academic year it fell slightly.

The reduced proportion of pupils receiving special needs education can imply that schools better adapt ordinary tuition to individual needs.

However, the decline is small and we do not know whether it will last. Nor do we know whether the decline has occurred because more pupils benefit sufficiently from ordinary tuition, or because pupils are not receiving their entitlements.

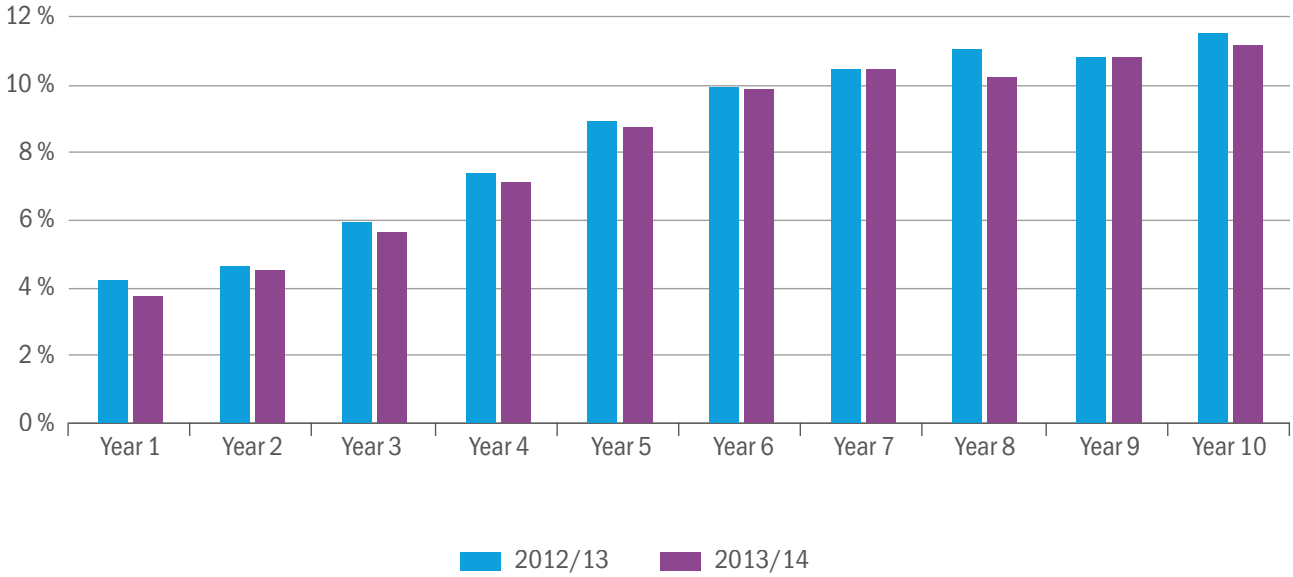
On the other hand, the number of complaints relating to special needs education has fallen. Complaints cover issues such as rejected applications, the extent of special needs provision, organisation, qualifications and/or failure to provide special needs education. The number of complaints about special needs education fell by 119 in the period 2010–2013. Based on the number of complaints, it would not appear that the decline in the number of pupils receiving special needs education has had a negative impact on the fulfilment of pupils' rights.

Early intervention and better adapted tuition

Early intervention entails both intervention at an early stage of a child's education, and intervention as soon as challenges arise.

The authorities have been expecting the principle of early intervention to reduce the current trend where the proportion of pupils receiving special needs education increase as they progress through the school system.

Figure 7.2 Pupils with individual decisions on special needs education – by year group. 2012/13 and 2013/14. Percentage.



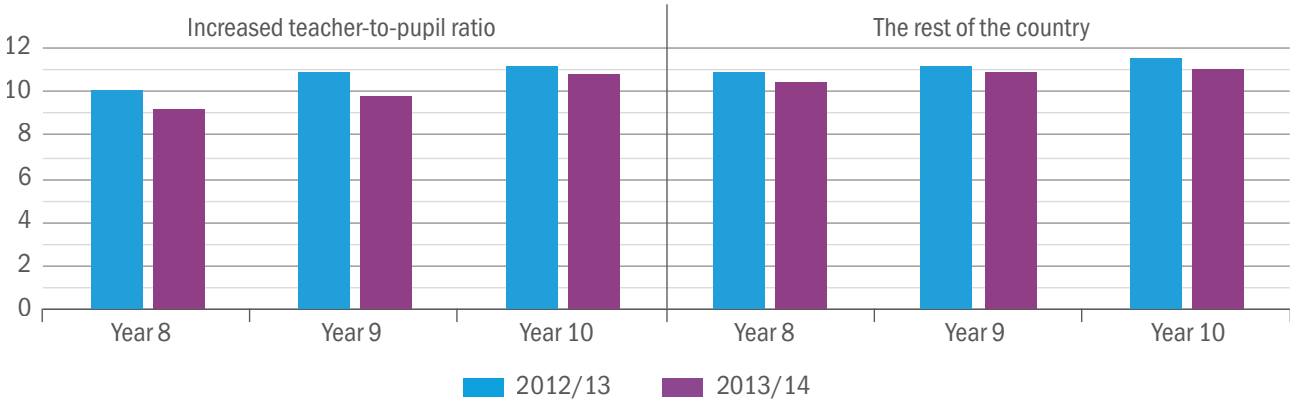
Source: GSI/Norwegian Directorate for Education and Training

There has been a drop in the proportion of pupils receiving special needs education in almost every year group between 2012/13 and 2013/14. The biggest fall occurred in Year 8. Despite this drop, there are still almost three times as many pupils receiving special needs education in Year 10 as there are in Year 1, and this has been the case for some time.

However, it would appear that this curve is beginning to somewhat level towards the end of compulsory education. The proportion of pupils receiving special needs education is now slightly lower in Year 8 than in Year 7.

One reason for this pattern could be increasing academic challenges and peer group heterogeneity further up the grades (Wendelborg 2010). There is also much to indicate that once a decision has been made to give a pupil special needs education, the pupil will continue to receive such education for the duration of his/her schooling. The reason could be that schools fail to assess the learning outcomes from special needs education and therefore do not make the necessary adjustment to the tuition they provide (Office of the Auditor General 2011).

Figure 7.3 Reduction in the proportion of pupils receiving special needs education in schools with increased teacher-to-pupil ratios compared with the rest of the country – by year group. 2011/12 and 2013/14. Percentage points.



Source: GSI/Norwegian Directorate for Education and Training

Knudsmoen et al. (2011) point out that schools should assess the pupil's progress throughout the year. For example, schools should consider whether the pupil, after a period of receiving special needs education, is capable of working towards the attainment targets and fundamental skills described in the standard curriculum for Knowledge Promotion.

In addition, schools should produce annual reports for pupils receiving special needs education, detailing the tuition the pupil has received, and providing an evaluation of the pupil's progress based on the targets set out in the pupil's individual subject curriculum. Pupils receiving special needs education are subject to the same assessment practices that apply to all pupils.

Increased teacher-to-pupil ratio in schools with low-performing pupils has reduced the proportion of pupils receiving special needs education

A 4-year funding scheme was launched in the autumn of 2013 to increase the teacher-to-pupil ratio in lower secondary schools. The purpose is to make the tuition more practical, varied and relevant, and to boost pupils' foundation skills. The scheme also aims to see whether increasing the teacher-to-pupil ratio could reduce the need for special needs education.

Between 2011/12 and 2013/14 we have noted that the schools that are part of the subsidy scheme have reduced the proportion of pupils receiving special needs education. The decline is greater than the nationwide reduction, and greatest in Year 9.

From next year, the Pupil Survey can help us find out whether the increased teacher-to-child ratio has led to better adapted tuition and increased motivation. We can also examine their average point scores to ascertain whether learning outcomes have improved.

More boys than girls receive special needs education

An average of 11.0 percent of boys and 5.5 percent of girls receive special needs education. For the girls the proportion is increasing steadily throughout their schooling, while for boys the figure has already peaked around 14 percent by Year 7 (Figure 7.4).

On average almost 68 percent of pupils receiving special needs education are boys, a figure that has remained stable over time. The share of boys is slightly higher in primary school than in lower secondary – 69 percent in Years 1–7 and 66 percent in Years 8–10.

Differences between counties in the proportion of pupils receiving special needs education

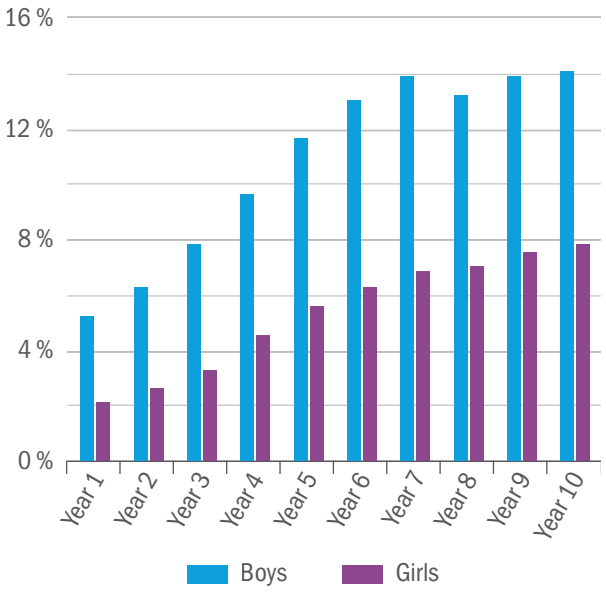
The counties Akershus, Hedmark, Oslo and Østfold had the lowest proportion of pupils receiving special needs education in the 2013/14 academic year, just over 7 percent (Figure 7.5). Nord-Trøndelag has the highest proportion at almost 11 percent. Fifteen out of nineteen counties saw a decline in the proportion of pupils receiving special needs education from the previous academic year, and the remaining counties only experienced a slight increase. Aust-Agder, Telemark and Hedmark saw the largest decline on the previous year.

The smallest municipalities have the highest proportion of pupils receiving special needs education

There is far greater variation between municipalities than between counties in the proportion of pupils receiving special needs education. In the smallest municipalities, an average of 10.2 percent of pupils receive special needs education, while the share is 7.5 percent in municipalities with a population of more than 50,000.

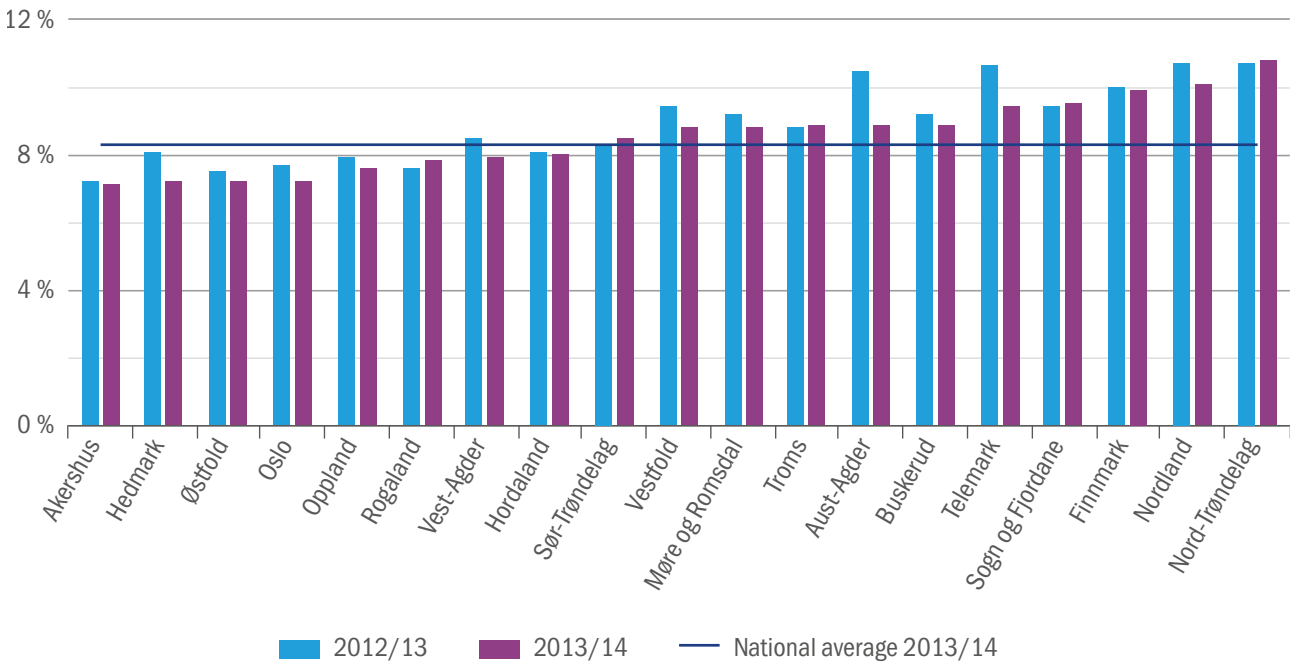
The variations are greatest between the smallest municipalities (less than 5,000 inhabitants), ranging from 2 percent to 28 percent. Correspondingly, in

Figure 7.4 Pupils with individual decisions on special needs education – by year group and gender. 2013/14. Percentage.



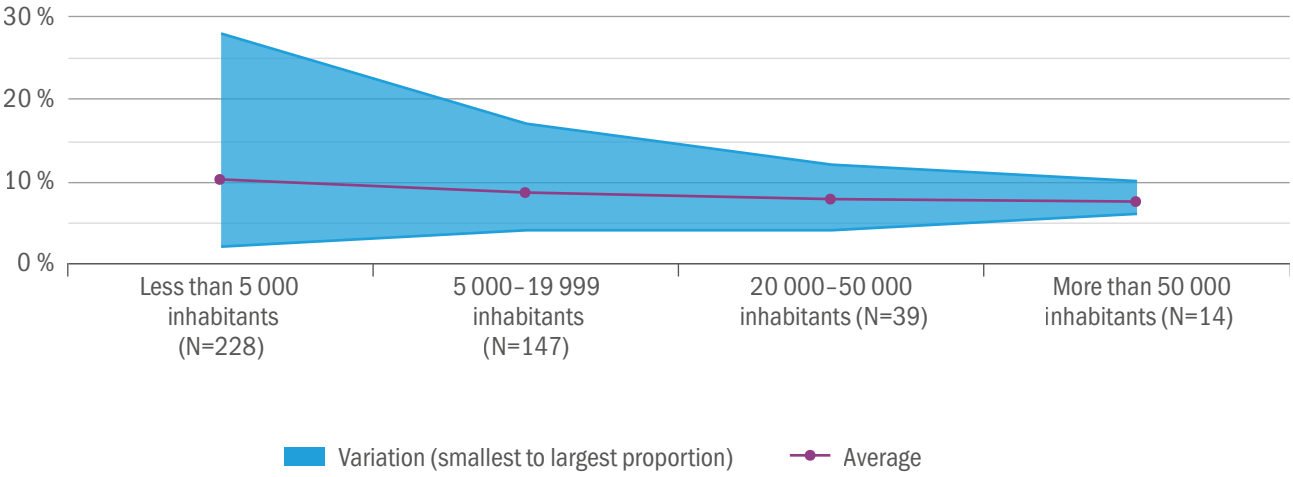
Source: GSI/Norwegian Directorate for Education and Training

Figure 7.5 Pupils with individual decisions on special needs education – by county. 2012/13 and 2013/14. Percentage.



Source: GSI/Norwegian Directorate for Education and Training

Figure 7.6 Pupils receiving special needs education – by municipality size. 2013/14. Percentage.



Source: GSI/Norwegian Directorate for Education and Training

municipalities with a population of between 20,000 and 50,000 it varies from 4 percent to 12 percent. Looking at the very largest municipalities, the variations are even smaller at between 6 percent and 10 percent. In most of the largest municipalities, the proportion of pupils receiving special needs education is 1–2 percentage points below or close to the national average.

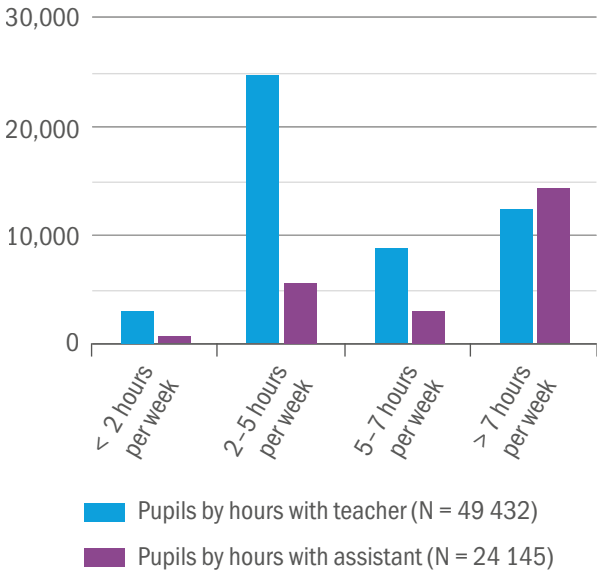
Almost everyone receives special needs education from a teacher

In the 2013/14 academic year, 49,500 of the almost 51,000 pupils with an individual decision on special needs education received special needs education from a teacher. Half of them received between two and five hours a week. 22,600 of the pupils receiving special needs education received some lessons with a teaching assistant and some lessons with a teacher. Around 1,500 pupils only received lessons with a teaching assistant. Of the 24,100 pupils who received lessons from a teaching assistant, 60 percent received more than seven assistant lessons a week.

The use of teaching assistants was defined in the Education Act in August 2013. The Act states that personnel who are not employed in a teaching position may assist in the teaching if they receive necessary guidance and the pupil benefits sufficiently from the tuition. Personnel who are employed in order to assist with the teaching must not be given independent responsibility for ordinary tuition or for special needs education.

Dyssegaard et al. (2013) point out that teaching assistants have a positive effect on all pupils when they are trained to perform a specific duty and when they have a defined and planned role.

Figure 7.7 Pupils in primary and lower secondary with individual decisions on special needs education – by hours with teaching staff and hours with teaching assistant. 2013/14. Numbers.



Source: GSI/Norwegian Directorate for Education and Training

7.4 Organisation of pupils receiving special needs education

Inclusive education

Inclusive education is a fundamental principle in primary and secondary education. It means that all children and young people with different social backgrounds and with different ethnic, religious and linguistic affiliations should be met with trust and respect at school. The right to inclusive, good and free primary and upper secondary education is also enshrined in Article 24 of the UN Convention on the Rights of Persons with Disabilities.

In order for a school to be inclusive, it must organise and adapt the tuition to all pupils.

The organisation of pupils who receive special needs education outside ordinary classes

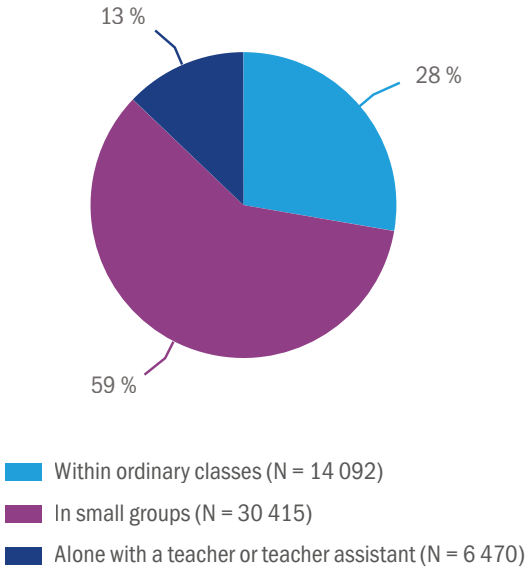
All pupils should belong to a core group or class, and spend enough time with this core group/class to feel a sense of belonging and stability. This also applies to pupils who receive special needs education.

Special needs education should be provided within the class or core group insofar as it is possible and appropriate. The individual child's decision on special needs education must describe how the tuition should be organised. Special needs education may be provided within the class / core group, in a separate group, or alone. Pupils who receive special needs education may also be affiliated with a group other than their class, or they may receive instruction in other, alternative learning environments.

Figures are available that tell us something about the extent of special needs provision outside ordinary classes:

- the number of pupils who receive special needs education alone with a teacher or teaching assistant or in small groups outside ordinary classes
- the number of pupils in dedicated units for special needs education
- the number of pupils on placements in alternative learning environments one day or more per week outside ordinary education

Figure 7.8 Pupils receiving special needs education within ordinary classes, in small groups, or alone with a teacher or teaching assistant. 2013/14. Percentage.



Source: GSI/Norwegian Directorate for Education and Training

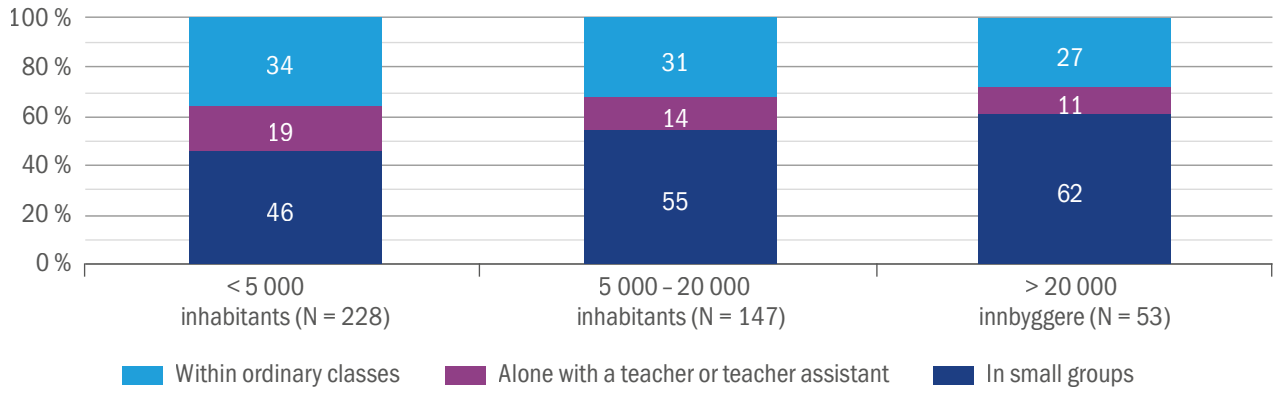
Almost three in four pupils with special needs receive special needs education outside of ordinary classes

Just under 51,000 pupils are receiving special needs education in the 2013/14 academic year. Of these, just over 14,000 (28 percent) are given special needs education within their ordinary class. The remaining 37,000 receive special needs education outside their ordinary class – either in small groups or alone. Of the 37,000 who receive special needs education outside their ordinary class, 4,000 are affiliated with a dedicated special needs unit and 33,000 are affiliated with an ordinary class.

We do not have figures that can ascertain how much of their school time these pupils spend outside their ordinary class.

There is a link between municipality size and the organisation of special needs education (Figure 7.9). In the smallest municipalities there are more pupils receiving special needs education in ordinary classes and fewer receiving tuition in small groups. In the smallest municipalities, more pupils also receive special needs education alone with a teacher or teaching assistant. Correspondingly, more pupils receive special needs education in small groups. One explanation for this is that small municipalities run small schools and subsequently do not have enough pupils to form separate special needs groups. There are however significant variations between schools irrespective of school and municipality size. This could suggest that other factors also play a part, such as the school's attitude towards including pupils with particular needs.

Figure 7.9 Pupils receiving special needs education within ordinary classes, in small groups, or alone – by municipality size. 2013/14. Percentage.



Source: GSI/Norwegian Directorate for Education and Training

Pupils in dedicated units for special needs education

The general rule is that pupils should receive tuition in their class / core group. Yet some pupils are affiliated with a dedicated special needs unit. These units may be separate special needs schools or dedicated special needs departments in ordinary schools.

In the 2013/14 academic year, just under 4,000 pupils are part of a dedicated special needs unit. This represents 0.6 percent of all pupils in primary and lower secondary and 8 percent of all pupils receiving special needs education. There are dedicated units in 351 schools.

In most schools, pupils in the dedicated special needs unit only account for a small percentage of all pupils. At 60 of the 351 schools, all pupils are part of a dedicated special needs unit. In addition, there are four schools where more than half of all pupils are part of the dedicated unit. Just over 1,400 pupils attend these 64 schools, which are in essence designated special needs schools.

The largest municipalities have most pupils in dedicated units

Large municipalities have the largest number of pupils in dedicated units (Figure 7.10). However, Figure 7.10 shows that in the largest municipalities, the proportion of pupils who belong to a dedicated unit ranges from 0.4 percent to 1.9 percent. One explanation for these variations is that some municipalities host intermunicipal schemes. There may also be differing attitudes towards inclusion and inclusive practices in schools.

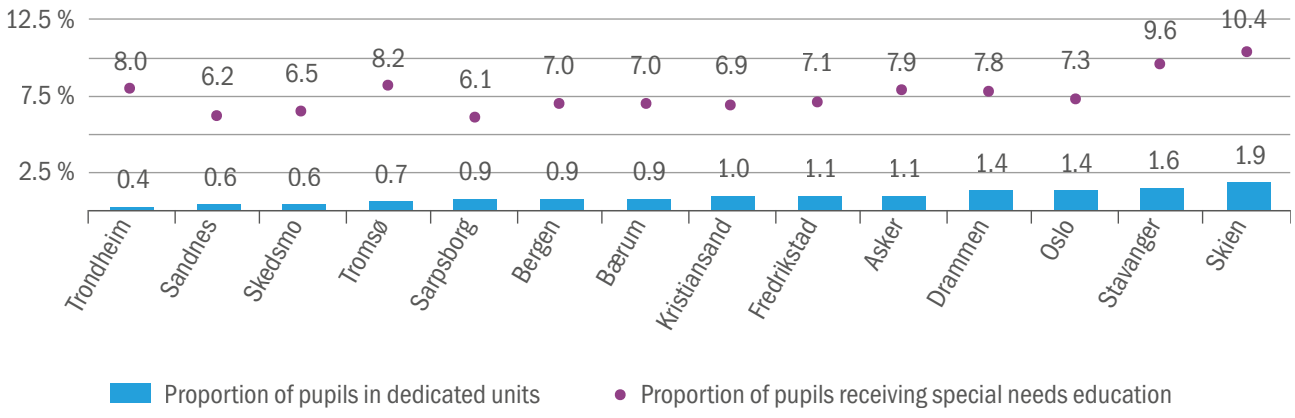
There is no clear link between the percentage of pupils in dedicated units and the extent of special needs provision. The municipalities Drammen, Oslo, Stavanger and Skien have the highest proportion of pupils in dedicated units whereas the proportion of pupils receiving special needs education in these municipalities varies from 7 percent to 10 percent.

Pupils in alternative learning environments

In addition to the 4,000 or so pupils in dedicated units in the 2013/14 academic year, there are just over 1,300 pupils on placements in alternative learning environments outside ordinary education one or more days a week. More than 80 percent of them are boys. These learning environments could involve outdoor pursuits, canteen work, agricultural activities, car workshops etc.

Schools have a limited scope for making use of alternative learning environments for special needs pupils, and any such provision must be stipulated in each pupil's individual decision on special needs education. Schools must consider whether an alternative learning environment is necessary in order for the pupil to benefit sufficiently from his or her education, based on his or her individual circumstances. They must also consider

Figure 7.10 Pupils in dedicated units and pupils receiving special needs education in the largest municipalities. 2013/14 academic year. Percentage.



Source: GSI/Norwegian Directorate for Education and Training

whether the arrangement would be in the best interest of the child.

Alternative learning environments are one of several measures available to schools in order to fulfil the principle of adapted tuition. The report "Den ene dagen" (Jahnsen et al. 2009) concludes that alternative learning environments can have a positive effect on pupils' motivation and well-being. At the same time, there are challenges in securing structure and continuity in the partnership between the school and the alternative learning environment. When a pupil spends one or more days a week in an educational setting outside school, it is crucial that the school is conscious of the pupil's learning outcomes, well-being and progress.

7.5 Special needs education in upper secondary

Pupils and training candidates in upper secondary education and training who do not benefit sufficiently from ordinary tuition are entitled to special needs education in the same way as pupils at the primary and lower secondary stages. This entitlement does not apply to apprentices, however.

Pupils may access special needs provision within ordinary study programmes, within an adapted or alternative study programme in school, or in workplace training.

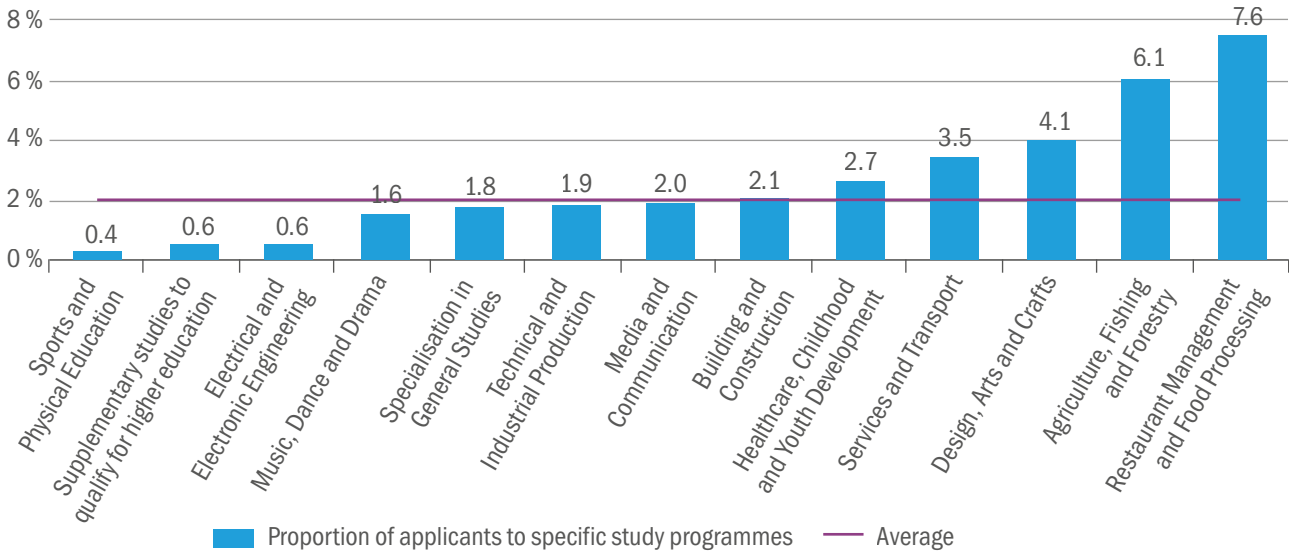
We can divide special needs pupils in upper secondary into two groups. One group consists of pupils aiming to obtain full qualifications and an ordinary diploma. The other group receives special needs education with a view to obtaining a lower level qualification – a so-called planned basic qualification. The Education Act refers to basic qualifications as any form of education or training that does not lead to full university or college admissions certification or to a full vocational qualification. Basic qualifications are documented in the form of a training certificate and may be planned or unplanned.

Enrolment of pupils with extensive special needs in upper secondary education and training

The provisions on enrolment in upper secondary education and training contained in the Regulations to the Education Act were amended in autumn 2013. They reintroduce the concept of preferential consideration of applicants with extensive special needs in cases where pursuing a particular study programme is critical to a pupil's chances of completing upper secondary education or training.

In addition to preferential consideration for specific study programmes, priority is also given to applicants with severely reduced functional ability, applicants entitled to

Figure 7.11 Applicants for a specific study programme. As at 1 March 2014. Percentage.



Source: Norwegian Directorate for Education and Training

tuition in or via sign language, and applicants who have been granted additional time to complete their studies.

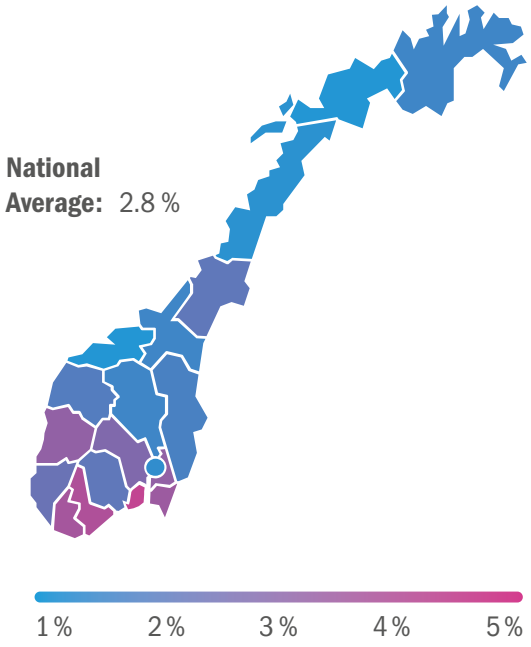
Applicant figures for upper secondary education and training in the 2014/15 academic year show that just over 4,200 applicants (2 percent) have applied for a specific study programme.

The programme for restaurant management and food processing and the programme for agriculture, fishing and forestry are the two study programmes with the highest proportion of applicants for a specific study programme.

The extent of special needs provision in upper secondary education and training

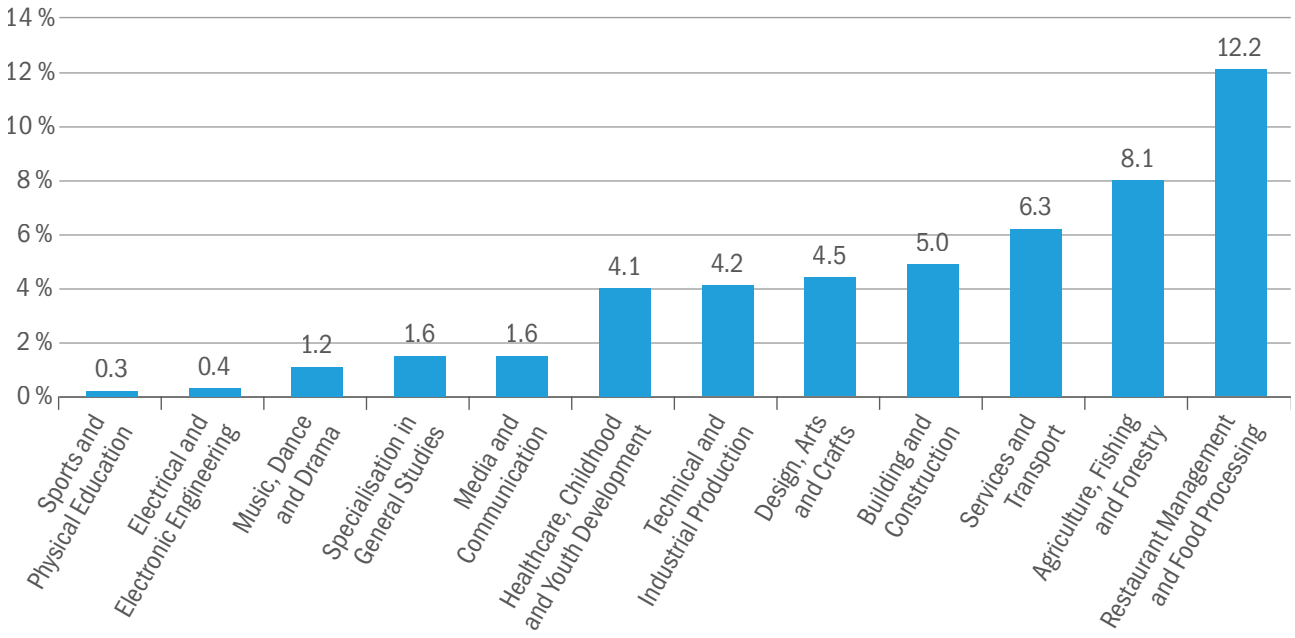
The Norwegian Directorate for Education and Training conducted a survey in spring 2012 asking the sector how many pupils were subject to individual decisions on special needs education. (Spørsmål til Skole-Norge, spring 2012). The replies showed that the proportion of pupils receiving special needs education ranged from 3.7 percent to 11.5 percent in different counties, with a national average of 6 percent. The percentage of pupils receiving special needs education thus seems to be lower in upper secondary than in primary and lower secondary school. Based on these figures, we can assume that almost 12,000 upper secondary pupils receive special needs education. This figure

Figure 7.12 Pupils registered with planned basic qualifications – by county. As at 1 October 2013. Preliminary figures. Percentage.



Source: Norwegian Directorate for Education and Training

Figure 7.13 People registered with planned basic qualifications – by study programme. As at 1 October 2013. Preliminary figures. Percentage.



Source: Norwegian Directorate for Education and Training

includes both pupils who aim to acquire a complete qualification, and pupils aiming to obtain a planned basic qualification.

A survey of pupils with functional disabilities in upper secondary education and training (Gjertsen and Olsen 2013) found that there are almost 11,000 pupils with reduced functional ability in upper secondary education and training and that 2,800 of them have developmental disabilities.

2.8 percent aim to obtain a basic qualification

A basic qualification is a qualification at a lower level than a full vocational qualification or university and college admissions certification. The pupil or training candidate receives training that is based around those subjects, or parts of subjects, that she or he is able to master. Some pupils make significant departures from the curriculum in all or most subjects, while for others it is a case of minor deviations from the ordinary curricula.

When completing their education or training, the pupils or training candidates are awarded a training certificate describing in which aspects of the subjects they have acquired skills.

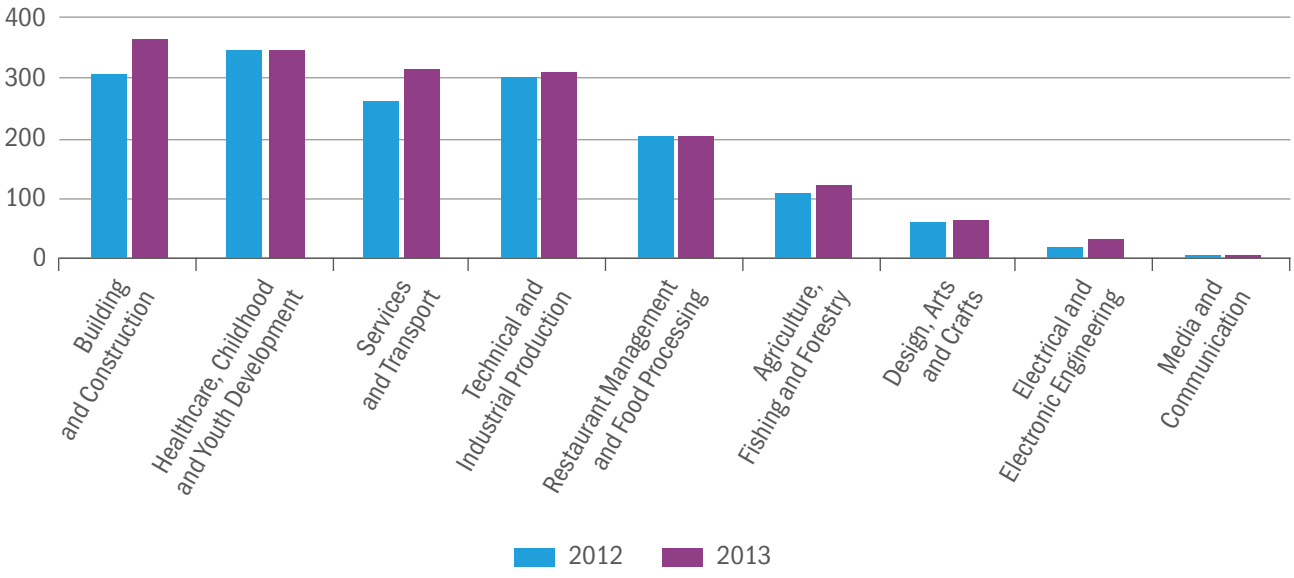
Just under 6,800 participants in upper secondary education or training had obtained a planned basic qualification as at 1 October 2013. 5,000 of them were pupils, and just under 1,800 were training candidates. In the country as a whole, 2.8 percent were studying for a basic qualification. This percentage varies from 1 to 5 percent across counties and is highest on the programme for restaurant management and food processing (12.2 percent) and the programme for agriculture, fishing and forestry (8.1 percent). The largest study programmes still have the highest number of people registered as studying for a planned basic qualification. On the programme for specialisation in general studies this involves 1,327 people, and on the programme for healthcare, childhood and youth development 1,030 people.

Organising special needs provision in upper secondary education and training

Of the 5,000 or so pupils studying for a planned basic qualification as at 1 October 2013, the majority (3,700 pupils) were given tuition in separate groups outside ordinary classes, a number that has remained stable over the last three years.

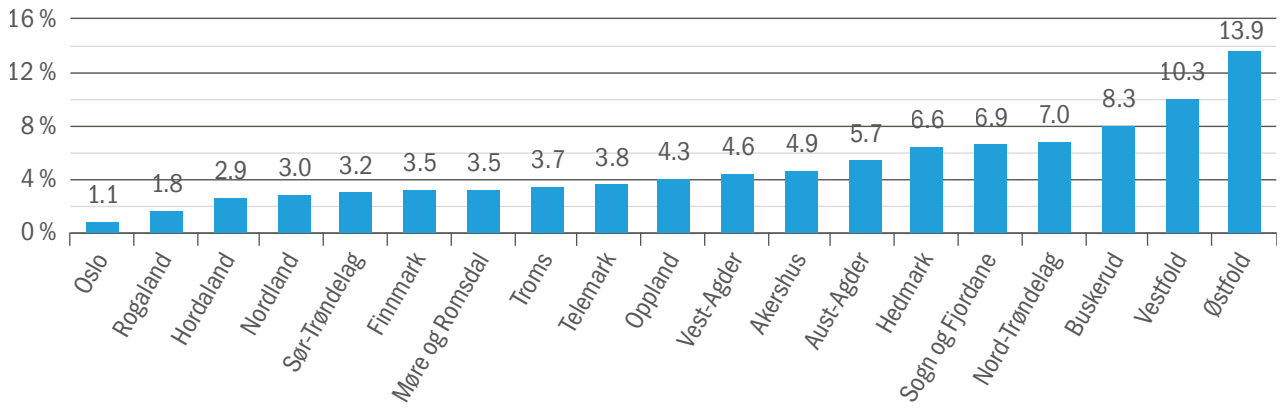
Of the 3,700 pupils registered as receiving tuition in separate groups, just under 2,100 have extensive special needs. These pupils often study in very small groups, and some of them have such severe special needs that they receive individual instruction by a teacher for some of the time.

Figure 7.14 Training candidates – by study programme. As at 1 October 2012 and 2013. Numbers.



Source: Norwegian Directorate for Education and Training

Figure 7.15 Proportion of training candidates among the total number of apprentices and training candidates – by county. As at 1 October 2013. Percentage.



Source: Norwegian Directorate for Education and Training

In their survey of pupils with functional disabilities in upper secondary education and training Gjertsen and Olsen (2013) found that special needs education is largely provided outside ordinary classes, depending slightly on the type of disability. This is particularly true for pupils with severe mental and physical disabilities (multiple disabilities). For pupils with motor, visual and hearing impairments it is more common to provide tuition with additional support within ordinary classes.

Training candidates

The main difference between an apprentice and a training candidate is the ultimate objective of the training. An apprentice must meet all the attainment targets in the curriculum, while a training candidate must reach some of the targets. There are sometimes significant variations in the degree to which training candidates are in a position to reach the attainment targets. It is also possible to convert a training candidate contract into an apprenticeship contract, and vice versa, during the study programme.

A training candidate will enter into a contract with a training establishment and sit an attainment test. This is a less extensive test than the apprenticeship and journeyman's examinations.

In 2013, there were just under 1,300 registered training candidates, an increase of 150 on the previous year. The greatest increase was on the programme for building and construction and the programme for services and transport.

The largest number of training candidates (350) enrolled on the programme for healthcare, childhood and youth development, and on the programme for building and construction. The programme for technical and industrial production and the programme for services and transport also had more than 300 registered training candidates in 2013.

There are considerable differences between counties as to the proportion of training candidates among the total number of training candidates and apprentices, varying from 1.1 percent in Oslo to 13.9 percent in Østfold (Figure 7.15). Some counties thus seem to use the training candidate scheme more actively than others, something reflected in the number of subsidy applications for apprentices and training candidates with special needs from individual counties.

Table 7.2 Subsidy applications for apprentices and training candidates with special needs. 2011–2013. Numbers.

Year	Total	Apprentices	Training candidates
2011	326	122	204
2012	528	194	334
2013	551	214	337

Source: Norwegian Directorate for Education and Training

Increase in the number of subsidy applications for apprentices and training candidates with special needs

A dedicated subsidy scheme has been put in place to encourage training establishments to offer apprentices and training candidates with special needs the opportunity to obtain a vocational qualification. The number of applications has risen in recent years, especially applications concerning training candidates. 551 applications were received in 2013, and subsidy applications for training candidates accounted for 61 percent of these applications. There are significant variations between counties. One county submitted only one application, while the most active county submitted 92 applications.

Around half of the applications concerned apprentices and training candidates on the programmes for technical and industrial production and healthcare, childhood and youth Development.

7.6 Research on special educational needs

Inclusion of pupils with special needs

A study carried out by Dyssegaard et al. (2013) collated results of international research and studied the effects of including pupils with special needs in ordinary tuition in primary and lower secondary. In brief, the study found that inclusion can have a positive academic and social effect on all pupils. The prerequisite is that teachers have adequate competence and access to special needs support staff. Using two teachers has a positive effect on all pupils contingent on one of the teachers having special needs training. The teachers should co-ordinate their teaching and take turns to assume the teacher role so that both of them teach and support all of the pupils. It is also imperative to the special needs pupils' academic and social progress that the school takes a positive attitude towards inclusion.

In a study into special needs education in upper secondary, Markussen et al. (2009) found that a sense of belonging with an ordinary class is important. Special needs pupils who are included in ordinary classes achieved better grades at Level Vg1 than pupils who are segregated in separate classes. Other than the potential social effects of inclusion, it is hypothesised that integrated special needs pupils are met with higher expectations when included in ordinary classes. Inclusion in ordinary classes is particularly effective for those with the best grades, i.e. those who achieved close to average grades in lower secondary. Markussen et al. (2009) also point out that the key factor is being affiliated with an ordinary class. It is not apparent that the inclusion of special needs pupils, or pupils who require additional help and support, has a negative impact on the other pupils.

High-quality teaching and special needs expertise are important

Mjøs (2007) writes that close co-operation between general teachers and special needs teachers appears to be a prerequisite for successful inclusion and adapted tuition for all pupils. Special needs competencies are considered to be particularly valuable when combined with ordinary tuition.

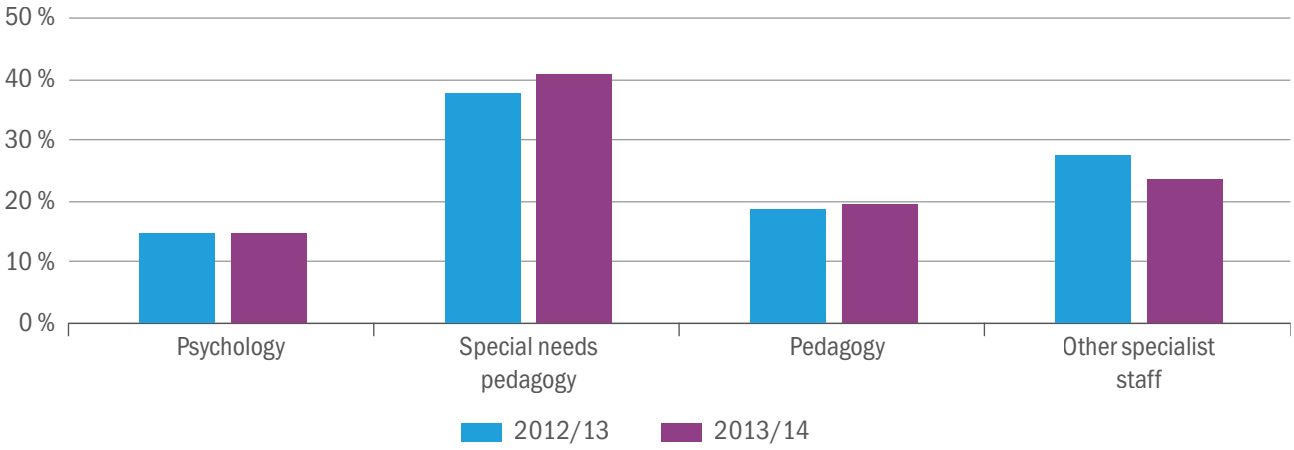
Egelund and Tetler (2009) demonstrate that the teachers' qualifications are vital to the outcome of special needs education. This is in line with other international research, which has shown that the teacher is the one factor with the greatest impact on pupils' learning (Hattie 2009). Many teaching assistants assume extensive responsibility for the tuition provided in individual subjects. Research suggests that not prioritising competent teaching staff in special needs education may render poorer outcomes than had the special needs competence been of a high level (Haustätter and Nordahl 2013)

Developing new knowledge in the field of special needs

The Research Council of Norway has allocated NOK 28 million to special needs research in the period 2014 to 2023 as part of its new research programme FINNUT. The research, which will commence in the summer of 2014, will help generate new knowledge about the factors that promote or impede inclusion in kindergartens and schools.

When looking at international research the special needs education field has according to Holck (2010) traditionally differentiated between different disabilities and diagnosis. Availability of research-based knowledge about the environmental factors that impact on individual pupils' learning is more limited. Identifying the factors that actually cause children and young people to learn, be happy and develop in line with educational objectives requires different skills and a different set of concepts. Unlike past practices, the aim is not to investigate and identify a diagnosis, function or problem, but rather to determine what creates good learning environments for everyone.

Figure 7.16 Specialist FTEs at the PPT – by specialism. 2012/13 and 2013/14. Percentage.



Source: GSI/Norwegian Directorate for Education and Training

7.7 The educational psychology service

Stability in the number of FTEs in the educational psychology service (PPT)

The educational psychology service (PPT) has a double mandate. It is responsible for producing expert assessments where the law demands it, both in respect of school pupils and children under compulsory school age (individual-based work). The service also has a statutory responsibility for contributing towards the development of competencies and organisational development in schools (system-based work).

A system-based approach means taking preventive action even before making a PPT referral. The PPT must assume the role of both organisational consultants and advisors, either at a school level or at a municipal level. Furthermore, the PPT can be more directly involved in assessing the individual outcomes of special needs provisions.

A survey of PPT competencies and skills (Hustad et al. 2013) found that specialist personnel at the PPT estimate that 80 percent of their time is spent on individual-based work such as writing expert reports and conducting tests or investigations.

Most employees have special needs training

In 2013/14 there were just under 1,700 FTEs covering specialist roles in the PPT. This figure is the same as in the previous academic year.

The most common academic background among PPT employees is special needs pedagogy. Personnel with special needs training filled around 695 FTEs, or 41 percent of all specialist FTEs in the 2013/14 academic year. This represents an increase of 3 percentage points, or almost 50 FTEs, on the previous year. 15 percent of PPT employees have a background in psychology.

Increase in the proportion of staff with Master's degrees

Three in four PPT employees held a Master's degree or equivalent in either psychology, special needs pedagogy, or teaching in the 2013/14 academic year. A survey of PPT roles conducted by Nordlandsforskning (Hustad et al. 2013) found the propor-tion of such specialist staff to be around 70 percent. This is an increase on 2008, when around 60 percent of specialist staff held a similar level of qualifications (Fylling and Handegård 2009). It would therefore appear that the proportion of employees with a Master's degree or equivalent continues to increase.

7.8 Statped – the government agency for special needs edu-cation

Local and regional authorities are responsible for ensuring that children and young people are given appropriate adapted tuition in an inclusive learning en-

vironment. Statped is charged with providing equitable services to municipal and county authorities that require assistance. Statped provides services in collaboration with the PPT but may also approach municipalities / counties directly to offer its services.

Statped possesses specialist expertise within six key areas:

- vision
- hearing
- deafblindness / combined loss of vision and hearing
- language/speech
- multiple learning difficulties
- acquired brain injuries

Statped services may be individual-based and/or system-based. Statped has introduced a dedicated case processing system that helps provide equitable access to services across the country. In 2013 the agency conducted almost 4,600 investigations and provided just under 5,400 consultancy and advisory services. It also received just under 2,000 applications for individual-based services and just over 800 referrals from organisations such as the specialist health service.

In 2013 Statped developed around 250 teaching aids and sold 3,200 teaching resources. The agency lent more than 50,000 audiobooks and produced 450 Braille books.

Statped employed 740 FTEs in 2013. Its specialist staff are educated to at least Master's level. Twenty-four employees hold doctorates, while a further 13 are currently studying for a doctorate.

Statped offers full-time training for deafblind people and Braille users as well as part-time training for sign language users. In the autumn of 2013 a total of 54 pupils were registered as enrolled in full-time training and 152 pupils in part-time training.

In order to improve special needs provision, a number of performance indicators are under development in several of Statped's areas of responsibility. Statped is also working with the higher education sector to help maintain, and further develop, skills and knowledge about special needs.

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Table of figures

Notes

Notes

“I highly recommend reading this year's Education Mirror. You are guaranteed to find enough information to form an opinion on kindergartens, primary and secondary education in Norway. Let the facts speak for themselves!”

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