

World Data on Education Données mondiales de l'éducation Datos Mundiales de Educación

VII Ed. 2010/11





Norway

Updated version, May 2012.

Principles and general objectives of education

The principle of equality in terms of educational provision has a long tradition in Norway, and the government's vision of society encompasses a nation of tolerance and mutual respect, a society free of discrimination, where citizens master the art of living together, and where everyone may feel included and safe, regardless of cultural origin, political conviction or religious belief. The government also has a vision of Norway as an advanced society, a knowledge society ranking among the best in the world, and a society able to make knowledge and competence available to all citizens, as well as to utilize the resources of all citizens.

High-quality education and training available to all is a basic precept of educational policy. Norwegian education policy is also based on the recognition that people's ability to receive and be motivated for new knowledge to a large extent depends on the content and quality of educational provision. The guiding principle for the 1990s has been to improve educational standards for the whole population by means of sector-wide improvement and consolidation of the system.

According to the Education Act of 1998, last amended in 2011, education and training in schools and training establishments shall, in collaboration and agreement with the home, open doors to the world and give the students and apprentices historical and cultural insight and anchorage. Education and training shall be based on fundamental values in Christian and humanist heritage and traditions, such as respect for human dignity and nature, on intellectual freedom, charity, forgiveness, equality and solidarity, values that also appear in different religions and beliefs and are rooted in human rights.

Education and training shall help increase the knowledge and understanding of the national cultural heritage and our common international cultural traditions. Education and training shall provide insight into cultural diversity and show respect for the individual's convictions. They are to promote democracy, equality and scientific thinking. The students and apprentices shall develop knowledge, skills and attitudes so that they can master their lives and can take part in working life and society. They shall have the opportunity to be creative, committed and inquisitive. The students and apprentices shall learn to think critically and act ethically and with environmental awareness. They shall have joint responsibility and the right to participate. Schools and training establishments shall meet the students and apprentices with trust, respect and demands, and give them challenges that promote formation and the desire to learn. All forms of discrimination shall be combated.

The Report No. 16 (2006-2007) to the *Storting* (e.g. the Parliament) states that every individual has a potential for learning, and the education system must ensure that this potential is utilized to the full amount, to the benefit of the individual and society. The education system shall give all individuals the same opportunities to obtain knowledge, skills and attitudes that are important for being able to living a



good life and become an active contributor in society. The education system shall, at the earliest possible time help, stimulate, guide and motivate each individual for 'stretching out' as far as possible to realize his or her learning potential regardless of his or her background. The education system should support each individual in formulating and realize their life projects to the benefit of the individual and the society. (MOER, 2008).

Laws and other basic regulations concerning education

Educational legislation has been revised in recent years as a consequence of the different reforms that involved all educational levels. Within the framework of the large-scale reform of upper secondary education (known as *Reform '94*), during the period 1994-1998 extensive changes took place, including among others: the introduction of a statutory right (although not an obligation) to three years' upper secondary education for all, with a corresponding obligation on the part of the regional authorities to provide an adequate number of places; the considerable reduction (from over 100 to fifteen) and a better coordination of foundation courses in order to provide a broad knowledge base for specialization and lifelong learning; and the coordination of school vocational training with apprenticeship training in the workplace.

Within the framework of the implementation of the Compulsory School Reform (known as *Reform '97*), compulsory education was extended from nine to ten years and the starting age was lowered from 7 to 6 years. On the basis of the 1998 White Paper on continuing education and adult education, known as the Competence Reform, the legal right for adults to primary, lower an upper secondary education was introduced in 2000, and the right for adults to have their practice and experience (e.g. their non-formal competence) assessed, documented and included as an integrated part of the formal upper secondary education was introduced in 2003. Following the publication of the White Paper in 2001, the implementation of the Quality Reform of Higher Education started in autumn 2003. The most important components of the reform have been the introduction of the three-cycle degree structure (three-year bachelor's, two-year master's, and three-year doctoral degrees) in line with the Bologna process, and the establishment in 2002 of a quality assurance agency, the Norwegian Agency for Quality Assurance in Education. As part of the reform, the Act of 1995 which regulated state universities and colleges was amended in 2001 and 2003, and finally a new Act was adopted in April 2005. The Knowledge Promotion Reform, introduced in 2006, covers the compulsory school and upper secondary education and training. It introduced changes in programme structure, organization and content of the individual subjects. As part of the reform, the new National Quality Assessment System is in charge of promoting quality development throughout primary and secondary education and training on the basis of a broad concept of quality.

The Education Act of 1969 provided for nine years of compulsory education for all (seven years of schooling had been compulsory since 1889). As a consequence of lowering the school starting age to 6 years, the period of compulsory education was extended to ten years instead of nine. In 1998, the government submitted a White Paper to the Parliament, proposing a common Education Act for primary, lower and upper secondary education. The **Education Act No. 61** of 17 July 1998, last amended



in May 2011, upholds the right and obligation to ten years of primary and lower secondary education, and the statutory right to three years of upper secondary education. This Act replaced previous legislation, e.g. the Act on Upper Secondary Education of 1974 and the Act on Vocational Training of 1980.

The Education Act stipulates that pupils with special needs are entitled to instruction offered in the compulsory school, and they are integrated into the ordinary ten-year compulsory school. Pupils who either do not or are unable to benefit satisfactorily from ordinary teaching have the right to special education (Section 5-1 of the Act). The municipalities are responsible for the education and training (both at the primary, lower and upper secondary levels) of children, young people and adults with special needs. Disadvantaged pupils may get up to five years of upper secondary education. Chapter 4 of Act regulates upper secondary apprenticeship. An amendment introduced in August 2000 gave adults statutory right to education at the compulsory school level and to upper secondary education. From 2003 adults were given the right to have their practice and experience (their non-formal competence) assessed, documented and included as an integrated part of the formal upper secondary education. Since August 2008, adults from the age of 25 who have not completed secondary education have a legal right to upper secondary education.

Pre-primary education is regulated by the **Kindergarten Act No. 64** of 17 June 2005, effective 1 January 2006, which has replaced legislation enacted in 1975, 1983 and 1995. The Act lays down rules and requirements for all pre-primary establishments, including requirements for staff in preschools. It states that the institutions shall take account of children's age, level of functioning, gender, and social, ethnic, and cultural background, including the language and culture of Sami children. An amendment concerning an individual, legal right to a place in kindergarten institution was introduced and put into effect in 2009. The Ministry of Education laid down the regulations providing a framework plan for the content and tasks of kindergartens on 1 March 2006. The regulations entered into force on 1 August 2006. The framework plan was recently amended by **Regulation No. 51** of 10 January 2011.

Adult education is regulated by the **Adult Education Act** of 28 May 1976, amended in 1991 and further revised in 2010. The Act states that the aim of adult education is to contribute to giving adults equal access to knowledge, insight and skills which will promote individual growth and encourage personal development, as well as strengthen the basis for independent achievement and cooperation with other people in work and community life. The Adult Education Act is characterized by the basic principles of redistribution and equal opportunity. This implies, *inter alia*, training for special target groups, such as people with insufficient basic education, heavy family obligations, and physical or mental disabilities. Training of special target groups is arranged by municipalities, counties, study centres and other voluntary organizations. Those parts of the Act which applied to primary and secondary education for adults have been included in the Education Act.

Folk high schools are regulated by **Act No. 64** of 8 June 1984. The Act states that folk high schools, in accordance with their traditions, shall promote general education at different ages and educational levels.



On the basis of the **Act** (*Introduksjonsloven*) of 2005, the majority of refugees and immigrants who get a residence permit in Norway have a right and an obligation to attend an introductory course of at least 300 hours of Norwegian and social science, covered by national funding. Municipalities where the refugee/immigrant settles down have the obligation to provide the introductory course within three months after settlement. The courses can comprise a maximum of 3,000 hours for persons with little or no schooling from their home country, and 850 hours for persons with a better educational background. Responsibility lies centrally with the Ministry of Children, Equality and Social Inclusion and locally with the municipalities.

The operation of private schools is regulated by the **Act on Private Schools No. 84** of 4 July 2003 (formerly the Act on Independent Schools, renamed in 2007), which replaced the Act on Private Schools of 1985. Recognition under this Act leads to state grants. Private schools can also be authorized under the Education Act, but no public funding is then available.

Act No. 22 of 1995 regulated state universities and colleges and ensured all public institutions of higher education the same degree of autonomy. The higher education system is now regulated by **Act No. 15 on Universities and University Colleges** endorsed on 1 April 2005 and last amended in 2009, which covers both public and private higher education institutions. Loans and grants to students are regulated by the **Act No. 37** of 3 June 2005. The organization of student welfare (i.e. student housing, canteens, day-care institutions) is regulated by the **Act No. 116** of 14 December 2007 entered into force on 1 August 2008.

The **Act on Postsecondary Vocational Education No. 56** of 20 June 2003, revised in 2007, regulates short (e.g. six months' to two years' duration) vocational training courses and programmes at the postsecondary non-tertiary level. In this Act, the term vocational denotes programmes leading to qualifications that can be immediately used in working life without further training. As a consequence of the 2007 revision, all providers must document quality assurance systems, and it is also possible to obtain institutional accreditation for programmes within a defined field of study, rather than having to apply for recognition programme by programme. Since January 2010, vocational colleges are administered by the counties. (Eurydice, 2009/10). The December 2010 amendments to the Act relate to the introduction of a national qualifications framework, to the recognition of prior learning, and to the use of credits. (CEDEFOP, 2011).

Teacher training for pre-primary, primary and secondary education was regulated by the Teacher Training Act of 1973, repealed in 1998. Provisions concerning teacher education are now under the Education Act of 1998 (e.g. teacher qualifications requirements), and in part under Universities Act of 2005. Following the Report to the *Storting* No. 11 (2008-2009), White Paper on Teacher Education (*The Teacher–The Role and the Education*), in May 2009 the Ministry of Education and Research (MOER) appointed a National Curriculum Committee in order to propose national guidelines for a new teacher education programme. After a consultation process, the **National Curriculum Regulations** for differentiated primary and lower secondary teacher education programmes for years 1-7 and years 5-10, as well as similar regulations for Sami teacher education programmes, were adopted by the MOER and entered into force on 1 March 2010. These new regulations



have repealed the former National Curriculum Regulations for general teacher education of 13 December 2005. Students following earlier curricula have the right to sit examinations in accordance with these until 31 December 2015.

Section 2-1 of the Education Act states that children and young people are obliged to attend primary and lower secondary education, and have the right to a public primary and lower secondary education. Children shall normally start to attend school in the calendar year in which they attain the age of 6 years. The right and obligation to attend school last until the pupil has completed the tenth year of schooling. Section 2-15 stipulates that pupils have the right to free public primary and lower secondary education. According to Section 3-1, young people who have completed primary and lower secondary education or the equivalent have, on application, the right to three years' full-time upper secondary education and training free of charge in publicly-maintained upper secondary schools or training establishments.

Section 6-2 of the Act stipulates that in Sami districts all children at the primary and lower secondary level have the right to receive their education both in Sami and through the medium of Sami. Outside Sami districts, Sami children at the primary and lower secondary level have the right to receive Sami instruction; this also applies to upper secondary education. The Sami are one of the largest indigenous people of Europe, traditionally inhabiting northern Norway, Sweden, Finland and the Kola Peninsula of Russia. The Sami population, which has its own Parliament and national flag, has been estimated to be between 85,000 and 135,000 across the whole Nordic region, roughly half of them living in Norway, including Oslo. The Sami language, which belongs to the Finno-Ugric family, is recognized as an official language. (MOER, 2008).

Administration and management of the education system

The government exercises its authority in matters of education through the **Ministry** of Education and Research (MOER, formerly the Ministry of Education, Research and Church Affairs). The Ministry has responsibility over the whole education system at all levels, including adult education, and administers higher education and research. It is also responsible for the policy issues. The legislative power lies with the Parliament, the *Storting*. Consequently, the *Storting* sets the principal objectives of education. The Minister of Education is assisted by two State Secretaries, one responsible for policy matters relating to kindergarten, primary and secondary education and training as well as adult education, and the other for policy related to research and higher education. In 2012, the MOER comprises the following departments/directorates: early childhood education and care; education and training; higher education; policy analysis, lifelong learning and international affairs; research; governance and finance; administration and development; and the communication unit.

Until 2005, childcare institutions were under the responsibility of the Ministry of Children and Family Affairs. The provision of childcare services is the responsibility of the municipalities; most of the services are provided by private organizations under municipal supervision. The government covers part of the annual costs of all approved private and public institutions. The remaining costs are shared



between the municipality and the parents. The municipality decides whether it wishes to subsidize private institutions. The Ministry of Children and Family Affairs was transformed into the Ministry of Children and Equality (currently, the **Ministry of Children, Equality and Social Inclusion**) on 1 January 2006 and since then the responsibility for nurseries and preschools has been transferred to the MOER under its **Department of Early Childhood Education and Care**.

The Norwegian Board of Education, established with effect from September 2000, was a national centre for the education sector, replacing the former National Centre for Educational Resources and the National Examination Board. The Board had also other functions, i.e. operative responsibility for curriculum development, educational research and development work, certain topics related to information and communication technology (ICT) in education, examinations in lower and upper secondary schools, and certain tasks related to information. It was replaced by the Directorate for Education and Training in 2004.

The objective of the **Directorate for Education and Training**, the executive agency of the MOER established on 15 June 2004, is to ensure that all pupils and apprentices receive the high quality education they are entitled to. The Directorate is responsible for: the development of primary and secondary education (since January 2012 also for pre-primary education); supervising education and the governance of the education sector, as well as the implementation of educational legislation and regulations; managing the Norwegian Support System for Special Education (Statped), state-owned schools and the educational direction of the National Education Centres; compiling national statistics concerning primary and secondary education and on the basis of these statistics initiating, developing and monitoring research and development. The Directorate is also responsible for the National Quality Assessment System (NQAS) for primary and secondary education. The system is based on a broad concept of quality, where information about four areas (learning results, learning environment, resources, and pupils' progress) provides the basis for follow-up and improvement. The Directorate has operational responsibility for curriculum development, educational research and development work, national examinations and assessment, topics related to ICT in education and a number of tasks related to information.

The Directorate has also the overall responsibility for inspection in the education sector. Inspection of private school is carried out by the inspection department of the Directorate, while the County governor offices conduct inspections of public schools. Since 2006, the Directorate coordinates a national inspection that is carried out by all the County governor offices on a yearly basis. (Directorate for Education and Training, January 2011).

Decentralization of decision-making has been a general trend in education since the late 1980s. The professional autonomy of the individual schools and institutions of higher education has gradually increased. A major step in the direction of decentralization for the primary and secondary levels was made by the introduction of a new sector grant system in 1986, in which local and regional authorities receive a lump sum covering all central government subsidies for school education and culture, as well as the health service. As a consequence, the municipalities and counties enjoy greater autonomy as regards educational provision. The country is divided into 19



counties, or regional administrative units, and 430 municipalities; they have different responsibilities as regards education. The **municipalities** are responsible for administering early childhood care and education, primary and lower secondary schools as well as adult education within their jurisdiction. The local authority dealing with education is the municipal council. The municipality is responsible for the building and maintenance of school buildings, and for appointing the teachers. The **counties** are responsible for upper secondary education and vocational education and training for adolescents and adults. The county is responsible for the running of the schools, the intake of students, the appointment of teachers, and coordinates examinations.

Kindergartens are owned either by the local authorities or different private companies, volunteer organizations, etc. Public schools are owned and run by the municipalities and counties, respectively, but the costs are covered by the central government. Both counties and municipalities report directly to the national level. A County Governor represents the government in each county and is the state representative, covering all levels of education except higher education. In all the 18 Counties governor offices there are separate departments with duties related to the education sector, including inspection. The County governor's office controls the kindergartens, delivery and results of compulsory and upper secondary (both general and vocational), including adult education. The office also has to carry out inspections on a regional level, involving the municipalities and county municipalities. Most counties have a County Education Committee, appointed by the County Council, which is responsible for running schools according to current laws and regulations, and for adult education at the upper secondary level. The County Vocational Training Board provides advice concerning strategies for quality development in the vocational education system in the county, and evaluates the system of quality assurance. The Board is also responsible for securing the attainment of qualifications in vocational education and promotes cooperation between schools and the regional labour market. Municipal Councils appoint the Municipal Education Committee. According to the Education Act, each municipality and county is obliged to have a body (e.g. PPT) that provides educational and psychological counselling services to kindergartens and schools. Municipalities and counties can organize the PPT jointly. The main function and responsibility of the PPT is to assist children, young people and adults that experience a difficult social or educational situation. PPTs in general employ specialists with background from psychology, pedagogic, speech therapy or similar. (MOER, 2008; Eurydice, 2009/10).

The State, through the Ministry of Education, has the overall responsibility for higher education. Traditionally, a large part of the administrative responsibility has been delegated to the individual institutions in the university sector, whereas the non-university sector until the end of 1995 was administered more directly by the central authorities. With the introduction of the 1995 Act concerning universities and colleges, the non-university sector (the state colleges and, from 1997, the art colleges) has been accorded the same administrative responsibilities as the universities. The Network Norway Council, established at the beginning of 1998, was an advisory body to the Ministry of Education on issues regarding higher education, in particular quality assessment and recognition. It was replaced in 2002 by a new Agency (NOKUT).



The universities and the specialized institutions of higher education are represented in the Norwegian Association of Higher Education Institutions, created in 2000 from the former independent councils of the university sector on the one hand, and of the university colleges on the other. Its aim is to coordinate the activities of the member institutions, and to contribute to a national policy on higher education. The Norwegian Agency for Quality Assurance in Education (NOKUT) was established in 2002 and commenced its activities on 1 January 2003. The Agency is an independent government body. Through evaluation, accreditation and recognition of quality systems, institutions and course provisions, the purpose of NOKUT is to supervise and help to develop the quality of higher education in the country. The establishment of NOKUT is part of the general reform of higher education known as the Quality Reform, fully implemented from autumn 2003. Through the reform, a three-cycle structure in accordance with the Bologna process started to be introduced in 2003/04. (Eurydice, 2007). All accredited higher education institutions are subject to accreditation control through a system of institutional audits, running in cycles of five years. The emphasis is on the institutions' own quality assurance systems and the information about actual educational quality that these provide. A second stage in the control mechanism is the possibility of a more detailed scrutiny of individual programmes by the NOKUT where appropriate.

Until the early 1990s, a characteristic feature of the Norwegian education system was a large number of advisory bodies concerned with specific types of education. Through a comprehensive revision of the education sector, the majority of these bodies were dissolved as of 1 January 1992, with the exception of the **National Council for Vocational Education and Training**, the **Sami Assembly** (Department of Education), and the **National Parents' Committee** for primary and secondary education, all placed administratively under the Directorate for Education and Training. There are also nine **Vocational Training Councils**, one for each vocational training programme at upper secondary level, providing advice on training in specific groups of trades. Trade-specific examinations boards are situated in each county. The certification of postsecondary vocational training leading to the qualification of master craftsman is administered by the **Master Craftsman Certificate Committee**, Ministry of Industry and Trade.

The Norwegian Agency for Lifelong Learning (VOX, previously the Norwegian Institute for Adult Learning), established with effect from January 2001, replaced three earlier institutions, i.e. the former Norwegian Institute of Adult Education, the Norwegian State Institution for Distance Education, and the State Adult Education Centre. The Agency's mission is to contribute to supporting active citizenship, improving employability and increasing participation in education. VOX administers governmental subsidies for the operational costs of study associations, distance learning institutions and study centres (e.g. institutions providing adult education belong to the private grant-aided sector). It contributes to the development of provision for individually adapted training in literacy, numeracy, ICT skills and oral communication skills for adults. In cooperation with education providers and enterprises, VOX develops methods based on established competence goal descriptions for adult basic skills, including further education options and continuing professional development for teachers and facilitators in this field. VOX is also in charge of curricular and pedagogical issues relating to the teaching of Norwegian and socio-cultural orientation to adult immigrants. It monitors the implementation of the



curricula and the national tests, initiates research and development and disseminates information to stakeholders in the field. From January 2011, a new National Unit for Career Guidance established within VOX cooperates with the Directorate for Education and Training in the field of recognition and validation of non- formal and informal learning. Finally, the Agency carries out research, analyses, reports and evaluations in the field of lifelong learning and contributes to the body of statistical evidence on adult learning.

Folk high schools are boarding schools; most schools are private, run by religious organizations or independent foundations, and only a few are run by the counties. The **Council of Folk High Schools** coordinates activities and provides a link to the authorities. The folk high schools provide education for young people and adults; courses do not result in formal qualifications. Most schools offer one-year courses (covering 33 weeks), or half-a-year courses. Many shorter courses in a variety of subjects are also offered, but most schools specialize in a certain field. The boarding costs are covered by a fee paid by the participants and by state grants.

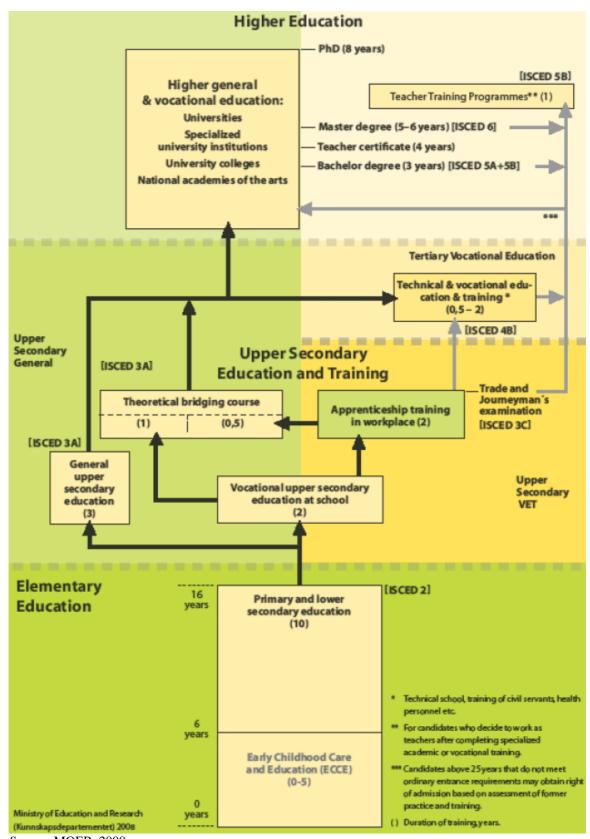
The administration and management of schools and institutions varies according to their level in the education system. The municipality/county administration influences the extent of self-governance in schools/institutions in the municipality/county. The day-to-day management of pre-primary institutions (kindergartens) is the responsibility of the **head teacher**. A **Coordinating Committee** consisting of representatives of parents, staff and owners, report and discuss important matters concerning the running of the institution. The Coordinating Committee shall establish an annual plan for the educational activity of the institution. In primary and secondary schools the head teacher is responsible for both the administrative and pedagogical aspects of running the school. In addition, depending on the size of the school, the staff of a primary/secondary school comprises 1-2 assistant head teachers, 1-2-pupil counsellors, 1-2 social teachers, and 1-4 administrative staff. A school may have a Management Board to assist the head teacher in the management of the school. In primary/lower secondary schools the School Board comprises representatives of the parents, the pupils, and the teaching personnel, other personnel and local municipal authorities. The head teacher is the secretary of the School Board. In upper secondary schools, there are similar boards.

The MOER is responsible for all higher education institutions, with the exception of those of the police and the military sectors administered by the Ministries of Justice and Defence respectively. For the state institutions, the administrative and organizational structure is laid down in the Act on Universities and University Colleges (2005). A Board with external representatives is the highest governing body of the state higher education institutions. These institutions cannot be instructed as to the content of their teaching, research or development work.



Structure and organization of the education system

Norway: structure of the education system





Pre-school education

Although pre-primary education is not compulsory, most of the children aged 1-5 and the majority of the 3- to 5-year-olds have a place in kindergarten. Kindergartens provide care and education for children aged 0–5. Parents normally pay a monthly fee. Early childhood education and care is since 2005 part of the education system. Since the beginning of 2006, kindergartens are under the overall responsibility of the Ministry of Education and Research.

Primary and lower secondary education (compulsory school)

Children enrol in compulsory education at age 6. Primary education, or the first stage of compulsory education, covered grades 1 to 6 (age group 7-13) up to 1996. After the Reform '97, it has been divided into two cycles, i.e. lower primary (grades 1 to 4, age group 6-9 years) and upper primary (grades 5 to 7, age group 10-12). Following the Knowledge Promotion Reform of 2004, the primary stage now comprises grades 1 to 7 (age group 6-12 years) with no division into cycles. A national test for assessing basic skills is administered in grade 5 (reading in Norwegian, English and mathematics) as part of the National Quality Assessment System (NQAS). Since 2007/08, grade 2 pupils sit a compulsory mapping test in reading skills and a compulsory mapping test in arithmetic. A compulsory mapping test in reading skills for grade 1 pupils and a voluntary mapping test in arithmetic for grade 3 pupils, were introduced in spring 2009. A compulsory mapping test in reading skills for grade 3 pupils has been introduced in 2010. There is also a voluntary mapping test in English in grade 3. Lower secondary education is the second stage of compulsory schooling and comprises grades 8 to 10 (age group 13-16). A national test is administered in grade 8 (reading in Norwegian, English and mathematics) as part of the NQAS; a national test in reading and mathematics in grade 9 has been introduced in 2010/11. At the end of grade 10, students sit the national examinations which include a centrally-set written exam (marked externally) in Norwegian or mathematics or Sami/English, and an oral examination organized locally. Successful students receive a certificate indicating the subjects taken, the latest marks for the year's work and the examination results. All students having successfully completed lower secondary school are entitled to three years of further (post-compulsory) education at upper secondary level.

Secondary education

Students normally start upper secondary education at the age of 16. General studies programmes normally takes three years to complete and lead to the general university admissions certification. Although some vocational programmes last three years, vocational education and training normally last four years (e.g. two years in school, one year as apprenticeship training in a training establishment, followed by one year of productive work). Upon completion of the vocational programme students receive trade or journeyman's certificates. Since autumn 2009, students sit a compulsory test in mathematics skills in the first year of upper secondary education; in autumn 2010 a compulsory test in reading skills and a voluntary test in English were also introduced. Vocational (postsecondary) technical colleges under the Act of 2003 are considered as part of upper secondary education and offer training programmes lasting between a minimum of six months to two years, building upon upper secondary education or a



similar level of qualification through recognition of prior learning. Completing twoyear technical postsecondary vocational education and training qualifies for general admission to higher education. Holders of a trade or journeyman's certificate with several years of professional experience can enrol in training programmes leading to a master craftsman certificate in over 70 different crafts.

Higher education

Higher education institutions under the Act of 2005 are degree-awarding institutions. These include universities, university colleges and colleges/academies of the arts and specialized university institutions (e.g. higher schools); military colleges and the police university college are not under the Ministry of Education. The universities offer degree programmes at three levels in the humanities, social and natural sciences. Under the former system, the lower university degree (cand. mag.), was normally obtained after three and a half to four years of full-time study. Higher degrees such as cand. philol. (humanities), cand. scient. (natural sciences), and cand. polit. (social sciences), usually required two additional years of study. Doctoral degree programmes normally lasted three years after completion of the higher degree, leading to the degrees dr. artium (humanities), dr. scient. (natural sciences), and dr. polit. (social sciences). A traditional general doctoral degree (dr. phil.) can also be conferred to graduates without formal research training or required studies on the basis of a dissertation, two trial lectures and a public defence of the dissertation. The university colleges (formerly regional colleges and vocational colleges) offer traditional vocational studies, other vocationally-oriented programmes, and university studies. They mainly offer three-year professional bachelor's degree programmes (in engineering, nursing, social work, etc)., and also professional programmes of varying lengths from one to five years, including teacher training (four years' duration) and business administration (two years). Most university colleges also offer some master's degrees and a few also offers doctoral programmes. After the endorsement of the Quality Reform of Higher Education (2002), implemented since autumn 2003, higher education institutions started offering three-year bachelor's degree (equivalent to 180 European Credit Transfer System-ECTS), two-year master's degree (120 ECTS including an independent research work), and three-year doctoral degree programmes in accordance with the Bologna structure. Exceptions are the university college twoyear degree programmes (college candidate), five-year consecutive master's degrees (in dentistry, pharmacy, secondary school teacher education), six-year professional programmes (in theology, psychology, medicine and veterinary science), master's degrees of one to one and a half year's duration, four-year bachelor's degrees in performing music and performing arts, and four-year teacher education programmes.

Section 2-2 of the Education Act indicates that the time allocated to teaching shall not be less than 38 weeks within a framework of 45 consecutive weeks during the school year. The school year for the primary and lower secondary schools consists of 38 teaching weeks (190 days) for pupils and 39 weeks for teachers. The school week comprises five days. The organization of school time at the compulsory and upper secondary level is primarily the responsibility of the local school administration. In 2000/01, the minimum number of teaching hours per year was 570 hours at age 7; 770 hours at age 10; and 855 hours at the lower secondary level. In 2011/12, the minimum total number of teaching hours is 5,234 hours in grade 1-7 and 2,566 at the lower secondary level (grades 8-10). Many municipalities offer more



teaching hours than the required minimum. (Eurydice, 2011). At the upper secondary level all students have between 30 and 35 teaching hours a week over the 38-week school year; small variations are found between courses. (Eurydice, CEDEFOP & ETF, 2009/10).

The academic year is divided into two semesters and starts in mid-/late August and ends by the end of June (mid-summer) throughout the whole education system. In primary and secondary education, the normal school holidays are one week in October (autumn vacation), two weeks at Christmas, one week in February/March (winter vacation), and one and a half weeks at Easter.

The educational process

Curricula are national, regulatory instruments that supervise education providers as regards education content, hereby contributing to ensuring common certification standards and inform potential employers and other education institutions about the expected knowledge and skills levels of the candidates. (MOER, 2008).

The Ministry of Education and Research is formally responsible for curriculum planning and design as well as for the practical implementation of curricula at the primary and secondary level. However, in September 2000 the Ministry transferred this task to the National Board of Education, and then to the new Directorate for Education and Training, which replaced the Board in June 2004.

During the 1990s, education has become a priority area of the political debate due to the impact of increasing technological, economic and social change, and new demands on competence and qualifications. Within the framework of the implementation of the Compulsory School Reform (*Reform '97*) the scope of school activities was expanded, schools were given greater responsibility for the growth environment of children, compulsory education was extended from nine to ten years and the starting age was lowered from 7 to 6 years. A new curriculum for primary and lower secondary education was developed, defining the principles, guidelines and subject syllabi for the new ten-year compulsory education programme. Many of the general principles defined in the earlier curriculum guidelines were retained, such as: the teaching shall be based on fundamental Christian and humanistic values; there shall be a good cooperation between home and school, based on equality and mutual respect; a suitably adapted education shall be offered to all pupils; subject matter shall be adapted to local conditions at municipal, school and class levels; and there shall be a diversity of teaching methods.

The common Core Curriculum aims at coordinating the principal objectives of education as stated in the relevant Acts of Parliament, and underlining how the different stages of education are linked together by common goals. These common goals were thus identified, and divided into six groups: moral outlook, creative abilities, work, general education, cooperation, and natural environment. Based on these common goals, the Core Curriculum formulates the objectives of education by drawing a picture of the human personality in its various characteristics (the spiritual, creative, working, liberally-educated, social, environmentally aware, and integrated human being), all of which should be stimulated and encouraged by the educational



process. In accordance with the Core Curriculum, education should promote an integrated development of the skills and qualities that allow one to behave morally, to create and to act, and to work together and in harmony with nature. Education shall contribute to giving the individual the strength to take responsibility for his or her life, to make a commitment to society, and to care for the environment, thus thinking and acting as an integrated human being. The ultimate aim of education is thus to inspire individuals to realize their potential in ways that serve the common good in a society in development.

The new curriculum for the ten-year compulsory school implied a significant renewal of the content of primary and lower secondary education. It is based on and consolidates the principle of an inclusive school, 'one school for all'. It places greater emphasis on common subject matter, while giving room for local and individual adjustments. Suitably adapted education is an overarching principle in the compulsory school. Together with the national curriculum a specific Sami curriculum was developed and adopted, and the two curricula are equal as to status.

The Core Curriculum has been retained as the general part of the National Curriculum within the framework of the Knowledge Promotion Reform. This reform focusing on primary and secondary education as well as teacher training is based on the White Paper Culture for Learning issued in April 2004. The implementation of the reform started in 2006/07, and introduced changes in programme structure, organization and content of the individual subjects. The National Curriculum for Knowledge Promotion (2006) includes the general part of the Core Curriculum of 1993, the Quality Framework (which comprises the 'learning poster'), subject curricula, and a framework regulating the distribution of periods/hours and subjects. With regard to the latter, municipalities and county authorities may reassign 25% of the teaching hours for a given subject to improve each pupil's access to differentiated education.

The Core Curriculum constitutes the binding foundation and common core for basic education and training at all levels. It describes the fundamental values and principles of a democratic education system and the role of education in society as a whole, taking the various types of individual, human needs and rights as the general point of departure.

The Quality Framework consists of the principles that clarify the responsibility for education and training establishments and their owners (municipalities and counties) to organize and adapt the teaching processes in order to ensure the optimal development of broad competences among pupils and apprentices. The Framework summarizes and elaborates on the provisions in the Education Act and its regulations, including the national curriculum. It is an integral part of the foundation on which the quality of primary and secondary education and training can be further developed and on which the school and apprenticeship-training enterprise can be systematically assessed. Principles and objectives anchored in the Education Act and the Core Curriculum are assembled in the 'learning poster', which forms part of the Quality Framework. The learning poster includes eleven basic commitments, mandatory in all primary and lower secondary schools as well as in upper secondary schools and apprenticeship training work places. All schools and apprenticeship-training enterprises shall:



- Give all pupils (including apprentices and trainees) an equal opportunity to develop their abilities individually and in cooperation with others.
- Stimulate pupils' motivation, perseverance and curiosity.
- Stimulate pupils' development of their own learning strategies and of their capacity for critical thought.
- Stimulate pupils' personal development and identity, and assist them in the development of ethical, social and cultural competence, and democratic understanding and participation.
- Encourage pupil participation, and enable pupils to make conscious value judgments and decisions on their educational needs and future work.
- Promote adapted teaching and varied working methods.
- Stimulate, use and further develop the competence of each teacher.
- Help teachers and instructors being evident leaders and role models for children and young people.
- Ensure that the physical and psychosocial learning environment promotes health, well-being and learning.
- Facilitate cooperation with the home and ensure parents'/guardians' coresponsibility in the school.
- Ensure that the local community is involved in education in a meaningful way.

