



# THE ICELANDIC NATIONAL CURRICULUM GUIDE FOR COMPULSORY SCHOOLS - WITH SUBJECTS AREAS

Ministry of Education, Science and Culture





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## PREFACE

The National Curriculum Guide contains the frame and conditions for learning and teaching based on the principles of existing laws, regulations and international conventions. Six fundamental pillars have been developed within this frame and they form the essence of the educational policy. They include the working methods, content and the learning environment at every school level and form important continuity in the Icelandic educational system. These pillars are literacy, sustainability, health, and welfare, democracy and human rights, equality and creativity.

It is of great importance to develop systematically the knowledge, skills and attitudes that strengthen the individuals' future ability to be critical, active and competent participants in a society based on equality and democracy. The fundamental pillars are, among other things, expected to improve this. The general public should be adequately educated to be able to keep the authorities sufficiently in check, whether this is within the economic, political, media or other social sectors. Schools are factually the only institutions of society that can guarantee youth an opportunity to prepare for active participation in a democratic society, exercise critical and creative thinking and to face diverse social and cultural circumstances.

It has long been known that there will be no real development in educational work without the support of teachers and school administrators. Education policy, organisation, study material and school buildings can be improved over and over again, but if the changes are not put into effect in schools, this is all of no use. The implementation of a new way of thinking in school activities is based on close cooperation of educational authorities with those who are the mainstay of the work carried out in schools.

I hope that this curriculum guide will prove valuable for Icelandic schools at a time of reconstruction, and I urge school personnel, parents, custodians and pupils to familiarise themselves with the content of the guide and to work according to its basic ideas.



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## INTRODUCTION

The general section of the National Curriculum Guide for Compulsory Schools stipulates the objectives and organisation of school activities at the compulsory school level. In this curriculum guide, the role of the National Curriculum Guide, general education and the fundamental pillars of education are discussed, and so are evaluation of school activities and other issues. The National Curriculum Guide details certain provisions of the Compulsory School Act, No. 91, 12 June 2008 and also regulations concerning learning and teaching at compulsory school. It discusses pupils and school personnel and lays down the common objectives for learning and teaching in all Icelandic compulsory schools. The National Curriculum Guide for Compulsory Schools describes the pedagogical and educational role of the compulsory school and its general policy for teaching and the organisation of teaching. The National Curriculum Guide details provisions on school subjects and fields of education and also on emphases and proportions. A reference timetable, showing the relative proportion of subjects and subject areas, is included in the National Curriculum Guide. Each compulsory school decides whether specific subjects and subject areas are taught separately or in an integrated manner but an effort should be made to make education as integral as possible. The National Curriculum Guide defines competence criteria for each subject area and each subject. Pupils should have an opportunity to achieve the competence criteria of the various subject areas and subjects in different ways. Study progress criteria define at what point pupils have completed the various subjects and subject areas. Criteria are formulated for pupils who complete compulsory education in less than ten years.

The National Curriculum Guide is issued by the Minister of Education, Science and Culture in the same manner as regulations and serves diverse purposes. It is both a means of control to execute provisions of law, instructions of the educational authorities on school policy and a compilation of the common objectives for school activities in the whole country. The National Curriculum Guide is to coordinate education and teaching as far as necessary and to ensure the right of all pupils for a defined minimum education and their equal rights to study.

The National Curriculum Guide is to serve different parties. It describes the objectives and requirements common for all pupils, teachers and school authorities and other school personnel. At the same time, it is criteria for standardised assessment in compulsory schools, evaluation of school activities, guidelines for those who produce study material or are engaged in teacher education, it is the basis for writing school curriculum guides and self-evaluation in schools and for the policy making of local authorities. The National Curriculum Guide also provides information and criteria for parents so they can follow the school activities, study progress and the welfare and wellbeing of the pupils. Additionally, the National Curriculum Guide provides pupils with diverse information about school activities.



# ROLE OF THE NATIONAL CURRICULUM



The National Curriculum Guide is based on the Preschool Act, No. 90, 12 June 2008, the Compulsory School Act, No. 91, 12 June 2008, and the Upper Secondary School Act, No. 92, 12 June 2008. The National Curriculum Guide is a framework for school activities at these school levels and a guide through their objectives and goals. It gives a comprehensive view of education and expands on the education policy of these laws.

The National Curriculum Guide is intended for school administrators, teachers and other personnel of the educational system. It also provides information about school objectives and activities for pupils, their parents, public institutions, associations, social partners and the general public. The guide is, in a sense, a contract that the nation makes with itself on education.

## The role of the National Curriculum Guide is multiple:

- The National Curriculum Guide illustrates the public education policy, a description of study programmes and study requirements; specifications which schools and their personnel are to follow in their educational planning. The National Curriculum Guide is thus to ensure children and youth advantageous conditions for education in accordance with the current law and educational policy.
- The National Curriculum Guide is the main administrative tool used by educational authorities to ensure coordination and synchronisation in schools in the execution of a common educational policy. The National Curriculum Guide is therefore one of the



main prerequisites for the Ministry of Education to fulfil its assigned role in directing and supervising the quality and execution of education.

- The National Curriculum Guide defines the framework of administrators, teachers and other personnel of individual schools in their planning, execution and evaluation of school activities which they must carry out, as detailed, for example, in the school curriculum guides.
- The National Curriculum Guide provides pupils and their custodians with information about the quality system and primary criteria on which school activities are based. It is the basis for evaluation of school activities and study assessment in schools. The National Curriculum Guide is intended to provide teachers, pupils and their parents with information on the education of children and youth at each educational level. The National Curriculum Guide is also intended for those who train teachers and other school personnel, as well as those who create study material, research or survey of educational activities.

## 1.1 The general section of the National Curriculum Guide

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Various issues that are discussed in the National Curriculum Guide are common for preschool, compulsory school and upper secondary school. Chapters 1 to 3 are the same for the curriculum guides of all three levels, and there the objectives of the educational system are discussed, general education and the objectives of the school system, in addition to the fundamental pillars of education and evaluation of school activities. Emphasis is on flexibility and continuity in the educational system, both in content and working methods. Additional emphasis is on school development and general professionalism of teachers at all levels.

In the general section of the National Curriculum Guide for Preschool, Compulsory School and Upper Secondary School, the role of each level is described and the special emphasis in learning and teaching at each level: their objectives, tasks, and working methods. In the school curriculum guides published by each school, the policy of the National Curriculum Guide is developed in accordance with the policy of the school in question, the pupil body, the school's professional emphasis and special characteristics.

## 1.2 The role of schools

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Schools are educational institutions and their role is defined in laws on education. Icelandic schools constitute a coordinated whole, the educational system, which is to ensure consistency and continuity in education from preschool to university and adult education. Emphasis is on integral educational policy and clearly defined divisions between school levels so that pupils can pass easily from preschool to compulsory school and from compulsory school to upper secondary school in accordance with their individual educational performance

and development. Pupils should also have the opportunity to study at two school levels simultaneously if it is appropriate for their education. Every school level aims at offering varied tasks and working methods in order to meet different individual needs and encourage the overall development, welfare and education of each pupil.

The main objective of preschool, compulsory school and upper secondary school is to encourage the general education of the citizens. Schools should make an effort to operate according to the status and needs of children and youth. Educational work is to encourage their active participation in democratic society, within and outside school.

The content and tasks of school activities are incorporated in fields of study, subjects or course units. It should be kept in mind that fields of study, subjects or course units are not goals in themselves but aids to facilitate meaningful education and to achieve the objectives of the educational work. The National Curriculum Guides of the three school levels therefore define objectives in accordance with the characteristics of each school level, and the age and development of children and youth.

In the organisation and tasks of school activities and in the working methods of schools, attention should be paid to learning environment and communication that is conducive to general education. General education is the basis for vocational education and all specialised education. Learning and education take place not only in schools. Education is a lifelong process. It is important that schools encourage their pupils' initiative for studying, their enjoyment and enthusiasm and thus promote their education.

In order to achieve the objectives of welfare, learning and education, the working methods of preschools, compulsory schools and upper secondary schools, as well as the interaction between pupils and between pupils and their teachers, are no less important than the tasks set in classes. The working methods of schools should be based on tolerance and equality, democratic cooperation and responsibility.

### **1.3 Teacher professionalism**

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The role of teachers is crucial in all school activities. Their work is vital in the school system, such as teaching, administration, upbringing, counselling, research and development. Thus school administrators, remedial teachers and counsellors belong to the body of teachers. Well-educated and enthusiastic teachers are the prerequisite for the quality of education and success in school activities at all school levels.

Teacher professionalism is based on their special vocational education, knowledge, attitudes and work ethic. Teacher professionalism concerns pupils, their education and welfare. Effective communication and constructive teaching enhances the studies and competences of children and youth. Teachers are not only responsible for imparting knowledge to their pupils but also giving them an opportunity to acquire knowledge and skills, encouraging their joy



of working and nurturing creative thinking. Teachers guide children and youth in their studies and the evaluation of their studies and also support them to adopt a healthy way of life. They endeavour to create good school atmosphere, fair work procedures and an encouraging learning environment.

At the beginning of the 21st century, extensive changes have taken place in Icelandic society and these have both direct and indirect influence on the educational system, the pupils' studies and the work of teachers. Whether it is the economy or industrial affairs, social issues or migration, technology or communications, there are radical changes taking place that will influence cultural life and knowledge, education and upbringing. Changes in Icelandic society have truly been swift in recent years, making increasing demands on schools in assisting society to understand these changes and cope with new conditions. These changes increase the demands on teachers, both in analysing social changes and adopting school activities to the present status in a responsible manner.

Teachers cooperate with school administrators on the development of school curriculum guides consistent with conditions and special emphasis at each school level. It is the responsibility of teachers to implement professionally in their teaching and other school activities the stipulations of education law and the policy that is specified in the National Curriculum Guide.



## GENERAL EDUCATION

# 2

Definitions of general education are not consistent. Such definitions vary with time and place and even depend on the individual. The seven liberal arts were the frame for general education of the upper classes in the Classical World. In the Middle Ages the church defined general education in Europe to meet its own needs, but with the Industrial Revolution new technology and academic studies appeared that laid the foundation for general education in modern society. In the 21st century general education is defined with regard to social and individual needs.

At any given time, general education advances the capacity of the individual for meeting the challenges of everyday life. General education therefore contributes towards the individuals' understanding of their characteristics and abilities and consequently their capacity to fulfil their role in a complex society. It is at the same time both individually and socially oriented.

People acquire general education not only within the educational system. However, the school system is the most important basis for society to ensure general education. It is therefore appropriate to explain the fundamental pillars in the National Curriculum Guide and connect them to the main fields of knowledge and skills that the individual is offered at school. General education is based on varied studies of the principal aspects of our culture, environment and society. General education is the goal of integral school activities and studies in fields of study, subjects and course units. Definition of the fundamental pillars is an attempt to map the main fields of the general education at which schools aim.

## 2.1 Fundamental pillars

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The educational policy that appears in the National Curriculum Guide is based on six fundamental pillars on which the curriculum guidelines are based.

These fundamental pillars are:

- literacy,
- sustainability,
- health and welfare
- democracy and human rights,
- equality,
- creativity.

Each of the fundamental pillars derives from laws on preschool, compulsory school and upper secondary school. There is also reference to other laws which include legal provisions for education and teaching in the school system, such as in the Act on Equal Status and Equal Rights of Women and Men, No. 10/2008. In addition, government policy in various issues is taken into account, as, for example, published in Welfare for the Future regarding important policy issues on sustainability. International conventions to which Iceland is a party are taken into consideration, for example, the United Nations Convention on the Rights of the Child and the policy of international institutions of which Iceland is a member. Here the UNESCO policy on general education and sustainable development is an apt example and also the Council of Europe policy on democracy and human rights. In formulating the policy that appears in the definition of the fundamental pillars, the idea of teacher professionalism is also taken into account as well as the developmental work that has been carried out in Icelandic preschools, compulsory schools and upper secondary schools.

### The role of fundamental pillars

The fundamental pillars refer to social, cultural, environmental and ecological literacy so that children and youth may develop mentally and physically, thrive in society and cooperate with others. The fundamental pillars also refer to a vision of the future, ability and will to influence and be active in maintaining society, change it and develop.

The fundamental pillars are based on the view appearing in school legislation that both social objectives and the educational objectives of the individual are to be achieved. They are socially oriented as they are to promote increased equality and democracy and to ensure well-educated and healthy citizens, both for participating in and for changing and improving society and also for contemporary employment. The fundamental pillars are meant to accentuate the principle of general education and encourage increased continuity in school

activities as a whole. In evaluating school activities, the influence of the fundamental pillars on teaching, play and studies have to be taken into consideration.

The fundamental pillars are an intrinsic part of school activities

The concepts that the fundamental pillars are based on are to be reflected in the working methods, communication and atmosphere of schools. They should be evident in all educational activities and in the content of school subjects and fields of study, both regarding the knowledge and the skills that children and youth are to acquire. Fields of study can be specialisation of the tasks of school activities, across subjects and school levels.

The fundamental pillars are an intrinsic part of all curriculum guides at all school levels and their stipulations for all school activities:

- Choice of material and content of study, teaching and play should reflect the fundamental pillars.
- Working methods and techniques that children and youth learn are influenced by ideas which appear in discussions of the fundamental pillars.
- Procedures of teachers and other school personnel are to be based on the fundamental pillars and thus encourage independence, initiative and development of school activities.
- When school activities are evaluated, it should be observed whether and how the fundamental pillars are reflected in study, teaching and play.

The National Curriculum Guide for Preschool, Compulsory School and Upper Secondary School is the basis for an integral composition of curriculum guides in the school system. The organisation of each day, week, month and school year is to reflect the comprehensive overview formulated in the fundamental pillars. In school activities it is important to approach tasks in an integral manner, applying professional broadmindedness and, when appropriate, interdisciplinary methods. This can necessitate unconventional teaching methods and unusual approach to school activities.

## Relations and nature of the fundamental pillars

The fundamental pillars of education are divided into six categories. They are interrelated and interdependent in education and school activities. By referring to them, a clear overview of educational work can be obtained. They are based on the idea that active democracy is unobtainable without literacy of the diverse symbolism and communication systems of society. They are also based on the idea that active democracy can only flourish if simultaneously every form of equality between individuals and groups in society is supported. Human rights will not be ensured, except by supporting individual health and welfare and by fighting discrimination and every form of violence, including bullying.



Sustainability concerns the interplay of the environment, economy, society and welfare. Sustainability includes respect for the environment, sense of responsibility, health, democratic working methods and justice, not only at the present time but also for future generations. Therefore it is unthinkable to support human rights without simultaneously espousing sustainability and balanced social development. Additionally, sustainability is dependent on the equality of social groups. Democracy and human rights, and health and welfare are thus an integral part of sustainability and, at the same time, independent fundamental pillars of education.

Education towards sustainability, equality, democracy and human rights therefore aims at children and youth understanding society as it is and has developed. At the same time, education aims at enabling children and youth to participate in forming society and thus acquiring a vision of the future and ideals to advocate. The concepts education towards sustainability, education towards democracy and human rights and education towards equality, do not necessarily aim at developing new subjects or fields of study, they are rather used to point out educational material and attitudes that are to be emphasised.

Creativity is an important factor in all education and thus part of the other fundamental pillars. Creativity is an intrinsic part of all studies and work, not only art studies. All the fundamental pillars are based on critical thinking, reflection, scientific attitude and democratic values.

Even though the fundamental pillars are linked, they each have their characteristics. Therefore they can be used to comprise the objectives of the whole educational system and issues emphasised by each school or school level. The fundamental pillars are, however, not a new system to classify school activities, but are defined to clarify and integrate the objectives of schools. Most aspects of school activities can be classified as belonging to one fundamental pillar and many of these aspects may belong to any of them.

### 2.1.1 Literacy

Literacy has usually been linked to the knowledge and skills needed to write down one's thoughts and understand a printed text, that is reading and writing. It has been associated with one set of symbols, printed characters, and related culture and forms of expression. Schools have considered competence in this field chiefly related to individuals, and it could therefore be measured: some are able to read fluently, some are hardly literate, others even illiterate.

Over time, attitudes towards literacy have changed as scholars of various disciplines have through their research clarified this problem. Although scholars do not agree on everything concerning literacy, a few important issues they have pointed out should be mentioned: Literacy depends on agreement made on usage and meaning of words in a speech community and is therefore by nature a social problem. It is dependent on tradition and is therefore not a capacity that an individual can acquire and apply regardless of place, time, culture and values.

Literacy requires writing utensils, material to write on and medium, for example, a book to publish what is written and this is partially dependant on technical media and know-how.

Even though literacy deals with systems of symbols and communication technology, it should be pointed out that it deals first and foremost with creation of meaning, and this creation never takes place in a vacuum. Two individuals may understand the same text in a different way, although their reading technique, phonological awareness and vocabulary are similar. The quality of their literacy cannot be said to differ for their creation of meaning depends on their experience and numerous circumstantial factors that influence their interpretation and understanding. Some texts are even difficult to understand without being acquainted with the discussion tradition and use of terms in various social groups.

It is not only that literacy research which has changed public attitude, digital technology has changed the surroundings where reading and writing take place. Computers and digital communication technology are considered indispensable factors of everyday life, both at home and at work, and have become essential equipment of education. It is therefore of great importance that computers are not only powerful word processing and calculation tools but tools that can be used for wide-ranging creation of meaning, for example, together with imagery. Pupils and teachers are therefore not limited to the printed text as computer technology offers other systems of meaning for studying and teaching. When preparing surveys or projects of various kinds, they can now discuss how to compile and present the material. Should it be done in a short film or a brochure, a radio programme, or a website?

Under these circumstances, terms like digital literacy, media education and media literacy have appeared. Digital literacy refers to knowledge that people have to acquire to be able to use computer and web technology for various forms of communication and creation of material. It involves photographs, printed text as well as music, and relates to the whole spectrum of material management, that is, resources, processing and communication.

The term media education refers to educational work where pupils use various media in their studies and, at the same time, learn a good deal about their utility and influence on culture and democracy. The objective is that they learn to evaluate the material that is communicated in addition to training in using these media for creating material and knowledge. The term media literacy denotes skills and knowledge that pupils acquire in these studies.

Even though the number of tools that can be used in education has increased, it does not diminish at all the importance of reading and writing in the traditional sense. As always, it is of great importance that children acquire certain reading and writing skills although attention is drawn to all the technology that pupils can make use of in communication, education and creation of meaning – for themselves and society.

The main objective of literacy is for pupils to become active participants in transforming and rewriting the world by creating their own meaning and responding in a personal and creative manner to what they read with the aid of the media and technology that is available.



## 2.1.2 Sustainability

Education towards sustainability aims at making people able to deal with problems that concern the interaction of the environment, social factors and the economy in the development of society.

The most common understanding of the concepts sustainability and sustainable development involves that we leave the environment to our descendants in no worse condition that we received it, and that we endeavour to meet the needs of the present without reducing the possibilities of future generations to meet theirs. This also refers to the definition of sustainability that it is a balanced situation and that sustainable development is the process of change when society, or a smaller unit, is developing towards sustainability. The difference between the traditional definition and the definition used here is a difference in emphasis rather than in meaning. This difference in emphasis is, however, important in educational work as it stresses that little things mean a lot, and that it is not necessary to wait for big changes to be able to rejoice in the smaller.

The environment and thereby nature surround human society. Sustainable development cannot take place, except within the limits that the ecosystems of the earth draw. Therefore understanding of these limits, in addition to the processes, laws, and cycles of nature, is an important basis for successfully working according to the ideals of sustainable development. Thus pupils have to know, understand and respect nature, both because of its intrinsic value and because of the service it renders mankind. Environmental protection, climate change and biodiversity are examples of tasks to be tackled.

From a social perspective, this ideology concerns equality, both intragenerational and transgenerational. In order to obtain equality, democratic methods have to be employed, the diversity of mankind respected and multiculturalism ensured. Diversity is a source of strength that can eradicate poverty, contribute to peace and secure living conditions and quality of life for all, wherever they live in the world. