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Principles and general objectives of education

A fundamental principle of the education system is that everyone should have equal opportunity to acquire education, irrespective of sex, economic status, geographic location, religion, and cultural or social background.

Since 2005, the Ministry of Education, Science and Culture carried out intensive work towards the formation and implementation of a comprehensive national lifelong learning strategy. The main emphasis has been on cooperation and continuity between school levels, improved governance, increased decentralization and autonomy, quality assurance and evaluation and the enhancement and improvement of vocational education and training as well as flexibility and second chance for those who drop out. (CEDEFOP, 2011).

The *Iceland 2020* policy statement is a vision for the future, which developed through dialogue and collaboration between hundreds of Icelanders throughout the country and in consultation with regional associations, local authorities, trade unions and economic interest groups. The objective for 2020 is for Iceland to become a fully-fledged member of the group of Nordic welfare states, which guarantee social security and the equality of citizens. Good education standards, high levels of employment and the active participation of citizens, irrespective of their place of residence, status or gender are prerequisites for this to succeed. Education plays a key role when it comes to preparing for the future and adapting to change, both for individuals and society as a whole. To strike an equilibrium in the basic elements of traditional education, such as reading, mathematics and Icelandic, focus needs to be placed on skill factors, such as information literacy, independence, initiative, critical thinking, social responsibility, participation or pro-activeness and, last but not least, ethics. Creativity needs to be emphasized at all school levels with systematic training in practical and artistic creativity. Preschool's philosophy of learning through play needs to be applied more widely throughout the school system. The integration of innovation into all areas of study plays a key role and the training of teachers is crucial, particularly interdisciplinary training that can provide them with a broader understanding of the diverse disciplines than they have now. It is important to build a balance and bridges between creative disciplines and mathematics and the sciences. Vocational training needs to become a real option in the school system and there needs to be greater respect for vocational training and working skills. (Prime Minister's Office, 2011).

Laws and other basic regulations concerning education

Legislation on compulsory education enacted at the beginning of the 1990s contained provisions for an increased decentralization, more parental influence and the introduction of educational counselling. By mid-1990s, the local municipalities took over all the operation and the financing of schools at the compulsory level. These measures aimed at enhancing the efficiency, dynamism and flexibility of the



education system. Radical changes were introduced in the education system through the new legislation for all levels of formal education taking effect in 2006-2008.

Pre-primary education is regulated by the **Preschool Act No. 90** of 12 June 2008, entered into force on 1 July 2008. The Act indicates that preschool is the first level of the education system and is intended for children below the compulsory school age. Article 4 stipulated that local authorities (municipalities) are responsible for the operation of preschools. According to Article 13, the Ministry of Education, Science and Culture issues a National Curriculum Guide for preschools which shall be revised on regular basis.

The Compulsory School Act No. 63/1974 gave all children the right to attend school from the age of 6, if their parents so wished. This law stipulated nine years of compulsory schooling from 7 to 16 years of age, but it anticipated that nine years of compulsory education would be put into effect within ten years of the passing of the law. In 1984, the Act on nine-year compulsory schooling came into force. The Act No. 66 of 1995 made attendance at school compulsory for all children aged 6-16 (ten-year programme). The Act also stipulated that by August 1996 the operation of schools at the compulsory level was to be transferred to the local municipalities. Primary and lower secondary education is currently regulated by the **Compulsory School Act No. 91** of 12 June 2008, entered into force on 1 July 2008. This Act covers compulsory schools run by local authorities, accredited private schools at compulsory level and other recognized education at compulsory school level. Local authorities are responsible for general organization of school operations of compulsory schools in their respective municipalities. According to Article 24, the Ministry of Education, Science and Culture issues a National Curriculum Guide for the compulsory school which shall be revised on regular basis. It shall stipulate the compulsory school's pedagogical role and general policy with regard to teaching and instructional organization according to the role of the compulsory school. Article 17 indicates that pupils have the right to have their special needs met regarding studies in compulsory school, without discrimination and regardless of their physical or mental attainment. If a child's parents, head teachers, teachers or other specialists believe that the child is not receiving suitable instruction in the compulsory school, the parents can ask that their child be admitted to special treatment within general compulsory school or to a special school. According to Article 16, pupils whose mother tongue is not Icelandic are entitled to instruction in Icelandic as second language. The instruction aims at encouraging the pupils to become actively bilingual, enabling them to study at compulsory school and thus becoming active participants in Icelandic society. Compulsory schools may accredit pupils' knowledge in their native language, in the case of pupils who are not native speakers of Icelandic, as part of their compulsory education, replacing compulsory education in another foreign language.

The Act No. 80/1996 on upper secondary education introduced nationally coordinated matriculation examinations in certain subjects, a provision which was fully implemented in 2005. Upper secondary education is currently regulated by the **Upper Secondary School Act No. 92** of 12 June 2008, entered into force on 1 August 2008. This Act defines the framework for education at this level, its objectives, the role and responsibility of the state and local authorities as well as other parties that are involved in providing education at this level. The new Act, which replaced the former Act of 1996, has introduced several changes in the organization of upper secondary



education, including increased decentralization of the curriculum and course development and more flexibility in the organization of the teaching and learning process. The Act also envisages the possibility of shortening general academic courses leading to the matriculation examination as well as vocational education and training from four to three years. All school work carried out by students shall be evaluated in standardized credit units. Article 12 indicates that the Ministry of Education can provide non-state schools with accreditation to carry out instruction at upper secondary level. Such schools can be run as non-profit organizations, limited public companies or as other types of accepted legal entities. Non-state upper secondary schools in operation had to be accredited no later than August 2011. Article 34 stipulates that students with disabilities and students with emotional or social difficulties shall be provided with instruction and special study support. Specialized assistance and appropriate facilities shall be provided as considered necessary by the Ministry of Education. Students with special needs shall study side by side with other students whenever possible. According to Article 35 students who do not have Icelandic as their native language have the right to instruction in Icelandic as second language. The same applies to students that have stayed for a long time abroad and have little knowledge of Icelandic. Article 54 stipulates that, upon approval of the Ministry of Education, upper secondary schools may participate in the operation of a lifelong learning centre in partnership with local authorities, professional associations, trade unions, employers' associations or other interest groups. In 2010 there were nine lifelong learning centres offering a variety of courses, such as job-related courses and courses in Icelandic for immigrants. These centres also facilitate distance education, mainly at the higher education level, by providing technical and organizational facilities, such as videoconferencing and enrolment of students.

The objective of the **Act No. 87** of 12 June 2008 on the education and recruitment of teachers and head teachers in preschool, compulsory school and upper secondary school, is to ensure that the education of those who practice teaching and take care of upbringing in preschool, compulsory and upper secondary schools is relevant to their occupation and responsibility. According to this new legislation, starting from autumn 2011 the minimum requirement for teachers at all school stages is a master's degree instead of a three-year bachelor's degree. The Act contains provisions relating to the occupational qualifications and recruitment of the different categories of teachers and head teachers, and qualifications requirements to obtain a licence from the Ministry of Education (only licenced teachers can be recruited). According to the Act, the content of education for preschool, compulsory and upper secondary school teachers is defined in detail in a specific regulation issued by the Ministry of Education taking into account the minimum requirements for the relevance of teacher certification studies as well as the relevance of professional subjects. This Act repealed the former the Act No. 72/1996 on the rights and duties of compulsory school teachers and principals.

Continuing education and training is regulated by the **Adult Education Act No. 27** of 31 March 2010, entered into force on 1 October 2010 repealing the Vocational Training Act 19/1992. The Act provides for the objectives of adult education and its organization, the accreditation of education and training providers, the recognition of non-formal and informal learning, guidance and counseling, the functions of the Education and Training Fund and its board, the objectives and implementation of evaluation and quality control for adult education, and the



certification of curricula or course descriptions. According to the Act, the Ministry of Education, Science and Culture is responsible for general policy making for adult education in consultation with stakeholders, the appointment of the members of the Board of the Education and Training Fund, support for development and innovation in the field of adult education, as well as general supervision and evaluation.

The **Youth Act No. 70** of 28 March 2007, which repealed the Act 24/1970 on youth issues, regulates the operation of clubs and club organizations that manage youth activities, youth activities run by the national authorities, municipalities and schools, as well as other operations that focus mostly on unaffiliated youth in organized youth activities. The purpose of this Act is to support children and young people, especially those aged 6 to 25, for participation in youth activities. Youth activities are organized club or leisure activities intended for children and young people to use their spare time working in concert for ideals, goals and interests which they themselves value. The Act stipulates that in all organized youth activity social, preventive, pedagogic and educational values should be considered, aiming to enhance the personal qualities and democratic awareness of participants. All activities involving children and young people should focus on their well-being and encourage them to show initiative and active participation. The Ministry of Education is the highest authority on youth affairs and appoints representatives to the Youth Council. The Act contains provisions relating to the functions of the Youth Council and the purpose of the Youth Fund.

Higher education was formerly regulated by the Universities Act No. 136/1997. The new **Higher Education Act No. 63/2006**, entered into force on 1 July 2006, required all higher education institutions to adopt the three-cycle degree structure in line with the Bologna process. In the same year, a National Qualifications Framework was adopted, and according to the Act all programmes offered by higher education institutions were to be accredited by the Ministry of Education by 2008. The **Act on Public Higher Education Institutions No. 85/2008** applies to the University of Iceland, the University of Akureyri, the Agricultural University and Hólar University College. This Act contains provisions and guidelines concerning the administration of these public higher education institutions.

The National Qualifications Framework for higher education in Iceland issued on 16 May 2011 is a systematic description of the structure of qualifications and degrees at the higher education level and is specifically based on learning outcomes. All higher education institutions accredited by the Minister of Education, Science and Culture in accordance with the provisions of the Higher Education Act No. 63/2006, shall follow this framework. This document contains a description of the framework that higher education institutions must comply with in their description of learning outcomes for the various qualifications. It also describes the linkage of the framework with the quality assurance system of higher education institutions.

According to Article 23 of the **Act on Equal Status and Equal Rights of Women and Men No. 10/2008**, as amended by Acts No. 162/2010 and No. 126/2011, gender mainstreaming shall be observed in all policy-making and planning in the work of the schools and educational institutions, including sports and leisure activities. At all levels of the education system students shall receive instruction on gender equality issues in which emphasis shall be placed, amongst other things, on



preparing both sexes to play an equal role in society, including work and family life. Educational materials and textbooks shall be designed in such a way as not to discriminate against either sex. In presentations on educational and vocational opportunities, and in counselling in the schools, boys and girls shall receive instruction and counselling regarding the same jobs, irrespective of their gender. The Ministry in charge of education shall monitor compliance with gender equality in schools and educational institutions, including sports and leisure activities. Furthermore, the Ministry in charge of education shall monitor developments in these areas of society as regards gender equality.

Article 3 of the Compulsory School Act of 2008 stipulates that compulsory education shall generally be of ten years in duration, but can be shorter. All children, in general between the ages of 6 and 16, are required to attend compulsory school. According to Article 32, a pupil may graduate from compulsory school before completing the ten-year compulsory education, provided that the pupil fulfils compulsory school requirements according to description of learning outcomes in the National Curriculum Guide. Compulsory school instruction in public schools shall be provided to pupils without charge and neither pupils nor their parents may be charged any fee for instruction, (Article 31).

Administration and management of the education system

The Parliament (*Althingi*) is legally and politically responsible for the education system. It determines the basic objectives and administrative framework of the system. Education at all levels is under the jurisdiction of the **Ministry of Education, Science and Culture**. The municipalities are responsible for the operation of pre-primary and compulsory schools. Upper secondary schools and higher education institutions are run by the state. Two higher education institutions that were under the auspices of the Ministry of Fisheries and Agriculture (i.e. the Hólar University College and the Agricultural University), came under the Ministry of Education, Science and Culture in January 2008.

The Ministry is headed by the Minister, assisted by the Permanent Secretary and a Director acting as deputy permanent secretary. According to the Notice No. 181/2007, the Ministry comprises three departments (Education, Cultural Affairs, and Science and Higher Education) and four offices (legal affairs, financial affairs, evaluation and analysis, and information and service). Each department or office is under the responsibility of a director, and each division is under a head of division, all under the general supervision of the Permanent Secretary. The **Department of Education** deals with educational matters at preschool, compulsory school and upper secondary levels, issues the national curriculum guides for pre-primary, compulsory school and upper secondary school, and is also responsible for continuing education. The Department directs and takes part in preparing a general policy in these areas and supervises its implementation. Furthermore, the Department is in charge of developing innovations in education, including distance learning, and publishing teaching materials. The **Office of Evaluation and Analysis** is responsible for quality evaluation and supervision of good practices within the educational institutions at all school levels, including evaluation of ongoing research in higher education and research institutes. Furthermore, the Office works on developing methods of quality and outcome evaluation in cultural, educational and scientific matters. In cooperation



with other offices and departments, the Office is also responsible for collecting and analyzing data and information as appropriate in order to ensure an overview and contribute to a general policy formulation.

The Ministry of Education is responsible for implementing legislation at all levels, from pre-primary through upper secondary and higher education levels, as well as continuing education for adults. The Ministry is in charge of planning educational improvements and issuing regulations, and is responsible for evaluation and supervision at all educational levels. The municipalities are responsible for evaluation and quality control of school activities in preschools and compulsory schools and provide the Ministry with information regarding implementation of school operations, internal evaluation, external evaluation at municipality level, process of school policy and plan for improvement. They shall also follow up on internal and external evaluation, so that such evaluation may lead to improvements in school operations.

The **National Centre for Educational Materials**, under the auspices of the Ministry of Education, develops and publishes educational materials for the compulsory school and distributes them to pupils free of charge.

The **Educational Testing Institute**, an independent institution funded by the state and under the auspices of the Ministry of Education, sets, organizes and marks nationally coordinated examinations at the compulsory education level. It also participates in and carries out international comparative research in the field of education with special emphasis on projects that can produce practical and/or scientific knowledge relevant to assessment or evaluation.

The **Cooperation Committee for the Higher Education Level** consists of the rectors of higher education institutions. The Committee has an advisory role on matters that are referred to it by the Minister of Education or individual higher education institutions. (Eurydice, 2009/10).

According to the Upper Secondary School Act of 2008, **Occupational Councils** comprising representatives of employers and employees are appointed by the Minister of Education for occupational groups or individual occupations. According to Article 25 of the Act, these Councils shall advise the Minister regarding vocational education at upper secondary school level in their respective occupations. Among other functions, these Council are expected to: propose general study objectives and define the needs for knowledge and skills which the study programme descriptions for the respective occupations shall be based on, and shall form a part of the general part of the National Curriculum Guide, and to make proposals for learning outcomes; devise criteria for division of study between school-based and workplace learning; make proposals regarding structure and content of examinations for individual occupations; and make proposals for study programme descriptions for individual study programmes which upper secondary schools can use as guidelines. Occupational Councils can establish **Professional Councils** for each occupation or occupational groups with representatives from individual occupations and vocational teachers and/or other specialists. The Professional Councils provide advice on innovation and development within the relevant occupational fields and make proposals on specific pilot projects and development projects.



The **Education and Training Service Centre**, established in 2002 by the Icelandic Confederation of Labour and the Confederation of Icelandic Employers, is since 2010 also owned by the Federation of State and Municipal Employees, the Association of Local Authorities and the Ministry of Finance. The role of the Centre is to be a collaborative forum of the founding parties for adult education and vocational training in cooperation with other educational bodies operating under the auspices of the member associations. The Centre operates in accordance with a service agreement with the Ministry of Education. It mainly targets those who have not completed the upper secondary level of education. The Centre is contracted by the Ministry of Education to develop methodologies to validate non-formal and informal learning.

The education system has to a large extent been decentralized both with regard to responsibilities and decision-making as part of a general trend in society. The local **municipalities** (there were 76 municipalities in 2010) are responsible for the operation of pre-primary and compulsory schools. Apart from being represented in the school boards of upper secondary schools, municipalities have no administrative responsibilities at the upper secondary level. A few of the larger municipalities operate schools for adults.

The **pre-primary board** (or the school board in those municipalities where there is one body responsible for both of these areas) supervises preschool educational affairs in the municipality concerned. The board comprises the representatives appointed by the political parties or organizations which have been elected to the local government. Representatives of teachers and parents are entitled to attend the pre-primary board meetings, with the right to speak and make proposals. In the larger communities, pre-primary school advisors work in cooperation with the pre-primary board or school board and the director of the pre-primary school. The role of the advisor is to give advice, monitor the operation of the pre-primary schools within that municipality and promote cooperation between the individual pre-primary schools.

The **school board** is responsible for compulsory school affairs in each municipality. The school board is comprised of representatives appointed by the political parties or organizations which have been elected to the local administration. Representatives of teachers, head teachers and parents have the right to attend school board meetings and to make proposals. According to Article 6 of the Compulsory School Act of 2008, among other functions the school board is expected to: ensure that all compulsory age children who have the right to attend school, receive compulsory education according to law; confirm the annual operational schedule of the compulsory school and the school curriculum for each individual school; monitor the implementation of schooling and instruction in the municipality, the structure of school curriculum and make proposals to the head teacher and/or local government regarding improvements to compulsory school operations; and encourage cooperation between preschool and compulsory school and between compulsory school and upper secondary school.

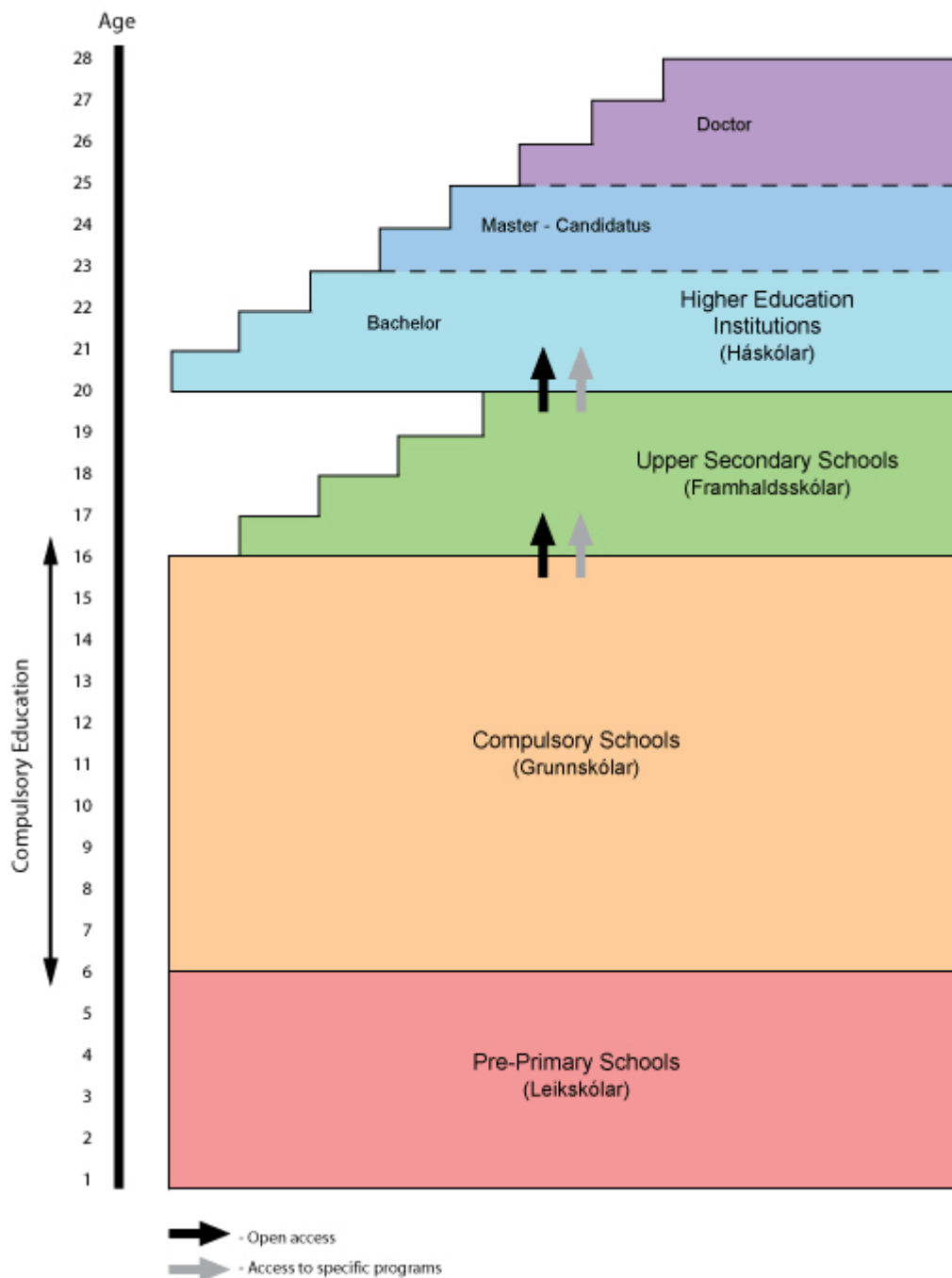
Pre-primary, compulsory and upper secondary schools are administrated by **head teachers**. They both direct and are responsible for the operations of the school under the supervision of the Ministry of Education. Every compulsory school shall operate a **school council**, which shall be a forum for cooperation between the head



teacher and the school community regarding school operations and activities. The school council discusses the school curriculum guide, annual operational schedule, financial plan and other plans regarding school activities. It comprises, in addition to the head teacher, representatives of teachers, parents and pupils (Article 8 of the Compulsory School Act of 2008). At the upper secondary level, the school council shall provide consultation and assistance to the head teacher. The head teacher serves as chair to the school council, which, in addition to the head teacher, shall be comprised of the head teacher's assistant and representatives of teachers and pupils. According to legislation, compulsory and upper secondary schools shall establish a **teachers' council** (or assembly in the case of upper secondary schools), a **parents' council** and a **pupils' council** (or association at the upper secondary level).

Structure and organization of the education system

Iceland: structure of the education system



Source: Website of the Ministry of Education, Science and Culture, June 2012.

Pre-school education

Pre-primary education is the first level in the education system and is intended for children who have not yet reached the age of compulsory schooling (i.e. 6 years). Generally pre-primary schools accept children aged 1/2-5. Children aged 0-2 years can be cared for in private homes by child-minders; this type of provision is under the auspices of the Ministry of Welfare and is not part of the school system. Parents pay



fees and have to apply for admission for the child at a pre-primary school. In local municipalities where there may be insufficient room to accommodate all applicants, children of single parents and students are often given priority.

Primary and lower secondary education (compulsory school)

Children enter the compulsory school at age 6. The compulsory school covers ten years (grades 1 to 10). There is no division between primary and lower secondary education; they form part of the same school level and normally take place in the same school. Generally grades 1 to 7 are considered the primary grades, and grades 8 to 10 the lower secondary grades. According to the Compulsory School Act of 2008, all pupils in grades 4 and 7 shall sit national examinations in Icelandic and mathematics; these examinations are intended to assess to what extent the goals of the National Curriculum Guide have been reached. Pupils in the first semester of grade 10 shall sit national examinations in Icelandic, mathematics and English. Examinations are organized by the Educational Testing Institute. Upon completion of the compulsory school pupils receive a certificate. It is also possible to graduate from compulsory school before completing the tenth year, provided that the pupil fulfils existing requirements according to the description of learning outcomes in the National Curriculum Guide.

Secondary education

Upper secondary education is not compulsory, but anyone who has completed compulsory education, has had equivalent basic education or has reached the age of 16 is entitled to enrol in the upper secondary school. Most upper secondary schools operate according to a unit-credit system where the educational content of each subject is divided into a number of defined course units which last for one semester. Grammar schools offer academic general education programmes in four branches of study (i.e. natural sciences, social sciences, foreign languages, and business and economics) leading to the matriculation examination, which gives access to higher education institutions. Studies leading to matriculation are normally organized as an eight-semester course. For the matriculation examination, 140 credits are required; one credit is generally the equivalent of two lessons per week for one semester. Comprehensive schools offer programmes similar to those of the grammar schools concluding with a matriculation examination, and also theoretical and practical courses, as well as some other vocational education courses. A few comprehensive schools also offer postsecondary non-tertiary programmes (i.e. master craftsmen courses). Industrial vocational schools offer theoretical and practical branches of study in the certified and some non-certified trades; these schools also offer postsecondary non-tertiary programmes (master craftsmen courses). The length of the courses offered by comprehensive schools and industrial vocational schools varies, but most courses involve three or four years of training. Training for the certified trades takes three to four years to complete. It normally involves taking a vocational branch of study at an industrial vocational school or a comprehensive school and an apprenticeship contract with a master craftsman or an industrial firm. There is also a three-year fine arts branch of study. The Upper Secondary School Act of 2008 introduced the possibility of shortening general academic studies leading to matriculation examination as well as vocational studies from four to three years. The Act allows for a greater flexibility and freedom for schools to formulate descriptions



of their study programmes to be validated by the Ministry of Education. All schools are expected to comply with the provisions of the Act starting from 2011. In order to graduate with an upper secondary school leaving certificate, a vocational certificate or a matriculation examination, students shall have completed their studies with satisfactory results according to the curriculum and study programme description validated by the Ministry. According to Article 18 of the Act, a study programme leading to matriculation examination shall include a minimum of 45 credit units in the core subjects (i.e. Icelandic, mathematics and English).

Higher education

As a main rule, access to higher education institutions is granted to students who have passed the matriculation examination or completed an equivalent level of study. In the last three decades new higher education institutions have been established and several postsecondary institutions have been upgraded to higher education level. The four teacher training institutions merged at the beginning of 1998 to form the University of Education (which in 2008 merged into the University of Iceland), and three art colleges merged into one in 1999 when the Academy of the Arts was founded. The Technical College of Iceland, gained university status in 2002, and in 2005 it merged into the Reykjavík University. The agricultural school became the Agricultural University of Iceland in 1998. In 2010 there were seven higher education institutions, of which four operated by the state and three by private entities with state support. Following the adoption of the Higher Education Act (2006) all higher education institutions have adopted the three-cycle degree structure in line with the Bologna process. The National Qualification Framework for higher education of 2011 provides a systematic description of the structure of qualifications and degrees and is specifically based on learning outcomes. At the first-cycle level, the duration of short, practically-oriented and theory-based diploma courses ranges between six months to two years, equivalent to 30–120 European Credit Transfer System (ECTS) credits. A full study programme shall normally consist of 60 credits per academic year and one ECTS credit normally consists of 25–30 hours student workload. In most cases bachelor's degree programmes take three years to complete (180 ECTS credits); the bachelor's degrees in nursing and physiotherapy, the bachelor degree in social work, and the bachelor degree in the art of acting (offered by the Academy of the Arts), require 240 ECTS. The master level qualification, which either do not include a research project or the project is of less than 30 ECTS, requires the completion of 30–120 ECTS credits of an organized study programme at the second cycle. A master's degree requires 90-120 ECTS, including a research project of at least 30 ECTS credits. Doctoral degree programmes, which are offered in some fields and not by all higher education institutions, usually take three to four years to complete (180-240 ECTS; 210 ECTS in the case of the doctorates in several fields of social and human sciences, 240 ECTS in the case of the doctorate in educational sciences). Most of the former degree programmes have been reorganized following the Bologna scheme, such as for example programmes in the fields of law and pharmacy, now divided into a three-year bachelor's and two-year master's degree. Some institutions continue to offer one-year postgraduate diploma programmes following the bachelor's degree (in the fields of social work, student counselling, journalism, mass communication and upper secondary teacher education) or short postgraduate diploma courses equivalent to 30 ECTS credits, as well as long-cycle *candidatus* degree programmes requiring



five to six years of full-time studies (300-360 ECTS credits), such as the *candidatus* degree in medicine or in dentistry (360 ECTS).

Article 28 of the Compulsory School Act of 2008 stipulates that the school year shall include at least 180 days of school attendance. Division between days of instruction and other school days shall be the responsibility of the head teacher in consultation with the school council and with the consent of the school board. The weekly workload shall comprise at least: 1,200 minutes in grades 1-4, 1,400 minutes in grades 5-7, and 1,480 minutes in grades 8-10. In determining daily and weekly working hours of compulsory school pupils, care shall be taken to ensure continuity and that the total does not exceed a reasonable workload considering the age and maturity of pupils. The school year normally consists of nine months, from late August-beginning of September to end of May-10 June. Classes are usually held five days a week. The average minimum annual number of teaching hours is 720 hours for children aged 6-9 (or in grades 1-4), 840 hours for those aged 10-12 (or in grades 5-7) and 888 hours at the lower secondary level (or grades 8-10). (Eurydice, 2001; see also MOESC, 2004). At the upper secondary school level the school year comprises nine months, divided into two semesters, from the last week of August to the end of May. Upper secondary schools operate from Monday to Friday. According to Article 15 of the Upper Secondary School Act of 2008, one school year shall comprise at least 180 working days. The academic year is divided into two semesters and usually lasts from September to May. Some higher education institutions offer summer sessions from June to August.

The educational process

The first comprehensive curriculum guide for primary and lower secondary schools was issued by the Ministry of Education, Science and Culture in 1960 and was based on the laws on compulsory education from 1946. This curriculum remained in effect until new laws on compulsory school were passed in 1974 at which point the writing of new national curriculum guide was begun. The National Curriculum Guide was issued in a series of booklets during 1975-1977. They were structured in such a way that a general section which described the main objectives of education at this level and teaching methods were together in one booklet, and separate booklets for each subject were issued later. The National Curriculum Guide issued in 1989 emphasized the dual role of upbringing and instruction at the compulsory level, while also dealing with individual subjects and the organization of school work. (Eurydice, 2009/10).

A division of the Ministry of Education, Science and Culture is responsible for the development and publication of the National Curriculum. An extensive review was carried out from 1996-1999 with new curricula and some new subjects introduced in 1999 in pre-primary, compulsory and upper secondary schools. Most of the compulsory school curricula had been revised by 2007, and all schools were expected to adapt their own curricula to the revised curriculum by 2010. The National Curriculum for Compulsory School of 2004 includes goals, aims and objectives and is organized into three sections covering grades 1-4, 5-7 and 8-10. Goals are stated for the end of grade 10. In 1999 detailed objectives were provided for twelve subjects stating the aims to be attained by the end of grades 4, 7 and 10, but in the more recent revision (2007), the objectives are published as an appendix to the main curriculum, allowing teachers to exercise more discretion in their teaching plans. Individual

schools are required to develop their own school curricula for each subject, based on the aims and objectives set out in the National Curriculum for Compulsory School, which has both a general and individual sections for each subject. Individual teachers make minor revisions annually based on local conditions. (J. Lavonen et al. in: Nordic Council of Ministers, 2009).

Article 25 of the Compulsory School Act of 2008 stipulates that the National Curriculum Guide shall lay down the main objectives of study and instruction, the structure and organization of study, as well as the distribution of time among the different subjects and subject areas in the compulsory school. Effort shall be made to ensure as much cohesion of studies as possible, but each compulsory school determines if particular subjects shall be taught in a separate or integrated way. The National Curriculum Guide shall define required learning outcomes within each subject area. Pupils shall have the possibility to fulfil the learning outcomes of particular subjects and subject areas in various ways. The National Curriculum Guide shall define learning outcomes and requirements for pupils to complete individual subjects or subject areas. It shall also define requirements for pupils that complete the compulsory school in less than ten years. The National Curriculum Guide shall outline the cooperation between compulsory school and preschool on the one hand and compulsory school and upper secondary school on the other hand and how to arrange efficient transfer and adaptation between school levels. The National Curriculum Guide shall stipulate the content and organization of study in the following areas: Icelandic or Icelandic as second language or Icelandic sign language; mathematics; English, Danish or other Nordic languages; arts and crafts; natural sciences; physical education; social sciences; equal rights affairs; religious studies, life skills and information and communication technology.

Article 26 of the Act indicates that from the beginning of their compulsory education, pupils shall have the possibility of choice regarding their studies, such as of topics, learning methods and subjects, according to the framework provided by the National Curriculum Guide and the (local) school curriculum. The objective is to encourage pupils to take responsibility for their studies and create flexibility in school activities. Distance education and web-based learning can account for part of pupils' schoolwork. In grades 8, 9 and 10 elective subjects and subject areas chosen by pupils may account for around one third of study time.

Each compulsory school shall annually issue a school curriculum guide and an operational plan. The head teacher is responsible for their implementation and shall devise them in consultation with teachers. The school curriculum guide is a more detailed version of the National Curriculum Guide as regards objectives, content and assessment of studies, operational methods and evaluation and quality control of school activities. The school curriculum guide shall take into consideration the compulsory school's culture, characteristics and circumstances and shall be revised regularly. The annual operational plan shall provide information on the school calendar, including the duration of vacations, pupils' study schedule, school rules, support services, extra-curricular and social activities as well as other aspects concerning school activities each year. The school's annual operational plan shall be submitted to the School Board for approval, which confirms its entry into force provided that it has been devised in accordance with law, regulations, National

Curriculum Guide, collective bargaining agreements and local authorities' decisions regarding school activities. (Article 29).

Assessment of pupils' results and progress shall be a regular part of school activities. The purpose is to monitor whether pupils fulfil the objectives laid down in the National Curriculum Guide and if they attain their study objectives, to encourage pupils to make progress and determine which pupils may need special support. Further provisions on study assessment shall be laid down in the National Curriculum Guide for compulsory schools. (Article 27). All pupils in grades 4 and 7 shall sit national examinations in Icelandic and mathematics. Pupils in the first semester of grade 10 shall sit national examinations in Icelandic, mathematics and English. The Minister of Education, Science and Culture shall also implement other examinations. (Article 39).

Following the adoption of the Compulsory School Act of 2008, a revision of the 2007 National Curriculum Guide started. The revision of the curriculum for compulsory education, as well as for pre-primary and upper secondary education, is based on a national development of the eight key competences recommended by the European Union in 2006 (i.e. . communication in the mother tongue; communication in foreign languages; mathematical competence and basic competences in science and technology; digital competence; learning to learn; social and civic competences; sense of initiative and entrepreneurship; cultural awareness and expression). The key competences are being considered a fundamental part of the Iceland's lifelong learning strategy and will mirror the main emphasis and objectives of the education system. (Eurydice, 2009/10).

A new curriculum for pre-primary, compulsory and upper secondary schools has been adopted in August 2011. The objectives in the curriculum are seen as guidelines on how the subjects in different grades reflect the fundamental principles of the education in Iceland. The curriculum focuses on competences instead of knowledge and skills. Furthermore, the municipalities have become more responsible for the local curriculum. (H. Ulvseth in: Nordic Council of Ministers, 2012).

The revised National Curriculum of 2011 takes into account the following inter-related guiding principles: literacy, sustainability, health and welfare, democracy and human rights, equality, and creativity. These principles shall be reflected in the content of the programmes and in the school culture and practice.

Pre-primary education

As mentioned, pre-primary education is intended for children who have not yet reached the age of compulsory schooling (i.e. 6 years). Generally pre-primary schools accept children aged 2-5. Children aged 0-2 years can be cared for in private homes by child-minders; this type of provision is under the auspices of the Ministry of Welfare and is not part of the school system. Parents pay fees and have to apply for admission for the child at a pre-primary school. In local municipalities where there may be insufficient room to accommodate all applicants, children of single parents and students are often given priority.



The Preschool Act of 2008 states that children's interests and welfare shall be the primary mission of all preschool activities. Children shall be provided with care and education, offered a healthy and encouraging environment to grow up in, as well as safe conditions to learn and play. Learning through play shall be encouraged in a creative environment where children enjoy a variety of possibilities to grow. Preschool practice and methods shall be characterized by tolerance and affection, equality, democratic cooperation, responsibility, concern, forgiveness, respect for human values and the Christian heritage of Icelandic culture. The main objectives of upbringing and instruction in the preschool shall be to:

- monitor and encourage children's general development in close cooperation with parents;
- provide systematic linguistic stimulation and contribute to common skills in the Icelandic language;
- provide children with mental, intellectual and physical care according to the needs of each individual, so that they may enjoy their childhood;
- encourage children's broadmindedness and strengthen their moral values;
- lay the foundation necessary for the children to become independent, autonomous, active and responsible participants in a democratic society which is undergoing rapid and continuous development;
- cultivate children's expressive and creative abilities with the aim of strengthening their self esteem, health awareness, confidence and communication skills.

According to Article 13 of the Act, the National Curriculum Guide for preschools, issued by the Ministry of Education, shall stipulate the main objectives of preschool activities and the preschool's role in providing upbringing and education. The National Curriculum Guide shall emphasize the value of play in all preschool activities. It shall also address the objectives of preschool education, parent cooperation, innovation and development, evaluation of preschool activities and the connection between the preschool and the compulsory school. The National Curriculum Guide shall define learning outcomes for preschool education based on children's age and maturity. Article 14 stipulates that each preschool shall issue a school curriculum guide under the responsibility of the preschool head teacher. The school curriculum guide is a more detailed version of the National Curriculum Guide for preschools, and includes the preschool's operational plan for upbringing and education with objectives and defined ways to reach those objectives. The school curriculum guide shall take into consideration the preschool's characteristics and the educational policy of the municipality in question. The school curriculum guide shall be revised regularly. The preschool head teacher issues annually a special operational plan. The operational plan shall provide information on annual activities of the preschool, such as the preschool calendar and other aspects concerning preschool activities. Article 16 indicates that the school curriculum guide shall provide information on the cooperation between the preschool and the compulsory school and on how to organize children's transfer and adaptation between school levels.

The National Curriculum Guide for Preschools (version 2003) describes the common goals and requirements which apply to all preschool activities. It is a policy statement guiding preschool education and is intended to form a flexible framework for their operation. Each preschool has to design its own school curriculum guide



based on the National Guide. The National Curriculum Guide: is a professional policy guideline on the educational role of the preschool; is based on a child-centred philosophy, with the child's maturity and needs as its core; is intended to coordinate the educating of children in preschools; serves as reference for evaluation of preschool activities and for preschool teachers' education; and is intended to ensure the quality of preschools and equalize children's educational circumstances. (MESC, 2003).

According to the National Curriculum Guide of 2003, preschools should emphasize children's creative work and play. This does not involve direct instruction aiming at specific theoretical knowledge. Preschool subjects are oriented more towards maturity than subject matter, emphasizing children's play as a route to learning and maturing, discovery learning. Preschools are to develop a child's all-round maturity, which includes: physical and motor development, emotional development, cognitive development, language development, social development and social consciousness, aesthetical development and creativity, ethical development and moral consciousness. Preschools should cater to all these aspects of development, encourage them and stimulate their interaction. A child's life skills and school achievement depend upon a balance among these developmental aspects. The preschool must show consideration for the needs of each individual child, to ensure that it can reach its potential in a peer group on its own premises. Special consideration must be shown to a child who is handicapped in any way or has emotional and/or social difficulties. It needs to be provided with special assistance to compensate for the limitations which its handicap imposes on it. The same applies to a child which is deaf or has a hearing disability, a blind child or one which is visually impaired. Each child needs to be occupied with tasks suited to its capabilities. Care must be taken to ensure that a child is not isolated but adapts well to the group and enjoys normal social relationships. (*Ibid.*).

Life skills are based on a child's overall development, his/her ability to communicate, logical expression and ability to respect his/her environment. To acquire life skills the child must learn: the basic aspects of healthy life styles and attitudes together with his/her peers in work and play; to respect others; to show tolerance for other views, different cultures and experiences; to know him/herself and strengthen self-confidence; to increase his/her ability to communicate and interact with peers; to think logically, ask questions and seek answers; to respect the values, habits and customs which prevail in the preschool and in the society; to respect nature—the environment, animals and plants. Preschool learning areas are aspects of emphasis in preschool education. These include: motor development, language development, artistic creation, music, nature and environment, culture and society. The learning areas overlap and are an integral part of basic preschool activities: play, daily care and general life skills.

Parents bear the primary responsibility for the education and welfare of their children, while a preschool should provide parents with support in raising children. It is important to develop close cooperation and mutual trust between homes and preschools. Each preschool is to have a parents' association, with parental meetings held regularly where parents are consulted concerning their preparation. Parents can participate in preschool activities by various means. They can observe and take part in a full day's or partial day's activities. They can also follow along on preschool



excursions and take part in organizing them. Furthermore, cooperation between preschools and compulsory schools is important in order to encourage a continuous progression in a child's education and so that he/she will experience compulsory school as a natural continuation of preschool. (*Ibid.*).

Local municipalities pay for the construction and the operation of pre-primary schools. Parents contribute a substantial amount towards operating costs. The share that the parents contribute varies from municipality to municipality and in some cases depends on the circumstances of the parents.

Generally each pre-primary school has one to five divisions with 18-24 children in each. Divisions where special needs children and other children are integrated have 14-18 children. Children are often divided into different divisions according to their age. Children 1, 2 and 3 year olds are often together in a division and so are the 3- to 5-year-olds. It is not uncommon, however, especially in smaller communities that children in different age brackets share a division. Pre-primary schools usually provide six to nine hours a day of care and instruction, and it is up to the parents to decide how long they deem it necessary for the child to attend. However, it also varies from one municipality to another whether the wishes of the parents regarding the length of stay at the preschool, can be fulfilled. Pre-primary schools are normally open between 7:00/8:00 a.m. and 17:30/18:30 p.m. Meal times, i.e. breakfast, mid-morning refreshments, lunch and afternoon refreshments, are a permanent part of the preschool routine. After lunch the younger children usually have a period of rest. The children are expected to be outdoors for a certain time every day. Each pre-primary school operates as an independent institution, usually in facilities which have been specifically designed for the purpose. As a general rule, children attend the preschool which is closest to their home. Preschool education is co-educational.

Most pre-primary schools are eclectic in their approach to different ideologies and choose to adapt them to their circumstances. Free and organized play is emphasized, and so is linguistic and artistic, musical creativity as well as exercise. Each pre-primary school provides the children with play materials, such as books and toys. There is no coordination across pre-primary schools concerning choice of material. Many pre-primary schools also offer computer sessions on individual basis for the oldest children in order to enhance their computer skills.

Pre-primary schools are not required to assess the performance or the progress of each individual child. However, the pre-primary school staff or specialists make such an assessment, if any suspicion of deviation from normal development arises. Each pre-primary school shall systematically evaluate the achievements and quality of its activities with active participation, as relevant, from pre-primary school personnel, children and parents. The pre-primary school issues publicly information on its internal evaluation, its connections with the school curriculum guide and plans for improvement. Municipalities shall administer assessment and quality control of pre-primary school activities and provide the Ministry with information about implementation of pre-primary school operations, internal and external evaluation, process of pre-primary school policy and plans for improvement.



According to Statistics Iceland, in 2004 there were 262 preschools with 16,755 children enrolled. The total number of educational staff was 4,085; 32% were qualified preschool teachers and 6% were staff with other types of training. The total number of non-teaching personnel was 618.

Statistics Iceland reports that in December 2010 a total of 18,961 children attended pre-primary schools (of whom 12,728 in the age group 3-5), a 1.3% increase compared to the previous year. In spite of this increase, the proportion of 1-5-year-olds attending pre-primary schools has decreased slightly from the previous year, from 83% to 82%. The children's daily attendance has also changed. The number of children staying in school for nine hours a day or longer decreased by almost 1,100 (31.6% of children) while the number of children staying eight hours each day increased by almost 1,400 (45.5% of children). In 2010 there were 277 pre-primary schools, of which 238 were run by the municipalities. There were 1,707 preschool teachers (including 653 preschool teachers, 640 heads of departments, 182 assistant head masters, and 232 head masters), 641 staff with other types of training (including 502 preschool teachers), and 2,631 unskilled staff, for a total of 4,979 staff (of whom 96% were women) or 4,371 preschool staff in full-time equivalent. (Statistics Iceland, 2011).

Primary and lower secondary education (compulsory school)

Children enter the compulsory school at age 6. The compulsory school covers ten years (grades 1 to 10) and there is no division between primary and lower secondary education. Generally grades 1 to 7 are considered the primary grades, and grades 8 to 10 the lower secondary grades.

According to the Compulsory School Act of 2008, all pupils in grades 4 and 7 shall sit national examinations in Icelandic and mathematics. These examinations are intended to assess to what extent the goals of the National Curriculum Guide have been reached. Pupils in the first semester of grade 10 shall sit national examinations in Icelandic, mathematics and English. Examinations are organized by the Educational Testing Institute. Upon completion of the compulsory school pupils receive a certificate. It is also possible to graduate from compulsory school before completing the tenth year, provided that the pupil fulfils existing requirements according to the description of learning outcomes in the National Curriculum Guide.

Article 2 of the Compulsory School Act of 2008 stipulates that the compulsory school shall, in cooperation with the home, encourage pupils' general development and prepare them for active participation in a democratic society that is continuously developing. Compulsory school practice and methods shall be characterized by tolerance and affection, Christian heritage of Icelandic culture, equality, democratic cooperation, responsibility, concern, forgiveness and respect for human values. The compulsory school shall endeavour to organize its activities to correspond fully with the condition and needs of their pupils and encourage the overall development, well-being and education of each individual. The compulsory school shall encourage broadmindedness in its pupils, strengthen their skills in the Icelandic language and their understanding of Icelandic society, its history and characteristics, of people's living conditions and the individual's duties to the community, the environment and to the world. Pupils shall be provided with the opportunity to develop and use their

creativity and to acquire knowledge and skills for further education and development. School activities shall lay the foundations for pupils' autonomy, initiative and independent thinking and train their cooperation skills. The compulsory school shall encourage good cooperation between the school and the home, with the objective of ensuring successful school operation, general welfare and safety for pupils.

Article 24 of the Act indicates that the National Curriculum Guide issued by the Ministry of Education shall, among other things, emphasize the following:

- self consciousness, personal awareness, ethical consciousness, social awareness and pupils' awareness of their civil responsibilities and duties;
- physical and mental well-being, healthy lifestyle and responsible approach towards living beings and the environment;
- training pupils in using the Icelandic language in all studies;
- dramatic and artistic expression;
- the ability of pupils to understand causal relationships and to draw logical conclusions;
- understanding of vital and creative activities, innovation and entrepreneurial studies;
- balance between academic and practical studies;
- utilizing children's' play as means of learning and development;
- studies which will be of advantage to pupils in their daily life as well as in further studies and future employment;
- preparing both sexes equally for active participation in society, family life and employment;
- a variety of means to acquire knowledge, through the use of technological media, information and communication technology, school resource centres and written sources;
- education and career guidance and counselling, information about occupations and employment, available courses of study in preparing for future studies or employment.

In devising the National Curriculum Guide, in the organization of study and instruction and in producing and selecting study material, special effort shall be made to ensure that all pupils have equal opportunities and a chance to select subjects and learning approaches in their own education. The objectives and practice of study and instruction shall aim at preventing discrimination on the basis of origin, gender, sexual orientation, residence, social class, religion, health condition, handicap or situation in general. All school activities shall encourage a healthy lifestyle and take into account the variation of personality, development, talent, abilities and interests of each individual pupil.

The objectives set in the *National Curriculum Guide – General Section* (2004 version) are pupil-oriented, and describe what pupils are expected to be capable of and know at specific points in their compulsory school study. They concern pupils' overall maturity, all subject aspects and also cross-disciplinary factors common to all subjects. The objectives of subjects or related subject areas are classified together and published in separate booklets. The General Section, together with all the subject booklets, comprises the entire National Curriculum Guide. The booklets on individual



subjects or subject areas include the justification for including this subject in compulsory school study and describe its place and purpose. They list the final objectives of the subject, which should describe generally what knowledge, comprehension and skills are demanded of pupils in general upon completion of compulsory school study in the subject and interim objectives at specific points in the study. There are three main categories of objectives, i.e. final objectives, intermediate objectives (for grades 1-4, grades 5-7 and grades 8-10), and enabling objectives. (MESC, 2004).

According to the *National Curriculum Guide for Compulsory School – Life skills* (2004 version), life skills study is intended to strengthen a pupil's overall development. This involves, for instance, having pupils make an effort to develop spiritual values, physical health and psychological strength. They strengthen their social skills, moral competence and respect for others and themselves. In addition, an effort is made to strengthen their courage, initiative, natural creativity and adaptability to meet the demands and challenges of everyday life. 'Life skills' is a collective term for a variety of study areas, making it easier for the teacher to follow a variety of routes to reach the specified objectives. They include aspects intended to increase pupils' self-knowledge, assist them in creating responsible lifestyles and values for themselves, finding solid ground to stand on and a sense of purpose in their lives, and developing their ability to build up and maintain productive relations with others.

'Life skills' as presented in the National Curriculum Guide 2004 is based, on the one hand, on topics where the focus is on self-knowledge, maturity and individual development and, on the other hand, on topics where external aspects of daily life are at the forefront. The former comprise the core of the subject and aim at increasing self-knowledge, maturity and individual development. The topics have been named self-knowledge, communication, creativity and lifestyle. The latter topics, named society, environment, nature and culture, offer more flexibility for implementation by individual schools. Here the schools have the opportunity of introducing issues which reflect to a greater extent their special situation, emphases in their work, ideology, local conditions and issues which may arise at any time and affect pupils and teachers. The Curriculum Guide expands on and specifies the final objectives of both sets of topics. They are intended to give an overarching view of what life skills in compulsory schools are aiming at. They explain the general purpose of the study and describe what schools should be aiming for and what pupils should have acquired upon completion of mandatory school study. The intermediate objectives are fully explained for topics included under self-knowledge, communication, creativity and lifestyle, which form the core of the subject and its main focus. The intermediate objectives thus give an overall view of what students are generally expected to have learned upon their conclusion. Similarly, only the enabling objectives are fully developed for self-knowledge, communication, creativity and lifestyle. The enabling objectives are a collection of objectives/topics by which the intermediate objectives are to be achieved. They are intended to describe the organization, continuity and progression of study and demonstrate how the intermediate objectives can be broken down in detail.

In implementing life skills as a subject, it is important to bear in mind that other compulsory school subjects involve life skills. They are intended to encourage pupils' all-round development, make them more conscious of their own history and

increase their comprehension of reality. Integration of topics in other subjects with life skills makes it possible to give more personal significance and meaning to the subject, while at the same time increasing the variety of core life skills topics. The objectives of subjects such as: sports, exercise and health; Christian studies, religion and ethics; fine arts; nature study; history and geography; computers and technology; mathematics; home economics and language arts, can each in their own way be integrated with the objectives of life skills. Normally, such developments would be laid out in a school's life skills programme, as it is part of each school's policy formation to adapt the subject to its policy and specific situation. (MESC, 2004b).

As mentioned, a new curriculum for pre-primary, compulsory and upper secondary schools has been adopted in August 2011. The curriculum focuses on competences instead of knowledge and skills. The revised National Curriculum of 2011 takes into account the following inter-related guiding principles: literacy, sustainability, health and welfare, democracy and human rights, equality, and creativity. These principles shall be reflected in the content of the programmes and in the school culture and practice.

The table below shows the reference timetable for the compulsory school in 2011:

Iceland. Compulsory school (grades 1-10): reference timetable

Subject/Learning area	Number of minutes per week in each cycle (minimum)				
	Grades			Total Grades 1-10	%
	1-4	5-7	8-10		
Icelandic (*)	1,120	680	630	2,430	18.08
Foreign languages (**)	80	460	840	1,380	10.27
Arts and crafts	900	840	340	2,080	15.48
Natural sciences	420	340	360	1,120	8.33
Physical education	480	360	360	1,200	8.93
Social studies; religion, life skills, gender equality, ethics	580	600	360	1,540	11.46
Mathematics	800	600	600	2,000	14.88
ICT	120	160	80	360	2.68
School choice/Electives	300	160	870	1,330	9.90
Total minutes per cycle	4,800	4,200	4,440	13,440	100.00

Source: Ministry of Education, Science and Culture. *National Curriculum of the Compulsory School 2011. General Section*. Reykjavik, 2012. [In Icelandic].

(*) Icelandic, Icelandic as second language, or Icelandic sign language. (**) English, Danish and other Scandinavian languages. Electives are chosen by students in grades 8-10. Natural sciences include earth sciences, life sciences and physical sciences. Each school can decide whether subjects and learning areas are taught separately or in an integrated way.

Education at the compulsory level is free of charge. Instruction, administration, bussing, maintenance of buildings and facilities are paid by the local municipality. Schools are organized into classes by age from grade 1 to 10. Officially there is no selection or streaming by ability and children automatically move from one grade to the next according to age. Pupils, who are thought not able to attain the goals



of the compulsory schooling, due to learning disabilities, are provided education in accordance with their abilities. Deaf, blind and otherwise disabled pupils are generally accommodated within a compulsory school or in special divisions within a school. According to an informal norm the number of pupils in a class in grades 1-6 should not exceed 24 and in grades 7-10 there may be 28 to 30 pupils. In smaller schools, mostly rural schools, several grades are grouped into a single class with one teacher. Normally pupils shall receive 30 lessons (of 40-minute duration) a week in grades 1-4, 35 lessons in grades 5-7, and 37 lessons in grades 8-10. Schools can plan their teaching around longer units and organize their own timetable. Schools generally open between 8:00 and 9:00 a.m., and most schools operate up to 15:00–17:00 p.m. Pupils in all compulsory schools shall be provided with the opportunity to participate in extra-curricular and social activities. Extra-curricular and social activities may be organized as part of daily school activities or outside normal school hours. The local authorities may also offer compulsory school pupils with extended stay outside of daily teaching hours. (Eurydice, 2009/10).

In grades 1-3, a class teacher teaches most of the subjects in his or her class. The borders between individual subjects at this age are not very clear. Teaching takes a variety of forms such as class teaching, group work or individual tutoring. In the upper grades, the borders between traditional subjects are clearly defined and teachers tend to be subject teachers teaching one or two subjects in many classes. There has been a tendency in recent years to offer different types of instruction in respect to the rate at which the syllabus is covered in grades 8 to 10. Pupils select a group according to ability, i.e. the best pupils choose a group where they can accelerate in the subject, then there is a group for average pupils and the weakest pupils choose a group where the subject matter is covered more slowly. The use of computers is widespread and about 99% of all compulsory schools have an Internet connection.

The National Centre for Educational Materials is responsible for producing teaching materials and receives an annual budget appropriation for this purpose. It is relatively expensive for a small country to publish satisfactory teaching materials in its own language. For this reason there is no possibility of a choice from a variety of different textbooks for all subjects but the variety of teaching material has increased in recent years, including for example audio-visual material and computer and multimedia programmes. Individual schools and teachers may choose which materials they use when alternatives are available. (*Ibid.*).

According to the Compulsory School Act, the assessment of pupils' results and progress shall be a regular part of school activities. The purpose is to monitor whether pupils fulfil the objectives laid down in the National Curriculum Guide and if attain their study objectives, to encourage pupils to make progress and determine which pupils may need special support. Examinations and other forms of assessment, usually written, are carried out by individual teachers and schools. Assessment is therefore not necessarily standardized between different schools and teachers. The way in which the reports on pupils' progress are written varies greatly: the assessment can be in the form of a number, a letter or a description either oral or written. Reports are given at regular intervals throughout the school year and at the end of each year. The purpose of assessment by the school and the teacher is above all to help improve learning and teaching and to provide both the parents and the children with information on how their studies are progressing. As mentioned, nationally



coordinated examinations are organized every year in Icelandic and mathematics in grades 4 and 7, and in Icelandic, English and mathematics in grade 10. The certificate received by pupils upon completion of compulsory education records the pupil's study assessment report for his/her final year of compulsory school for the study undertaken. The head teacher determines whether a pupil has concluded compulsory education and is responsible for the pupil's graduation from compulsory school.

According to Statistics Iceland, in 2004 there were 178 compulsory schools with 44,511 pupils enrolled (including four special schools with 155 pupils enrolled). The total number of teachers was 4,045 of whom 680 without the required qualifications.

Statistics Iceland reports that in December 2010 there were 42,539 pupils enrolled in the compulsory school, of whom 13,107 in grades 8-10. The total number of licenced teachers was 4,509, including 3,449 teachers, 516 special education teachers, 245 heads of departments, 121 assistant head masters, and 178 head masters. There were also 377 un-licenced teachers, including 365 teachers, four special education teachers, six heads of departments, and two assistant head masters. The total number of educational staff was 4,886 (of whom 80% were women) or 4,671 in full-time equivalents (FTE). The total number of other personnel was 2,703 (or 2,187 in FTE), including 626 assistants for pupils with special needs. (Statistics Iceland, 2011).

Secondary education

As mentioned, upper secondary education is not compulsory, but anyone who has completed compulsory education, has had equivalent basic education or has reached the age of 16, is entitled to enrol in the upper secondary school. Most upper secondary schools operate according to a unit-credit system where the educational content of each subject is divided into a number of defined course units which last for one semester. There are also schools with traditional classes or forms where all the students of a class follow a particular programme of study.

Grammar schools offer academic general education programmes in four branches of study (i.e. natural sciences, social sciences, foreign languages, and business and economics) leading to the matriculation examination, which gives access to higher education institutions. Studies leading to matriculation are normally organized as an eight-semester course. For the matriculation examination, 140 credits are required; one credit is generally the equivalent of two lessons per week for one semester. Comprehensive schools offer programmes similar to those of the grammar schools concluding with a matriculation examination, and also theoretical and practical courses, as well as some other vocational education courses. A few comprehensive schools also offer postsecondary non-tertiary programmes (i.e. master craftsmen courses). Industrial vocational schools offer theoretical and practical branches of study in the certified and some non-certified trades; these schools also offer postsecondary non-tertiary programmes (master craftsmen courses). The length of the courses offered by comprehensive schools and industrial vocational schools varies, but most courses involve three or four years of training. Training for the certified trades takes three to four years to complete. It normally involves taking a vocational branch of study at an industrial vocational school or a comprehensive



school and an apprenticeship contract with a master craftsman or an industrial firm. There is also a three-year fine arts branch of study. A general short branch of study (one to two years of studies depending on individual students) is intended for students who after compulsory school need further preparation for academic or vocational studies as well as for those students who are undecided as to what to do after compulsory education. The objective of the general branch of study is to impart a solid preparation for the core subjects and at the same time to give students the opportunity to take on varied topics in both academic and practical fields.

The Upper Secondary School Act of 2008 introduced the possibility of shortening general academic studies leading to matriculation examination as well as vocational studies from four to three years. The Act allows for a greater flexibility and freedom for schools to formulate descriptions of their study programmes to be validated by the Ministry of Education. All schools are expected to comply with the provisions of the Act starting from 2011. In order to graduate with an upper secondary school leaving certificate, a vocational certificate or a matriculation examination, students shall have completed their studies with satisfactory results according to the curriculum and study programme description validated by the Ministry. According to Article 18 of the Act, a study programme leading to matriculation examination shall include a minimum of 45 credit units in the core subjects (i.e. Icelandic, mathematics and English).

Article 2 of the Act of 2008 stipulates that the objective of the upper secondary school is to encourage the overall development of all students and encourage their active participation in democratic society by offering studies suitable to the needs of each student. The upper secondary school prepares students for employment and further studies. It shall strive to strengthen students' skills in the Icelandic language, both spoken and written, develop moral values, sense of responsibility, broadmindedness, initiative, self-confidence and tolerance, train students to apply disciplined, autonomous working methods and critical thought, teach them to appreciate cultural values and encourage them to seek further knowledge. The upper secondary school shall strive to communicate knowledge and train students in a way that provides them with skills to carry out specialized work and with solid foundations to pursue further education.

Within any given academic branch of study, three groups of courses are offered: core subjects, which all students are required to take; elected fields according to the aims of the branch of study in question; and free selection. Schools have a certain flexibility concerning the offer of courses for the elected fields and the free selection. For the matriculation examination, 140 credits are required. One credit is generally the equivalent of two lessons of instruction per week for one semester. Core subjects constitute 98 credits, elected fields 30 credits, and free selection 12 credits. Studies leading to matriculation are organized as an eight semester course. Core subjects constitute the required course in each academic branch of study and amount to 70% of the total course load. Compulsory core subjects for all academic branches of study are: Icelandic, English, Danish, a third foreign language (usually French, German or Spanish), mathematics, history, social sciences, natural sciences and sports. However, the number of courses in these subjects for each branch of study differs as the core subjects include special subjects within that branch together with subjects that provide and support general education. There are first-year



comprehensive and cross-disciplinary units in the natural and social sciences for all branches of study. A course in life skills is obligatory for all branches, with the goal of preparing students for life in a democratic society by deepening their understanding of that society, including the historical basis, working conditions, culture, family responsibilities, and the rights and responsibilities of the individual. A fourth foreign language is required in the foreign languages branch of study and a course in geography in the social sciences branch. Elected fields constitute 21% of the total course load and cover specialization in an area of the branch of study, such as mathematics, physics and chemistry for the natural sciences branch of study; philosophy and psychology for the social sciences branch; and Latin as well as any of the modern languages mentioned above for the foreign languages branch. Vocational training or recognized training in the arts may be assessed as counting as part of the specialized courses within general academic studies, provided certain conditions are met. Free selection constitutes about 9% of the total course load and may include any of the subject courses offered at the school including further deepening in a subject already studied, such as a foreign language. ICT is used as a tool for teaching other subjects in the curriculum.

The teaching of modern languages is emphasized. For those students who intend to matriculate, English and Danish are compulsory subjects as well as a third foreign language (French, German or Spanish). Students in the language branch are to study four foreign languages, i.e. English, Danish and two of the following: French, German, Spanish. Students, particularly students at schools that operate according to a unit-credit system, also have the opportunity of taking further modern languages as free selection or taking more advanced courses in the modern languages that they have been studying. (Eurydice, 2009/10).

In vocational education at the upper secondary level, study shall be both theoretical and practical and shall form as cohesive a whole as possible in order to enable pupils to better understand the connection between its theoretical and practical aspects. The content and educational objectives of individual branches of study are defined in the National Curriculum Guide. The subjects included in vocational branches of study can be divided as follows: general academic subjects, theoretical vocational subjects and practical vocational subjects. Emphasis shall be placed on having the content of study reflect the current needs of the employment sector concerning the professional qualifications of workers. All vocational trainees must take a certain number of credits in general academic subjects; i.e. Icelandic, modern languages, social studies and mathematics. Physical education is also compulsory. One credit is generally the equivalent of two lessons of instruction per week for one semester. The number of theoretical vocational subjects and practical vocational subjects varies in different branches, as does the extent of practical training.

All upper secondary schools operate five days a week, from Monday to Friday. The average number of lessons in general academic programmes is 35 per week. This may however vary from one year to another. The number of lessons for students in vocational education varies between branches of study and between semesters. Each lesson in upper secondary schools lasts 40 minutes, but some schools plan their teaching around longer units. Individual schools at the upper secondary level organize their own timetables. Schools generally open between 8:00 and 8.15 a.m. and most schools operate up to 15:00 and 16:00 p.m. (*Ibid.*).



General study assessment in upper secondary schools is in the hands of teachers, under the supervision of the head teacher. Upper secondary schools generally have examinations at the end of every semester, regardless of the type of school. These examinations are in most cases written. Students are obliged to take these if they wish to continue and complete their education. The examination period, including the time that it takes to mark the exams, is around three weeks each semester. Some grammar schools that have traditional classes or forms have more extensive final examinations at the end of the fourth and last school year. There are no formal comprehensive final examinations in schools that operate according to a unit-credit system. Marks are given in whole numbers using a 10-point scale, with 10 being the highest grade. In schools that operate according to the unit-credit system students are given a certain number of credits for each course unit they complete. The student's progress is thus measured in credits. The passing grade for each course unit is 5. Students who fail to receive a passing grade in any given course unit are not allowed to retake an examination at the end of the semester and have to repeat the course unit during the next semester in order to continue in that particular subject. Students are allowed three attempts to complete a given course unit. No average mark is calculated, but students must complete at least nine credits per semester. Studies leading to matriculation are organized as an eight-semester course but eleven semesters are allowed as a maximum length of time. The unit-credit system allows students to regulate the speed at which they complete their education, i.e. to accelerate their studies or take more time due to personal circumstances. In schools that have traditional classes or forms a minimum grade of 4 in every subject and a 5 average for all subjects is needed to be allowed to move up to the next year. Examinations can be retaken after the regular examinations at the end of the school year by those students who have failed to get a grade of 4 in individual subjects but whose grade average of all subjects is sufficient to pass. Those students whose grade average is under 5 or who do not reach a minimum grade of 4 in individual subjects after the retakes must repeat the year.

At the end of each semester, students are given a transcript by the school which shows their marks and present standing within the branch of study. On completing a branch of study, students are issued with a certificate by the school which specifies which course units or subjects they have taken and the marks they have received. If the student graduates from a school that operates on a unit-credit system, the certificate also shows the number of credits completed in individual subjects and in the branch of study as a whole. These students are able to graduate at the end of both the autumn and spring semesters. The school-leaving certificate gives the student the right to enter other schools or confirms that the student has completed a certain amount of vocational training. (*Ibid.*).

According to Statistics Iceland, in 2004 there were 36 upper secondary schools (including five private schools) with a total enrolment of 19,623 students (day courses). The total number of teachers was 1,226; there were also 379 instructors (lacking full qualifications).

Statistics Iceland reports that in autumn 2010 there were 25,144 students at the upper secondary level (of whom 12,738 were girls), mainly enrolled in day courses (a total of 22,086 students, including 10,899 girls). A total of 16,540 students (of whom 8,958 were girls) were in general education and 8,604 students (of whom 3,753 were



girls) were in vocational education. In addition, 990 students (including 324 girls) were enrolled at the postsecondary, non-tertiary level. (Statistics Iceland, 2011).

Assessing learning achievement nationwide

The Ministry of Education, Science and Culture is responsible for the regular external evaluation of the pre-primary, compulsory and upper secondary schools. The purpose of the evaluation is to assess the quality of the education system and identify areas in need of improvement. Reliable information is normally gathered on such matters as school management, academic achievement, the academic experience of the pupils, and communications within the school and between the school and parents as well as other acting parties outside the school. Every school is expected to implement methods to evaluate its work, including teaching and administrative methods, internal communications, and contacts with parties outside the school. Schools are free to choose among systems that each develops for its own use or more common quality-management procedures, but should in any case include significant elements of internal monitoring. According to the Ministry's requirements, the self-evaluation methods shall be formal, comprehensive, reliable, cooperative, improvement-oriented, performance-linked, institutionally and individually oriented, descriptive, analytical and public. Furthermore, the Educational Testing Institute prepares, organizes and conducts nationally coordinated examinations in Icelandic and mathematics in grades 4 and 7, as well as in grade 10 in Icelandic, English and mathematics. The mean figures for every compulsory school as well as for every region are made publicly available.

The Ministry is also responsible for the monitoring of higher education, and all higher education institutions have to be accredited. The Ministry has laid down rules on quality control of teaching and research in higher education which include provisions on monitoring the internal quality systems and on regular external evaluations of defined units within the higher education institutions or of the institutions as a whole. (Eurydice, 2009/10).

According to Article 30 of the Upper Secondary School Act of 2008, general study assessment in upper secondary schools is in the hands of teachers, under the supervision of the head teacher. The assessment is based on objectives set for school activities in the National Curriculum Guide and the school curriculum guide. In upper secondary school core subjects (i.e. Icelandic, mathematics and English), study assessment for final courses leading to matriculation examination shall be based on reference examinations provided or accredited by the Ministry. The Ministry of Education may also decide to set assessment examinations in individual upper secondary school subjects, as well as skills examinations concerning learning outcomes. Studies in the certified trades conclude with a journeyman's examination (nationally coordinated).

Iceland has participated in the Programme for International Student Assessment (PISA) since the first study in 2000. The PISA study has shown a strong female advantage in Iceland for students age 15, compared to other countries. The results for 2000 indicated that the gender gap in reading literacy favouring girls was substantial in Iceland. However, no gender difference was found in mathematics and science literacy that year. In PISA 2003, Iceland was noted as the only country where

girls performed significantly better than boys in mathematics. In all 41 participating countries, Iceland was also the country where girls had the greatest advantage over boys in reading literacy. Furthermore, Iceland was one of only three countries where the science literacy of girls was higher than for boys. In PISA 2003 a special test was administered to assess problem solving skills of students and the greatest gender difference favouring girls by far was found in Iceland. More than 400,000 students from 57 countries took part in the PISA 2006 assessment. The focus in this assessment cycle was on science literacy and the assessment also included an optional computer-based component assessing scientific competences (Computer-Based Assessment of Scientific Literacy—CBAS). Three countries administered the CBAS component (Denmark, Iceland and Republic of Korea). Whereas overall country-by-country performance levels did not change between tests, boys in all three countries outperformed the girls when the test was presented via computer. This gap between the boys' performance and the girls' performance occurred regardless of the patterns of achievement across gender on the PISA paper and pencil test of science literacy. (A. Halldórsson et al. in: Nordic Council of Ministers, 2009 Northern Lights, 2006, p. 100).

In PISA 2000, the Icelandic students' scores in mathematics and reading were above the OECD average, whereas the students' scores in science were around the OECD average. In PISA 2003, Icelandic students performed above the OECD average in mathematics, around the OECD average in reading, and below the OECD average in science. In PISA 2006, Icelandic students performed below the OECD average in science and reading; in mathematics, the students' score were above the OECD average. (H. Ulvseth in: Nordic Council of Ministers, 2012).

The percentage of weak readers in PISA 2009 was 17% in Iceland, a percentage proportion that is still lower than the average percentage among all OECD countries (19%). In comparison with the results from PISA 2000, the percentage of weak readers has increased. In OECD as a whole, a slight decrease has been noticed from 2000 to 2009. (U. Fredriksson et al. in: Nordic Council of Ministers, 2012).

Teaching staff

According to new legislation adopted in 2008 (i.e. Act No. 87 on the education and recruitment of teachers and head teachers in preschool, compulsory school and upper secondary school), starting from autumn 2011 the minimum requirement for teachers at all school stages is a master's degree instead of a three-year bachelor's degree. The Act contains provisions relating to the occupational qualifications and recruitment of the different categories of teachers and head teachers, and qualifications requirements to obtain a licence from the Ministry of Education (only licenced teachers can be recruited). According to the Act, the content of education for preschool, compulsory and upper secondary school teachers is defined in detail in a specific regulation issued by the Ministry of Education taking into account the minimum requirements for the relevance of teacher certification studies as well as the relevance of professional subjects.

The main requirement for admission to teacher training programmes is the matriculation examination. As the number of places available is limited, higher education institutions use a selection procedure when admitting applicants. The



admission requirements are determined by each individual institution. Until 2011, the minimum requirement for pre-primary and compulsory school teachers has been a three-year bachelor's degree programme (180 ECTS credits). These programmes are offered by the University of Iceland (the Iceland University of Education merged into the University of Iceland in 2008) and the University of Akureyri. Practical training involves 26-28 ECTS for pre-primary teachers and 24-26 ECTS for compulsory school teachers. In the case of distance education, the programme takes four years to complete. The University of Iceland also offers a teaching certification programme that qualifies bachelor's degree holders to teach at the compulsory level. The length of the practical training in the course is 10 weeks. To qualify as a teacher at the upper secondary level 60 ECTS in pedagogy and didactics are required in addition to a bachelor's degree (B.A. or B.Sc.). Instructors teaching a particular vocational subject at upper secondary level without formal qualifications in pedagogy and didactics, have the right to apply for admission to this programme. Teachers who have completed these programmes are also qualified to teach at the lower secondary level (grades 8-10). The minimum requirement for a special education teacher is a one-year diploma or a two-year master's degree in addition to a bachelor's degree. (Eurydice, 2009/10).

At the University of Iceland, the three-year programme for pre-primary school teachers consists of training in social science subjects, Icelandic, health studies and ecology, art, music, and literature. Subjects taught include psychology, pedagogy, sociology, Icelandic, history of education, behaviour studies, health studies, nutrition science, ecology, family law, children's literature, music, drama, diction and vocalism, art, children's drawing, puppetry, first aid, theme studies and vocational training. The programme emphasizes the importance of combining theoretical knowledge and methodological training in educational institutions. The programme offered at the University of Akureyri is both academic and practical. Emphasis is placed on: working methods; the importance of play in the education and the development of the child; the interrelation of the arts to other activities carried out at the pre-primary school; field trips; education on the environment and the nature; the interrelation between various activities carried out at pre-primary school and the theoretical knowledge of the student. Practical training is equal to 28 ECTS. For pre-primary school teacher trainees, practical training takes place in pre-primary schools, school day-care centres or other educational establishments where the trainees are monitored by a supervisor.

Subjects within the three-year programme for compulsory school teachers at the University of Iceland are divided into three groups: pedagogy, didactics, and electives. The course in pedagogy mainly includes educational studies, the history of education, the sociology of education, educational philosophy, psychology, education theory, curriculum studies, the preparation of educational materials, teaching techniques and methodology. ICT (four ECTS) and integration of children with special needs (eight ECTS) are compulsory courses. The course in didactics emphasises the importance of introducing students to the nature and contents of education at all the stages of the compulsory school. In the case of didactics, special attention is given to Icelandic, mathematics, social and natural sciences, arts and crafts subjects and environmental studies and to the different working methods that apply in the various stages of compulsory school. Teaching practice is an important part of the didactics course, and care is taken to make certain that students become familiar with

school activities and teaching at all levels of compulsory schooling. Electives normally include Icelandic, Danish, physics and chemistry, English, sociology, history, home economics, physical education, religious studies, geography, biology, art, woodwork, mathematics, textile studies and music. Each student can choose two subjects, each equivalent to 25 ECTS. During the final year of their studies, students complete a final essay on a pedagogical or an educational project of their own choice.

In the case of upper secondary school teachers, the one-year programme (60 ECTS) offered at the University of Iceland concentrates on courses on general educational theory, educational psychology, the educational theory of individual subjects, the sociology of education, developmental psychology, as well as studies relating to upper secondary schools, electives and practical training. It qualifies the students to teach both at the compulsory (grades 8-10) and the upper secondary levels. The programme (60 ECTS) that leads to full qualifications for unqualified teachers at the upper secondary level at the University of Iceland is a part-time course carried out over a period of two years. The programme is mainly based on courses in group dynamics, group psychology, the history of education, education and the community, methodology and statistics, educational theory, teaching techniques, educational psychology and developmental psychology, in addition to teaching practice. A similar programme is offered at the Education Department of the University of Akureyri. (*Ibid.*).

Pre-primary and compulsory school teachers are employed by the municipalities according to a law on public employees' wage contracts. Teachers at upper secondary and university levels are state employees. Pre-primary school teachers are usually appointed by municipalities according to a contract that does not specify the length of their employment. Compulsory school teachers are hired following an open recruitment procedure and apply to a municipality for permanent appointment. At the upper secondary level, teachers are appointed to individual schools. Teachers at all education level have the status of public employees.

The working time of teachers is divided into obligatory and non-obligatory attendance. Obligatory attendance at the school includes teaching, breaks between lessons and work on behalf of the school (interview hours, form supervision, assessment, report writing, staff meetings, meetings with parents, consultation with other teachers, etc., as determined by the administration of the school). Non-obligatory attendance includes teaching preparation, marking and the attendance of courses. Pre-primary school teachers work 40 hours a week and are expected to spend four out of the 40 hours on preparation (i.e. work plans, meeting with parents, analyzing behavioural patterns and preparing field trips). The yearly workload of compulsory and upper secondary school teachers is 1,800 hours which is comparable to other professions, although their work is divided into fewer weeks because of the time frame in which compulsory schools operate. The 1,800 hours include 150 hours for in-service training, preparation and other duties outside presence time, as well as 64 hours for preparation and work before and after the school year under management of the school head.

Provisions concerning in-service training for pre-primary, compulsory and upper secondary teachers are to be found in their wage-contracts, in laws and regulations for individual teacher training institutions and in laws on individual school



levels. In recent years emphasis has been placed on making it possible for teachers to have access to in-service training or further education. Educational authorities have adopted the policy of encouraging teachers themselves to bring about innovations and initiate developmental and in-service training projects. In-service training projects are often initiated by the associations of teachers of a particular subject and in some cases by local education offices. In-service training is not compulsory for pre-primary school teachers. In recent years in-service training courses for pre-primary school teachers have included courses on ethics and education, options and choices in education, counselling and support for parents, administration, educational development, gender studies, etc. Courses of this kind usually entail 12 to 30 hours of training. In-service training for compulsory school teachers is not compulsory, but in the teachers wage-contract they are expected to spend 150 hours per year in in-service training, preparation and other duties outside presence in school. Teachers who have completed a programme of further studies (i.e. one-year diploma and postgraduate studies leading to a master's degree) improve their position regarding the possibility of obtaining senior or administrative posts or to be employed by service-related institutions that are linked to the school system. In recent years four main options of in-service training have been available to upper secondary school teachers: subject based courses; itinerary courses; training projects; and field studies. (*Ibid.*).

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Ministry of Welfare: <http://eng.velferdarraduneyti.is/> [In Icelandic and English. Last checked: June 2012.]

National Centre for Educational Materials: <http://www.namsgagnastofnun.is/> [In Icelandic; some information in English and Danish. Last checked: June 2012.]

Quality Board for Icelandic Higher Education: <http://www.rannis.is/english/qef/> [In Icelandic and English. Last checked: June 2012.]

University of Iceland: <http://www.hi.is/> [In Icelandic and English. Last checked: June 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>