The subject curricula define learning outcomes (all described as learning outcome-based competence objectives) for pupils and apprentices upon completion of grade 2, 4, 7 and 10, as well as upon completion of each year of upper secondary education. Continuity and coherence in learning outcomes are emphasized in the subject curricula for consecutive years. Basic skills are integrated in all subjects from grade 1. Decisions on how to organize and adapt teaching and on selection of instructional methods are made locally. Each subject curriculum has been developed by a curriculum team and been subject to a broad consultation process that has involved schools, school owners and the social partners. The objective of each subject describes in which way the subject can contribute to the pupil/apprentice's competence development in a lifelong learning perspective. The main areas within each subject curriculum describe the central content or functional area along which lines the subject is structured, and which are the basis of the formulation of the competence aims. These are the cornerstones of the curricula, contain the learning objectives for the pupil/apprentice and are formulated so as to describe what the pupil/apprentice must master with regard to the knowledge and skills they have developed. (CEDEFOP, 2011).

The Knowledge Promotion reform does not represent a major change in fundamental political principles or objectives. But it emphasizes more strongly than before the development of basic/core skills at an early stage. These basic skills are: the ability to express oneself orally; the ability to read; numeracy; the ability to express oneself in writing; and the ability to use digital tools. These basic skills have been incorporated into the subject curricula for all subjects, starting in grade 1. All teachers are thus responsible for facilitating the acquisition of these skills through their work with the various subjects. The basic skills will enable the learners to participate actively and constructively in the competitive knowledge society and prepare them for lifelong learning.



The greater emphasis on basic skills does not imply that the development of social and cultural competence and democratic values and attitudes should get less attention. These aspects are elaborated in the Core Curriculum and the Quality Framework. The Framework emphasizes that a clear value base and a broad cultural understanding are fundamental elements of an inclusive social community and of a learning community where diversity is acknowledged and respected. Such a leaning environment encourages cooperation, dialogue and differences of opinion. The pupils shall participate in democratic processes, thus developing their democratic ideals and understanding of the importance of active and committed participation in a multicultural society. To develop the pupils' social competence the school and apprenticeship-training enterprise shall ensure that pupils are trained in various types of interaction and problem and conflict solving when working on their subjects and in the enterprise. Education shall help to develop the sense of social belongingness and mastering of various roles in society, working life and leisure activities. To develop the pupils' cultural competence for participation in a multicultural society the education shall enable them to acquire knowledge on different cultures and experience of a wide range of forms of expression. Education shall promote cultural understanding and develop self-insight and identity, respect and tolerance. The pupils shall also have the opportunity to use their creative powers through varied activities and forms of expression. This can lay the basis for reflection, emotions and spontaneity. The Framework also considers other important aspects, such as learning strategies, motivation to learn, and pupil participation.

The reform included the development of new subject curricula in all subjects at all levels, mutually adapted between the levels so as to form coherent learning paths. Instead of overloading the curricula with detailed descriptions of themes and issues to be included in the lessons, the new subject curricula contain clear objectives specifying what pupils should know and be able to do by the end of each grade. In general, the new subject curricula are relatively ambitious and the goal achievements of the learners will thus vary. It is the challenge and duty of the teacher to stimulate and facilitate optimal learning by each individual learner through the targeted use of differentiated teaching. The curricula give no instructions regarding teaching materials and organization of classroom instruction. These are decisions that must be taken at local level by professionals who know the learners and the learning environment.

All changes in curricula under the Knowledge Promotion Reform were followed by the development of similar curricula for the Sami people. This was done in close collaboration with the Sami Parliament. The Sami curricula today are more or less similar to the Norwegian. For some of the subjects, for instance mathematics, the two curricula are identical. In other subjects, such as history, the Sami curriculum gives more space for the history of the Sami people. Sami language is a special subject, which can be chosen either as their first or second language.

The reform encourages greater variations in learning methods and learning arenas, more practical learning and more collaboration between schools and external institutions and enterprises. This will give the pupils insight into different working processes, practical working experience and knowledge about working life. It will furthermore contribute to giving the pupils a better basis for making an informed choice of further education and future profession or vocation. (MOER, 2008).



"One of the pervasive points of discussion in the meetings of the OECD review team with education stakeholders was the absence of clear statements of learning goals and expectations that could guide teaching and assessment practices and bring more consistency. The localized nature of Norwegian education means that the agreed national competence outcomes for student performance are quite broad and there are no descriptions of expected learning progress through the curriculum. The subject curricula define competence aims at key stages of education (Years 2, 4, 7 and 10 and each year of upper secondary education), but the intermediate learning goals and the more specific teaching content, methods and grading criteria are expected to be developed a the local level. While the Directorate for Education and Training also provides curriculum guidelines, experience from several projects indicates that many teachers find it difficult to translate these competence aims into concrete lesson plans, objectives and assessment activities. The broad competence goals have the advantage of giving teachers ownership in establishing their teaching programme, but there seems to be a need for more structure for a substantial number of teachers. Many stakeholders interviewed by the OECD review team referred to the need for clearer learning goals or standards to provide a comprehensive picture of what students should know and be able to do, which can serve as visible reference points for students, teachers, school leaders, policy makers and test developers. The learning goals should be specific enough to enable the establishment of an interdependent relationship among curriculum, instruction and assessment." (OECD, September 2011).

In 2007, the Directorate for Education and Training implemented a package of measures intended to clarify rules and regulations, increase assessment competence at all levels, make assessment practice more relevant and fair, and improve the system for documenting formative and final assessment. The project Better Assessment Practices was part of the package of measures implemented for the period 2007-2009. All documentation for this project shows that systematic work with subject curricula and assessment makes it easier to understand the curricula and carry out assessments based on the competence aims. Nevertheless, it is challenging to evaluate a student's competence, and it is important to improve the quality of feedback students receive and to bolster student participation in assessment work. The Better Assessment Practices project is being followed by a four-year national campaign directed at assessment for learning, which began in 2010. The objective of this campaign is to improve assessment practices and competence among teachers and instructors by working with assessment as a tool for learning. Moreover, examples of characteristics of goal attainment are being made as part of the guidelines to the subject curricula. The school development programme called Knowledge Promotion – From Word to Deed (2006-2010) has also helped develop competence in assessment. These initiatives have inspired work focused on improving assessment practice and on assessment as a tool for learning by bringing schools, school owners, the university and university college sector and private stakeholders together, and by developing information and guidance material. (Directorate for Education and Training, January 2011).



Pre-primary education

As mentioned, although pre-primary education is not compulsory most of the children aged 1-5 and the majority of the 3- to 5-year-olds have a place in kindergarten. Kindergartens provide care and education for children aged 0–5. In general, there are three types of pre-primary institutions: ordinary kindergarten, family kindergarten and open kindergarten. All are co-educational. Early childhood education and care is since 2005 part of the education system. Since the beginning of 2006, kindergartens are under the overall responsibility of the Ministry of Education and Research (MOER). The two basic functions of kindergartens are contributing to the education of children of preschool age and providing care during parents' working hours.

The former framework plan for kindergartens recommended the following five main learning areas: society, religion and ethics; aesthetic subjects; language, text and communication; nature, environment and technology; and physical activities and health. The plan also recommended play and social activities as important methods for learning and development. A new Framework Plan for the content and tasks in kindergartens was approved by the MOER in March 2006 and entered into force in August 2006. It includes seven learning areas: communication, language and text; body, movement and health; art, culture and creativity; nature, environment and technology; ethics, religion and philosophy; local community and society; numbers, spaces and shapes.

The 2006 Framework Plan for the content and tasks in kindergartens was amended in January 2011. The central aim is to give head teachers, pedagogical leaders and other staff a binding framework for the planning, implementation and assessment of the activities of kindergartens. Kindergarten programmes shall be built on a holistic pedagogical philosophy, with care, play, learning and formation (*bildung*) being at the core of activities. Social and linguistic skills, as well as the seven learning areas, are also important to the pedagogical environment provided by kindergartens. The Framework Plan shall be adapted to differing ways of running kindergartens, and to local conditions and regulatory environments.

In accordance with the Kindergarten Act of 2005, the kindergarten shall, in collaboration and close understanding with the home, safeguard the children's need for care and play, and promote learning and formation as a basis for an all-round development. The kindergarten shall be based on fundamental values in the Christian and humanist heritage and tradition, such as respect for human dignity and nature, on intellectual freedom, charity, forgiveness, equality and solidarity, values that also appear in different religions and beliefs and are rooted in human rights. The children shall be able to develop their creative zest, sense of wonder and need to investigate. They shall learn to take care of themselves, each other and nature. The children shall develop basic knowledge and skills. They shall have the right to participate in accordance with their age and abilities. The kindergartens shall meet the children with trust and respect, and acknowledge the intrinsic value of childhood. They shall contribute to well-being and joy in play and learning, and shall be a challenging and safe place for community life and friendship. The kindergarten shall promote democracy and equality and counteract all forms of discrimination.



The Framework Plan stipulates further what contents the kindergartens are to offer. The social role of kindergartens is to offer preschool children a care and educational environment that benefits each child. They should provide both education and a public service to the parents of young children. Kindergartens shall support and take into account individual children, whilst also looking after the common interests of the children. Kindergartens shall provide preschool children with an environment that offers both challenges appropriate to the age and level of function of the children, and protection from physical and psychological harm. Kindergartens shall increase the opportunities that children have to learn and to participate actively in a peer group. Kindergartens shall have the physical, social and cultural qualities that at any given time correspond to current knowledge and understanding regarding children and their requirements. Kindergartens shall promote good health and prevent illness, and shall help to ensure social equality. Kindergartens have a responsibility in society for the early prevention of discrimination and bullying, and must strive to promote gender equality in their educational practice. Cultural diversity shall be reflected in kindergartens. Social, ethnic, cultural, religious, linguistic and economic differences in the population mean that children come to kindergartens with different experiences. Kindergartens shall support children on the basis of their own cultural and individual circumstances.

Kindergartens for Sami children in Sami districts shall be an integrated part of Sami society and shall demonstrate the diversity, vigour and variety of this society. Sami statutes shall include the aim of strengthening children's identity as Sami people through the use of Sami language, and by teaching children about Sami culture, ways of life and society. Important aspects of Sami child rearing should be retained through working methods and everyday life. The programme of kindergartens must be arranged in such a way that children are involved in various work processes, and are able to participate in cultural and social activities. It is crucial that staff speak Sami. At kindergartens catering for Sami children but outside Sami districts, parents and children are entitled to expect staff to be familiar with Sami culture, and to emphasize it as part of the kindergarten's programme. (MOER, 2011).

The content of kindergartens shall be comprehensive and varied, and shall be designed in such a way that individual children gain experiences that support the development of their knowledge, skills and attitudes. The content shall also promote linguistic and social competence through joint tasks and social interaction. Children should have the opportunity to experience how digital tools can be used for play, communication and the gathering of information. The working methods and content of kindergartens must be viewed together. Working methods must foster children's curiosity, creativity and thirst for knowledge. Staff must be sensitive to children's sense of wonder and search for knowledge. Children shall have a large degree of freedom in terms of choosing activities. In order to make it easier for kindergartens to plan a varied and comprehensive pedagogical programme, the content of kindergartens is divided into seven learning areas that are of central importance to experience, exploration and learning. These areas are largely the same as the ones that children subsequently encounter in school. Positive experiences and useful teaching within these areas at kindergartens may give children a good relationship to the learning areas, and motivate them to learn more.



Each learning area covers a wide range of learning. The learning areas rarely appear in isolation. Several areas are often represented alongside one another in thematic programmes and in connection with everyday activities and walks in the local neighbourhood. In order for children to play and interact well together, it is also crucial that they have rich, joint experiences and shared knowledge in many areas. There are goals for the work within each learning area, in order to promote the development and learning of children, and to clarify the responsibilities of staff. The aims that focus on children's experiences and learning are expressed as process aims. The children shall become familiar with the learning areas and working methods. Work on the learning areas must be appropriate to the ages and interests of the children, and to the composition of the group of children and other circumstances. The teaching material, methods of working, equipment and approach must be designed with the different needs of children in mind. All children shall be given equal opportunities to face challenges that correspond to their level of development. The way in which the learning areas are adapted to the interests of individual children, the group, and the local community, shall be determined by each individual kindergarten, and set out in the kindergarten's annual plan. (*Ibid.*).

The broadest possible participation of children, parents, kindergarten staff and the owners should be encouraged in the planning, documentation and assessment of the kindergarten's activities. Kindergartens shall normally not assess the achievement of goals by individual children in relation to specific criteria. Information and documentation shall provide the basis for reflection and discussions within the staff group and with children and parents. The results of the assessment should be used as a basis for work on next year's annual plan. The right of children to special educational assistance is set out in Section 5-7 of the Education Act. The special educational assistance can be given at kindergartens. The pedagogical-psychological counselling service is one of the many professional bodies that can provide an expert opinion on whether a child with a reduced level of function may be entitled to prioritized admission to a kindergarten. (*Ibid.*). The teachers normally give informal evaluation to parents about their children's progress in different fields once or twice a year.

The Kindergarten Act of 2005 regulates the authorization, functioning and supervision of pre-primary institutions. Municipalities are responsible for the development and operation of both private and municipal kindergartens and for ensuring that institutions are run according to the relevant legislation. An individual, legal right to a place in a kindergarten institution was introduced and put into effect in 2009. The municipalities are obliged to provide a kindergarten place for children that have applied for a place and who are one year old by the end of August in the year of admittance. In 2010, almost half of the places were provided by private organizations under municipal supervision. (Eurydice, 2009/10).

The Government covers a great part of the annual costs of all approved institutions, private or public. The rest of the costs are shared between the municipality and the parents. There are regulations concerning maximum parents' fees. For children with special needs, such as disabled children and immigrants, the government gives special economic support to municipalities. Low income families may receive income-based differentiation of payment or they may apply for a free place.



Ordinary kindergartens are usually divided into groups consisting of children either in the age group 0-2 years or 3-5 years. There may also be mixed age groups of children aged 0-5 years. As a rule, there shall be one qualified (e.g. holder of a three-year bachelor's degree) preschool teacher per 14 to 18 children over the age of 3, and one teacher per seven to nine children under that age. The number of staff must be sufficient to carry out satisfactory educational activities. Most ordinary kindergartens are open at least 41 hours a week (Monday to Friday) and some of them even longer. Children may attend part-time or full time, from eight hours a week to about 47 hours a week. Full-time attendance is 41 hours or more a week. Normally kindergartens open at 7:00 or 8:00 a.m. and close at 17:00 or 18:00 p.m. (*Ibid.*).

According to Statistics Norway, at the end of 2005 there were 5,069 ordinary and 1,158 family kindergartens, of which about 46% in the public sector. The total enrolment was 223,393 children, of whom about 55% in public kindergartens. The total number of staff was 64,531 of whom 57% in the public sector. Qualified preprimary teachers represented 33.7% of personnel in kindergartens.

By mid-December 2008, there were 6,705 kindergartens of which 3,082 were public. The total enrolment was 261,886 children in ordinary and family kindergartens (an additional 7,223 children attended open kindergartens); 89,476 children were aged 1-2 years (representing 74.7% of the age group concerned) and 169,235 were aged 3-5 years (or 95.6% of the age group). For the age group 1-5 years the overall percentage was 87.2. About 54% of the children attended public institutions. An average of 83% of children, or 217,411 children, had full-time places (41 hours or more a week). In addition 15,189 children attended kindergarten 33-40 hours a week. The total number of staff was 81,450; the number of qualified pre-primary teachers was 26,338. (Eurydice, 2009/10).

According to Statistics Norway, in 2010 there were 6,579 kindergartens of which 3,046 in the public sector. The total enrolment was 277,139 children, representing 89.3% of the age group 1-5 years (78.8% of the age group 1-2 years, and 96.5% of the age group 3-5 years). A total of 241,053 children were enrolled full-time (41 hours or more a week), 13,474 children attended 33-40 hours a week, and 22,612 less than 33 hours. In 2010, 89.9% of head teachers and 83% of pedagogical leaders were graduates of three-year undergraduate programmes in preschool teaching. (Statistics Norway, 2012).

Primary and lower secondary education (compulsory school)

The compulsory school covers grades 1 to 10. Until 1996, primary education comprised grades 1 to 6 (age group 7-13). After the *Reform '97*, it has been divided into two cycles, i.e. lower primary (grades 1 to 4, age group 6-9 years) and upper primary (grades 5 to 7, age group 10-12). Following the implementation of the Knowledge Promotion Reform of 2004, the primary stage now comprises grades 1 to 7 (age group 6-12 years) with no division into cycles. A national test for assessing basic skills is administered in grade 5 (reading in Norwegian, English and mathematics) as part of the National Quality Assessment System (NQAS). Since 2007/08, grade 2 pupils sit a compulsory mapping test in reading skills and a compulsory mapping test for number comprehension and mathematics skills. A compulsory mapping test in reading skills for grade 1 pupils and a voluntary mapping



test in number comprehension and mathematics skills for grade 3 pupils, were introduced in spring 2009. A compulsory mapping test in reading skills for grade 3 pupils has been introduced in 2010. There is also a voluntary mapping test in English in grade 3.

Lower secondary education is the second stage of compulsory schooling and comprises grades 8 to 10 (age group 13-16). No formal division is made between the two stages. Some schools cover all compulsory education, while others are purely primary schools or lower secondary schools. A national test is administered in grade 8 (reading in Norwegian, English and mathematics) as part of the NQAS; a national test in reading and mathematics in grade 9 has been introduced in 2010/11. At the end of grade 10, students sit the national examinations which include a centrally-set written exam (marked externally) in Norwegian or mathematics or Sami/English, and an oral examination organized locally. Successful students receive a certificate indicating the subjects taken, the latest marks for the year's work and the examination results. All students having successfully completed lower secondary school are entitled to three years of further (post-compulsory) education at upper secondary level.

The general objectives of compulsory and upper secondary education are spelled out in the Education Act, the Core Curriculum, the Quality Framework and the learning poster (see the precedent sections).

The National Curriculum of 1997 consisted of: the core curriculum for primary and secondary education (and adult education as well); principles and guidelines for the education in the compulsory school; and subject curricula The curriculum guidelines indicate how much time should be devoted to the different subjects in terms of weekly lessons per subject for each stage of compulsory education. Within the framework of the Knowledge Promotion Reform of 2004, new subject curricula have been developed. The new National Curriculum which is being implemented in grades 1-9 and 11 from August 2006 consists of: the core curriculum for primary, secondary and adult education; the quality framework for primary, lower secondary and upper secondary schools as well as apprenticeship workplaces; subject curricula; and a framework regulating the distribution of periods/hours and subjects. Sign language has official status as a minority language, developed for deaf and hearing impaired pupils. The new subject curricula define learning outcomes, all described as learning outcome-based competence objectives expected from pupils at each level, and basic skills have been incorporated into all the subject curricula. The number of lessons in primary school, especially in grades 1-4, has been increased in order to improve the pupils' basic skills.

In early grades teaching is to be organized around themes containing elements from different subjects. The lower secondary stage (e.g. grades 8 to 10) has to ensure a smooth transition to upper secondary education; pupils are expected to acquire practice in analytical and critical methods through more detailed learning and greater coherence of the subject matter, practical and cross-subject work. The former optional subjects have been replaced by an additional compulsory subject (a second foreign language, in-depth language study, or a 'working life subject' since 2010), combined with time allocated for the choice of the school and the pupil. The choices made by the school or the pupils shall have a local profile, and the curriculum shall be designed by the school in accordance with the objectives of the National Curriculum. The



organization of school time is the responsibility of the local school. Municipalities are allowed to reassign 25% of the classes for a given subject in order to improve each pupil's access to differentiated education. Technology and design have been introduced as an interdisciplinary topic at the primary and lower secondary level.

The tables below show the distribution by subjects of the total minimum number of hours for the two stages of compulsory education in 2005 and 2009:

Norway. Compulsory school: distribution by subject of the total minimum number of hours in each stage of the ten-year programme (2005/06)

_	Total number of hours in each stage			
Subject	Primary (grades 1–8)	Lower secondary (grades 8–10)		
Knowledge of Christianity, religion and ethics	427	157		
Norwegian language	1,296	398		
Mathematics	812	313		
Social studies and history	385	256		
Art and crafts	477	150		
Science and the environment	328	256		
English	328	227		
Second foreign language	_	227		
Music	285	85		
Home economics	114	85		
Physical education	478	228		
Class and pupils' council activities	_	71		
Programme subjects	_	113		
Total number of hours (minimum)	4,930	2,566		

Source: Eurybase, 2006. Teaching periods usually last 45 minutes, but they can also be merged for extended lesson periods. The municipalities are free to offer pupils more teaching hours than the established minimum.



Norway. Compulsory school: distribution by subject of the minimum number of hours in each stage of the ten-year programme

Subject _	Total number of hours in each stage (minimum)					
	Primary grades		Lower secondary	Total		
	1-4	5-7	1-7	Grades 8-10		
Norwegian	931	441	_	398	1,770	
Mathematics	560	328	_	313	1,201	
English	138	228	_	227	593	
Physical activity	_	76	_	_	76	
Natural science	_	_	328	256	584	
Foreign language (*)	_	_	_	227	227	
Social studies and	_	_	385	256	641	
history						
Religion,						
philosophies of life	_	_	427	157	584	
and ethics						
Arts and crafts	_	_	477	150	627	
Music	_	_	285	85	370	
Food and health	_	_	114	85	199	
Physical education	_	_	478	228	706	
Class council and	_	_	_	71	71	
pupils' council						
Elective subjects	_	_	_	113	113	
Total hours (min.)		5,196		2,566	7,762	

Source: Eurydice, 2009/10. (*) Or in-depth language studies (Norwegian, English or Sami). The minimum total number of teaching hours in 2011/12 has been increaser to 5,234 hours for grade 1-7. (Eurydice, 2011). Regarding grades 8-10, from 2010/11, pupils may choose a practical subject (e.g. 'working life subject') based on one of the nine programmes in vocational education and training instead of another foreign language or the in-depth study of a language. (CEDEFOP, 2011).

One of the main principles set by the Knowledge Promotion reform is the introduction of more freedom at local level with respect to local curriculum work and the choice of work methods, teaching materials and the organization of classroom instruction. Schools are to prioritize the cultivation of basic skills in all subjects. The subject curricula focus on active, enterprising and independent pupils. Pupils should learn by doing, exploring and experimenting, and in so doing should acquire new knowledge and understanding. Pupil participation is a basic principle, and the pupils are to gradually be given more responsibility for planning their own learning; at the lower secondary stage, they shall share the responsibility for planning and evaluating the tasks they carry out themselves, or together with others. There are no prescribed textbooks and local education authorities are responsible for supplying schools with teaching aids which are free for pupils. (Eurydice, 2009/10).

The country has a scattered population, and a typical feature is the relatively large number of small school units in remote and sparsely populated areas. These schools do not have separate classes for all age groups, because the number of pupils is too small. In these multigrade schools, the same teacher teaches pupils of different ages in the same classroom, but teaching is adapted to the levels of the pupils. Multigrade schools have been approximately one third of all schools, but with less



than one tenth of all pupils. Compulsory education is comprehensive and coeducational. The aim is to offer all children an education that is adapted to their individual abilities. This principle applies just as much to the education of children with learning difficulties or other handicaps as to children with exceptional abilities, be these theoretical, practical, physical or aesthetic. Extra resources, mostly extra teachers, can be allocated to pupils with learning difficulties or other special educational needs. Flexibility on local level in organizing learning activities is the norm since 2004/05. The earlier understanding of the term class does formally not exist anymore; children in the same grade belong to groups. A group may also have pupils from different grades. There are no regulations as to group size, but the size shall be pedagogically justifiable. Two or more teachers may cooperate in teaching a group of pupils. A contact teacher shall have the same functions as the earlier class teacher. Since 1999, all municipalities are required by law to provide such daycare facilities before and after school hours for pupils in grades 1-4. Parents pay a monthly fee. Daycare facilities must provide amenities for play and participation in cultural and recreational activities appropriate for the age, level of physical ability and interests of the children. From 2010 schools are also expected to organize homework assistance for pupils. (*Ibid.*).

For the majority of the pupils concerned, special education is provided at the school to which the pupil belongs, most often within his/her own class. Pupils may also be taught in small groups together with other pupils with special educational needs, or individually. For many pupils there is a combination of the models of organization. The pedagogical-psychological service gives advice to schools and teachers concerning organizational models and methods of education. When the municipality or county lacks competence on certain problems, it may get help from a National Resource Centre. Approximately 7.8% of the pupils in compulsory education in 2009/10 were recognized as having special educational needs and received special education after individual decisions. (*Ibid.*).

The main purpose of pupils' assessment is to promote learning and development. Pupils should play an active part in assessment and get practice in taking responsibility for and evaluating their own work. Individual assessment without marks is part of the day-to-day learning process, and is included in the regular planned conferences between teachers, pupils, and parents or guardians. Emphasis is increasingly placed on continuous and formative assessment. In primary education the assessment does not involve the awarding of marks. In the lower secondary stage, a system of marks is introduced as part of ongoing assessment and final assessment. Pupils progress automatically to the next grade at the end of a school year throughout compulsory education. Pupils in difficulty may receive additional educational support. At the end of grade 10, pupils sit national examinations. They are required to sit a centrally-set written examination in one of three subjects: Norwegian, mathematics or English. Most pupils also have to sit an oral examination, which is organized locally and may be in any of the school subjects, except art and crafts, home economics and physical education.

The results of the national tests in basic skills (reading in Norwegian, English and arithmetic/mathematics) are made public through a website. The main purpose of the national tests is to collect information about pupils' basic skills that can be used for improvement and development activities locally and centrally.



Upon leaving lower secondary school, all students receive a certificate indicating the subjects taken, the latest marks for the year's work and the examination results. The marks are used as one of the more important criteria for further education in upper secondary school, i.e. when it comes to selecting an area of study and being admitted into a chosen school. All students leaving lower secondary school are entitled to three years of further education at upper secondary level. (Eurydice, 2006 and 2009/10).

According to Statistics Norway, in October 2005 there were 3,160 primary and lower secondary schools (of which 1,944 were primary schools) with a total of 619,640 pupils enrolled. The number of teachers was 65,376 including 43,428 teachers on a full-time basis.

According to the Directorate for Education and Training, in fall 2010 there were 2,957 mainstream primary and lower secondary schools (including 159 private schools) and 71 special schools; as of October 2010 the total enrolment was 614,020 pupils in mainstream schools (of whom 16,250 pupils in private schools) and 1,881 pupils in special schools; in addition, there were 754 pupils in Norwegian primary and lower secondary schools abroad. A total of 50,266 pupils in mainstream primary and lower secondary schools received individual decisions on special needs education (SNE). In addition, 1,555 pupils received SNE at special schools. Overall, this represented 8.4% of the pupils in primary and lower secondary school. By the end of 2009, there were 67,200 teachers (of whom 49,852 were female teachers), 4,979 administrators (56.5% women) and 13,942 assistants (of whom 11,873 were women) in primary and lower secondary education; 83.9% of teachers were holders of an undergraduate university or university college degree with teacher training. (Directorate for Education and Training, 2011; Statistics Norway, 2012).

Upper secondary education

Students normally start upper secondary education at the age of 16. Upper secondary education covers grades 11 to 13 named advanced courses 1 to 3 from 2006/07; attaining minimum competence at one course level is necessary for admission to the next level. General studies programmes normally takes three years to complete and lead to the general university admissions certification. Although some vocational programmes last three years, vocational education and training normally last four years (e.g. two years in school, one year as apprenticeship training in a training establishment, followed by one year of productive work; the last one-two years are often combined with some teaching at school). Upon completion of the vocational programme students receive trade or journeyman's certificates. Since autumn 2009, students sit a compulsory test in mathematics skills in the first year of upper secondary education; in autumn 2010 a compulsory test in reading skills and a voluntary test in English were also introduced.

Vocational (postsecondary) technical colleges under the Act of 2003 are considered as part of upper secondary education and offer training programmes lasting between a minimum of six months to two years, building upon upper secondary education or a similar level of qualification through recognition of prior learning. Holders of a trade or journeyman's certificate with several years of professional experience can enrol in training programmes leading to a master



craftsman certificate in over 70 different crafts. Completing two-year technical postsecondary vocational education and training qualifies for general admission to higher education. The majority of the upper secondary schools are public, owned by the counties, and most schools offer both general academic and vocational education. Most of vocational postsecondary, non-tertiary providers are private.

One of the main objectives of upper secondary education is to make it possible for all students to attain a recognized qualification, vocational and/or academic. As in the case of compulsory education, the general objectives are spelled out in the Education Act, the Core Curriculum, the Quality Framework and the learning poster (see the precedent sections).

From 2006 students can choose from one general study programme area qualifying for higher education, and from nine vocational study programmes. The general study programme area consists of four specializing programmes and two additional study programmes (e.g. sports and music, dance and drama). The four specializing programmes are: languages; natural sciences and mathematics; social sciences and economics; arts, crafts and design. The nine vocational programmes are: technical and industrial production; electricity and electronics; building and construction; catering and food processing; health and social care; media and communication; service and transport; agriculture, fishery and forestry; and design, arts and crafts. The first year in vocational programmes is common for all students, then they specialize for different trades and occupations by choosing among several courses in the second and third year. There are nine programme areas which qualify for higher education, i.e.: language, social studies and economic studies; natural science and mathematics studies; arts, crafts and design studies; music studies; dance studies; drama studies; sport and physical education studies; media and communication studies; and agriculture, fishery and forestry studies. Students in upper secondary schools have from 30 to 35 teaching hours per week. The organization of school time, methods and teaching aids, and forms of work are the responsibility of the local school. There are no prescribed textbooks.

All courses have three components: common core subjects; subjects related to the education programmes; and optional subjects. About 500 new subject curricula have been worked out for all subjects in the ten-year compulsory school and for the common subjects in upper secondary education and training during 2005-2008. In the programme for specialization in general studies, common subjects (Norwegian, mathematics, natural science, English, social science, geography, history, religion and ethics, and physical education) and programme subjects related to the area of study comprise a total of 2,523 hours over three years. The programmes for general studies include a compulsory foreign language course comprising a minimum of 225 hours over three years, in addition to the English course (140 hours). The programme for music, dance and drama, the programme for sports and physical education and the programme area for crafts and design studies comprise a total of 2,943 hours over three years.

All the vocational programmes include as compulsory subjects Norwegian, mathematics, natural science, English, social science and physical education; in the first two years a total of 588 hours are allocated to these subjects. An additional 1,963 hours over the first two years are allocated to the course-related subjects. It is possible



to take a fourth additional year in the remaining general subjects in order to gain matriculation rights to higher education.

Marks are given in all subjects on the basis of teachers' assessments. Two types of marks are used and recorded on certificates. The first are marks for overall achievement in the final subjects, based on the student's work during the school year, including practical work, work in class, homework, tests, project work and group work; the overall achievement marks are given on a six-point scale from 1 (lowest) to 6 (highest). The second are marks awarded in end-of-year examinations, using the same grading system. Most examinations in written subjects are organized by public examination boards. Papers are evaluated centrally by groups of experienced teachers. An upper secondary school certificate is awarded upon the successful completion of a three-year course of studies. Trade or journeyman's certificates are awarded upon successful completion of vocational training. The Minimum requirements for higher education entrance qualifications include two components: the successful completion of the years of upper secondary education including upper secondary level 1, 2 and 3 (regardless of the area of study) or the possession of a recognized vocational qualification/trade or journeyman's certificate; and studies corresponding to a specific level of attainment, determined in periods per week, within the following general subject areas: Norwegian; English; social studies; mathematics; science or environmental studies. In addition, those students who have completed and passed upper secondary level 1 and 2 in a vocational programme, can achieve general university and college admission certification by taking a supplementary course at upper secondary level 3 that will qualify them for higher education. Upper secondary school certificates are issued on the authority of the school and signed by the principal. The county examination board on the basis of recognized tests issues trade and journeyman's certificates. (Eurydice, 2009/10).

According to Statistics Norway, in 2005/06 there were 475 upper secondary schools (including 88 private or independent schools); a total of 381 schools were run by the counties. The total enrolment was 182,926 students, and the total number of teachers was 26,598.

According to the Directorate for Education and Training, 91% of all 16-18year-olds were enrolled in upper secondary education and training in the autumn of 2010. There were 437 upper secondary schools, of which 352 were countyadministered, 83 private, and two were state administered. More students are applying to the general studies education programmes, particularly to education programmes for specialization in general studies (from 33% in 2006 to 36% in 2011). Girls constitute 55% of the applicants to education programmes in general studies, whereas the boys constitute 59% of the applicants to the vocational education programmes and apprenticeships. In October 2010, there were 192,694 students in upper secondary education and training. About half of the students who were enrolled in the first year of upper secondary in 2010, started in a general studies education programme. In October 2010, 34,165 apprentices and 1,311 trainees were registered in upper secondary education and training; over two thirds of the apprentices were men. By the end of 2009, there were 25,348 teachers (of whom 12,543 were female teachers) and 2,831 administrators (including 1,318 women) in upper secondary education; 53.9% of teachers had an undergraduate university or university college degree with teacher training, 21.7% had a graduate degree with teacher training, 9.3% had an



undergraduate degree without teacher training, 6.7% had a graduate degree without teacher training, and 8.4% had completed upper secondary or a lower qualification without teacher training. (Directorate for Education and Training, 2011; Statistics Norway, 2012). In December 2009, some 11,400 full-time equivalent students (of whom 36% in the public sector) were enrolled in postsecondary, non-tertiary education. (Eurydice, 2009/10).

Most young people enter upper secondary education and training immediately after compulsory school (96.4% of the pupils in 2010). Most pupils who commence (71%) complete and pass upper secondary education and training within two years beyond the stipulated time (i.e. three years). Of the 29% who do not complete and pass within two years beyond the stipulated time, one third do so within ten years after they commenced upper secondary education and training. In other words, out of an age cohort that commences upper secondary education and training, 20% do not complete and pass within ten years. Pupils who began in vocational studies completed upper secondary education and training less frequently than the pupils who began in general studies. For general studies, 75% of students completed within the stipulated time and another 9% completed within the next two years. In vocational studies, 40% of students completed in the stipulated time (i.e. four years), while another 22% completed within the next two years. There are significant differences among the counties. (Directorate for Education and Training, 2011).

Assessing learning achievement nationwide

The aim of the National Quality Assessment System (NQAS), established in 2003 within the framework of the Knowledge Promotion Reform, is to promote quality development throughout primary and secondary education and training. The system is based on a broad concept of quality, where information about four areas (learning results, learning environment, use of material and human resources, and rate of progress at the upper secondary level) from all schools provides the basis for followup and improvement. Results from national tests, final examinations at the end of grade 10 and examinations in upper secondary education, and user surveys (students, teachers and parents) are part of the NOAS. Results are disseminated through the School Portal and the publication *The Education Mirror*. National tests assessing pupils' basic skills in reading, writing, English, and mathematics in grades 4 and 7 were introduced for the first time in 2003/04. National tests in reading and mathematics do not assess performance in these subjects, but rather in reading and mathematics as basic interdisciplinary skills. An important reason why national tests were introduced was that the international studies showed that Norwegian students had poorer skills than the national authorities had expected. (Directorate for Education and Training, 2011).

"There are three types of nationally-designed student assessments that complement teacher-based classroom assessment. Mapping tests are available for grades 1-3 of compulsory school and the first year of upper secondary school (grade 11 or Vg1). They are assessments of basic skills in reading and mathematics and form part of an early intervention strategy to provide students, teachers, schools and school owners with diagnostic information to identify and support students needing additional help. The results from mapping tests are intended for local use and will not be registered nationally. National basic skills tests in grades 5, 8 and 9 of compulsory



school are assessments of how pupils apply basic skills in reading, mathematics and English. The key purpose of the national tests is to provide education authorities with information about school outcomes so as to inform education policy. A secondary purpose is to give students and schools information to form the basis for improvement and development work during the school year. Examinations are summative assessments given to students at the end of compulsory education (grade 10) and in upper secondary education (grade 11, 12 and 13 or Vg1, Vg2 and Vg3). The primary purpose of examinations is to certify individual student achievement, but the results also form part of the national assessment system. Results from mapping tests are not registered at a national level, although a 20% sample of papers are collected to do some national analyses and to set the benchmark for the lowest 20% who will need extra follow-up and adapted teaching." (OECD, September 2011).

"National tests in reading (Norwegian), mathematics and English are administered in the autumn term to all pupils in grade 5, 8 and 9 (only reading and mathematics in grade 9). Like the mapping tests, the national tests in reading and mathematics are basic skills tests. They are intended to provide information about proficiency in reading in Norwegian and mathematics skills across all subjects, but they are not designed to provide specific diagnostic information in the subjects. The tests in English are related to the subject English, but only to selected parts of the curriculum, where reading is a central focus. Since 2009, the national tests in reading English and mathematics are administered electronically. The results are reported as distributions on different levels, connected to particular expectations of mastery. Information from the tests is intended to inform national policy and provide data to school owners and schools for their own development work. The national results are available to the public, and schools and school owners can access their own results in relation to the national average." (*Ibid.*).

"In the latest round of the OECD's Programme for International Student Assessment (PISA) in 2009, the performance of Norwegian 15-year-old students was at the OECD average in mathematics and science and just above the average in reading. Overall, Norwegian results in PISA have been relatively stable over the past decade. While there had been a decline of Norwegian results between 2000 and 2006, this trend was reversed in 2009 with results very similar to those achieved in 2000. While, overall, Norway's results are at or above the OECD average depending on the subject, these outcomes are not considered satisfactory given that Norway's annual expense per student is about 45% above the OECD average. The first publication of PISA results in 2000 was described by stakeholders in Norway as a "PISA shock", which has helped focus attention on the monitoring of quality in education. Over the past ten years, there has been a strong focus on building up national tools and procedures to monitor quality at different levels of the system with a view to improve practices and raise performance." (*Ibid.*).

"Compared to the OECD average, Norway achieves a relatively high level of equity among students from different socio-economic backgrounds. The strength of the relationship between socio-economic background and reading performance has not changed significantly between 2000 and 2009 and remains below OECD average. As in other Nordic countries, variations in student performance can mostly be found within schools. The between-school variation of performance in Norway is low by international comparison, which indicates that the specific school a student attends



has only a modest impact on how the student performs. The relatively small proportion of top performers has raised concerns about whether the Norwegian education system adequately caters to its most talented and gifted students. There are also concerns about the consistently low performance of certain student groups, in particular students with an immigrant background. This gap is above the OECD average and has remained stable since 2000. Results from national assessments and other studies indicate that there are important differences in education quality across municipalities. These variations may be linked to the fact that there are very large differences in resources and capacity among the 430 municipalities. Some municipalities are very small and do not have staff with specific qualifications in education. National research has also shown that many teachers are not qualified in the subject they teach and that there are gaps in teachers' knowledge in important areas of pedagogy." (Ibid.). Concerning PISA 2009, only 8% of Norwegian girls scored below level 2, whereas the corresponding figure for the boys was 21%. Readers at level 4 and above can be described as good readers, and in Norway 22% of the boys and 39% of the girls scored at these levels in 2009. In mathematics, girls and boys scored almost equally while in science there was a very slight gender gap in favour of girls. (Directorate for Education and Training, 2011).

"According to the Trends in International Mathematics and Science Study (TIMSS), in 2007, Norway's fourth grade students scored below average among participating countries in science and mathematics. Results show that a same cohort tested as fourth graders in 2003 in science and mathematics had the same relative position (below the scale average) when they were tested as eighth graders in 2007. Also, evidence from Norwegian national assessments shows that students who do not attain basic levels skills at the beginning of lower secondary education are more likely to struggle to succeed at the end of lower secondary education. The TIMSS survey also shows that lower secondary pupils in year eight have scores in mathematics and science well below the international average (500) even though there has been a small improvement in mathematics since 2003." (OECD, 2011).

The International Civic and Citizenship Education Study (ICCS) is a study of school pupils' knowledge of and opinions about democracy and citizenship under the auspices of the International Association for the Evaluation of Educational Achievement. Students from 38 countries took part in the study in 2009. Results show that Norwegian students have good knowledge about and skills in democracy and citizenship relative to students in other countries. Only a few Norwegian students scored poorly. The main selection, e.g. students in year 8, averaged 515 points which is significantly above the international average of 500. The students in year 9 scored an average of 541 points on the test of knowledge and skills, and thus came in fifth place in the international ranking of the 38 countries participating in the study. Considering students from the same age level, Norwegian students had a knowledge score slightly below Finland and Denmark and a little above Sweden. Norwegian girls in years 8 and 9 had average scores of 527 and 554 points respectively, 23 and 24 points higher than the boys. (Directorate for Education and Training, 2011).

National tests in reading, mathematics and English were conducted in the autumn of 2010 for all pupils in years 5 and 8. For the first time, the tests in reading and mathematics were also conducted in year 9. The tests in year 9 were identical with the tests in year 8, making it possible for the schools to compare the pupils'



outcomes in years 8 and 9 in the same year. In reading in year 5, 80% of the municipalities scored at an average mastering level between 1.8 and 2.2, whereas in year 8, 61% of the municipalities scored between 3.0 and 3.5. A common characteristic of the municipalities that have an average mastering level lower than this is that they have a low number of pupils. As in previous years, there is a clear, positive correlation between test scores and the parents' level of education. Children of parents with higher education score in the highest mastering levels on all tests to a greater extent than the other pupils. Pupils with a non-western immigrant background have poorer achievements than pupils with a mainstream background; the disparity is especially great in reading. Concerning examinations, it was found that there is considerable variation in the ways in which lower secondary schools determine overall achievement marks. Some schools, especially the small ones, seem to overestimate the level of achievement of their pupils, whereas others, especially large schools, seem to underestimate that level. No significant gender gaps have been found in English in year 5, but there was a tendency for girls to score slightly higher than boys in the year 8. In reading, girls scored slightly higher than boys, and the disparities were somewhat larger in year 8 than in year 5. In mathematics, boys scored slightly higher than girls in both years. The gender gaps remained fairly stable in the period from 2007 to 2010. Disparities in achievement between boys and girls increase throughout lower secondary school. Girls improve their achievement more than boys in most subjects excepting mathematics, where the boys show more improvement. Girls get higher marks than boys in most subjects at the completion of lower secondary school, in both overall achievement marks and examination marks. Similarly, girls get higher average marks than boys in most common core subjects in upper secondary education and training excepting mathematics. (*Ibid.*).

Teaching staff

Pre-service teacher training is regulated by the Education Act of 1998 and subsequent amendments and the Universities and University Colleges Act of 2005. The Kindergarten Act of 2005 also includes qualification requirements for staff. The Teacher Training Act of 1973 was repealed in 1998.

University colleges offer different types of programmes for pre-primary, general subject, specialized subject, and vocational education teachers. Universities or university colleges train teachers of general or academic subjects in upper secondary school.

Three-year pre-primary teacher programmes qualify for teaching in kindergartens (and in grade 1 of compulsory school); one additional year of study qualifies for teaching in grades 1-4. General subject teachers in primary and lower secondary school are normally trained in four-year programmes. Subject teachers are graduated from three- or four-year programmes qualifying for teaching specific subjects in primary and lower secondary, upper secondary, and in adult education. Teachers of general/academic subjects in upper secondary schools have completed three to five years of university or university college studies, normally covering two or three different subjects. Graduates from three- to five-year university degree courses not including a pedagogical component, have to enrol in a one-year educational theory and practice programme if they want to be qualified for teaching from grade 5 onwards, in upper secondary and adult education. Vocational education



teachers are graduated from a three-year programme; vocational subject teachers are trained in three- to four-year programmes; other qualifications include a craft/trade certificate, relevant professional experience and a one-year educational theory and practice programme.

Long-cycle five-year programmes leading to the award of a master's degree qualifying for teaching certain subjects in grades 5-10, in upper secondary and adult education are also offered. Sami teacher education qualifies for teaching children in kindergartens and schools in Sami areas. Within the framework of the three-cycle structure of the Bologna process, three-year bachelor's degree and two-year master's degree are also available.

There is a unified structure for teaching positions in all higher education, with identical requirements to all teaching staff with the same professional title, whether they are at a university or a university college. Professors and associate professors are doctoral degree holders.

Within the framework of the Knowledge Promotion Reform, from autumn 2005 stricter admission requirements to general teacher education have been introduced. Applicants must have as a minimum mark 3 (6 being the highest) in Norwegian and mathematics from upper secondary school and a minimum of 35 study points in total.

The new National Curriculum Regulations for differentiated primary and lower secondary teacher education programmes (years 1-7 and years 5-10) of March 2010 aim to ensure that teacher education institutions provide integrated, professionally oriented and research-based primary and lower secondary teacher education programmes of high academic quality. Teacher education institutions shall provide integrated primary and lower secondary teacher education programmes showing coherence and cohesion between theoretical and practical studies, between subjects and subject didactics and between subjects. The programmes shall provide the candidates with sound academic and didactic knowledge and qualify them for research-based professional performance and continuous professional development. The primary and lower secondary teacher education programmes shall also qualify the candidates to be able to provide instruction about Sami conditions and issues and ensure that they have acquired knowledge about Sami children's right to education. The Regulations include the expected learning outcomes that candidates are expected to acquire, defined as knowledge, skills and general competence, as a basis for working in schools and for further competence development.

According to the Regulations, programmes are to be organized as two clearly defined and differentiated primary and lower secondary teacher education programmes in a manner that ensures progression in a coherent professional education programme. The primary and lower secondary teacher education programme for years 1–7 is normally to comprise at least four school subjects, of which at least one must have a scope of 60 credits (European Credit Transfer System–ECTS), while the others must have a scope of at least 30 credits. In the fourth year of studies, one school subject may be replaced by a 30 credit subject that is relevant for work in schools The primary and lower secondary teacher education programme for years 5–10 is normally to comprise three school subjects, each with a scope of 60 credits. In the fourth year



of studies, one school subject may be replaced by one school subject and one subject that is relevant for work in schools, each with a scope of 30 credits, or by two school subjects, each with a scope of 30 credits. In both programmes, on transition to a master's degree programme after the third year of studies, the first year of the master's degree programme will replace the fourth year of the primary and lower secondary teacher education programme. Both education programmes have to provide supervised, evaluated and varied teaching practice in all the years of study. Teaching practice is to be an integrated part of all the subjects in the programmes. The scope of the teaching practice is to be at least 100 days distributed over the four-year programme: at least 60 days during the first two years of study, and at least 40 days during the last two years of study. The teaching practice will take place in primary and lower secondary education schools and must cover both the early and advanced years for which the education programme qualifies. All school subjects must be professionally-oriented subjects and comprise subject didactics and work on basic skills in the subject. All school subjects and subjects and courses that are relevant for work in schools must be research-based and anchored in an active professional research environment. The bachelor's thesis in the third year of study is compulsory. In the primary teacher education programme for years 1-7 compulsory subjects include: pedagogy and pupil-related skills (60 credits), mathematics (30 credits), and Norwegian (30 credits). In the programme for years 5-10, pedagogy and pupil-related skills (60 credits) is compulsory.

The three-year (180 credits) pre-primary teacher education programme that qualifies for educational work in kindergartens and the first grade of primary school includes: practical and didactic training (45 credits); relevant subjects (105 credits) including drama, arts and crafts, music, natural science, mathematics, Norwegian or Sami language, religion and ethics and social studies; an in-depth course in at least one subject chosen among those mentioned above (30 credits), normally in the third year; 20 weeks allocated to supervised practice in a kindergarten institution. It is a requirement that one or two of these weeks are supervised practice in grade 1. (Eurydice, 2009/10).

The framework plan for teachers of vocational education and training (VET) laid down by the MOER in January 2006 and the practical-pedagogical teacher training in vocational subjects are undergoing revision as part of the general reform of teacher education for the secondary level (grades 8-13). The reform is scheduled for implementation by 2013. One aspect of the revision is the implementation of the national qualifications framework for higher education, which requires the inclusion of learning outcome descriptors. Others include improved overall quality provision, better integration of vocational theory and practice, and pedagogy and didactics better aimed at reducing dropout, so as to train better professionals. All school-based VET in formally recognized education including theory and practical training in school workshops is provided by formally qualified VET teachers. Formal teacher education is a requirement for permanent employment as a VET teacher in upper secondary schools. VET teacher training programmes follow the general degree system, with a three-year bachelor's and a two-year master's degree. (CEDEFOP, 2011).

The municipalities employ teachers in municipal kindergartens and public schools at primary and lower secondary level. The counties employ teachers at upper secondary institutions. Employers recognize the professional status of teachers, and



teachers' professional bodies negotiate terms of employment and salary levels. Inservice training courses are organized at local, regional and national levels. The organizers may be local education authorities, teachers' associations, associations for special subjects in higher education institutions, regional officer's educational departments, county education committees, national councils or national education authorities.

The content of in-service training is influenced by school reforms as well as by priority areas set by the Ministry of Education. In primary, lower and upper secondary schools, in-service training is often connected to innovations introduced in schools. A one-week of compulsory study and planning during the school year is the most regular form of in-service training at the local level for compulsory education teachers. Similar study and planning days are arranged for teachers in upper secondary schools, usually five per school year. Two annual staff seminars are also held, lasting two days. In 2009 a new programme for in-service teacher education has been introduced. One of the reasons for the programme is the new qualifications regulation. According to the Knowledge Promotion Reform, Norwegian/Sami, mathematics and English are some of the subjects which are given priority.

Teachers' salaries depend largely on their educational qualifications, the duration of their studies, and seniority. On the basis of the agreement of January 2002, all teachers have an annual workload of 1,687.5 hours. The teaching duty is regulated in a certain number of lessons per year and in an average number of lessons per week. The number of weekly lessons depends on the subjects to be taught and the level of education in which the teacher is employed. For compulsory education teachers, the average number of weekly hours (full-time basis) is 26 hours in primary and 21.2-25 hours in lower secondary. At the upper secondary level the weekly workload is 16.3-23.5 hours. In addition, teachers have a mandatory 150 hours at school, usually five hours per week used for meetings, planning etc., and must also be present for five planning days. On the basis of the Working Environment Act, staff at universities and university colleges normally work 37.5 hours per week. (Eurydice, 2009/10).

"In 2008, there were about 66,522 teachers in primary and lower secondary schools. The Ministry reports that the average age is relatively high and about 74% of teachers are women. TALIS (Teaching and Learning International Survey) results show that about three out of four lower secondary teachers in Norway have a bachelor's degree, while one out of four have a masters' degree. Teachers with university degrees predominate in more populated areas, such as Oslo. More generalist teachers prevail in small school in less populated areas. Teachers' reports in Norway show a rather high sense of engagement and self-efficacy towards their work. Half of lower secondary teachers have predominantly four years of training (threeyear bachelor's degree and a year of teacher preparation), another 25% have a first degree and 25% have a master's degree. Teachers with a university master's degree in a content area predominate in more populated areas, such as Oslo. Many lower secondary teachers teach in small schools that combine primary and lower secondary education. All together, one-third of teachers teach in such schools, many of which are small and serve isolated rural populations. Such combined schools often have teachers who are generalists and teach both primary and lower secondary education students. Teachers with a general level of disciplinary knowledge can succeed in primary schools but their knowledge gaps become problematic when teaching young



adolescents. Teachers' salaries are lower than other comparable professions in Norway, and opportunities for advancement on the salary scale are limited. A teacher with 15 years of experience earns at most only 24% more than a beginning teacher. This is about three times less than the OECD average. At the same time, salaries for lower secondary education teachers have not changed much between 1996 and 2008 and are low in relation to GDP per capita." (OECD, 2011).

"To build up the capacity of new school leaders, a national principal education programme was introduced in 2009. It is currently provided by six institutions and the Directorate for Education has set common competence requirements for all providers. The programme is initially targeted at principals who are new to the position but it will later be extended to more experienced principals as well. The education can be undertaken part-time over one-and-a-half to two years depending on the provider. In the years 2009/10 and 2010/11, 621 principals have already participated in the programme. The programme focuses on supporting principals in becoming 'educational leaders' capable of leading the core processes of teaching and learning in the school." (OECD, September 2011).

References

CEDEFOP (European Centre for the Development of Vocational Training). *Norway. Vocational Education and Training (VET) in Europe. Country Report 2011*. Prepared by ReferNet Norway.

Directorate for Education and Training. *The education mirror 2011. Analysis of primary and secondary education in Norway.* Oslo, 2011.

Directorate for Education and Training. *OECD review on evaluation and assessment frameworks for improving school outcomes. Country background report for Norway.* Oslo, January 2011.

EURYBASE. Norway, 2005/06. Norway Eurydice Unit, 2006.

EURYDICE. *National system overview on education systems in Europe: Norway*. European Commission, 2011 edition, December 2011.

EURYDICE. *Organization of the education system in Norway*. European Commission, 2009/10 edition.

EURYDICE. Focus on the structure of higher education in Europe 2006/07. National trends in the Bologna Process. EURYDICE, European Unit, Brussels, March 2007.

EURYDICE, CEDEFOP and ETF. *Structures of education and training systems in Europe: Norway.* European Commission, 2009/10 edition.

Ministry of Education and Research. Framework plan for the content and tasks of kindergartens. As amended by Regulation No. 51, Oslo, January 2011.



Ministry of Education and Research. *National report of Norway. All inclusive...? The development of education*. Presented at the 48th session of the International Conference on Education, Geneva, 2008.

Ministry of Education and Research. *The development of education 2000-2004*. *National report of Norway*. Presented at the 47th session of the International Conference on Education, Geneva, 2004.

Ministry of Education, Research and Church Affairs. *The development of education* 1991-2000. *National report of Norway*. Presented at the 46th session of the International Conference on Education, Geneva, 2001.

Ministry of Education, Research and Church Affairs. *The development of education* 1994-1996. *Norway national report*. Presented at the 45th session of the International Conference on Education, Geneva, 1996.

Ministry of Education, Research and Church Affairs. Board of Education. *Core Curriculum for primary, secondary and adult education in Norway*. Oslo, 1993.

OECD. *OECD reviews of evaluation and assessment in education. Norway.* (Prepared by D. Nusche, L. Earl, W. Maxwell and C. Shewbridge). Paris, September 2011.

OECD. OECD reviews of national policies for education. Improving lower secondary schools in Norway. Paris, 2011.

Statistics Norway. Facts about education in Norway 2012: Key figures 2010. Oslo, 2012.

Statistics Norway. Facts about education in Norway 2007: Key figures. Oslo, 2008.

Web resources

Ministry of Children, Equality and Social Inclusion:

http://www.regjeringen.no/en/dep/bld.html?id=298 [In Norwegian, English and Sami. Last checked: May 2012.]

Ministry of Education and Research:

http://www.regjeringen.no/en/dep/kd.html?id=586 [In Norwegian, English and Sami. Last checked: May 2012.]

National Parents' Committee for Primary and Secondary Education: http://www.fug.no/ [In Norwegian and English. Last checked: May 2012.]

Norwegian Agency for Lifelong Learning (Vox): http://www.vox.no/no/global-meny/English/About-Vox/ [In Norwegian and English. Last checked: May 2012.]

Norwegian Agency for Quality Assurance in Education: http://www.nokut.no/en/ [In Norwegian and English. Last checked: May 2012.]



Norwegian Association of Higher Education Institutions: http://www.uhr.no/ [In Norwegian and English. Last checked: May 2012.]

Norwegian Centre for International Cooperation in Education: http://www.siu.no/eng [In Norwegian and English. Last checked: May 2012.]

Norwegian Directorate for Education and Training: http://www.udir.no/Stottemeny/English/ [In Norwegian and English. Last checked: May 2012.]

Norwegian State Educational Loan Fund: http://lanekassen.no/Toppmeny/Languages/English/ [In Norwegian and English. Last checked: May 2012.]

Norwegian Universities and Colleges Admission Service: http://www.samordnaopptak.no/info/ [In Norwegian, English and Sami. Last checked: May 2012.]

School Portal (Results of National Tests): http://skoleporten.udir.no/ [Mainly in Norwegian; some information in English and Sami. Last checked: May 2012.]

For more detailed and updated information consult EURYDICE, the information network on national education systems and policies in Europe: http://eacea.ec.europa.eu/education/eurydice/index_en.php

For updated links, consult the Web page of the International Bureau of Education of UNESCO: http://www.ibe.unesco.org/links.htm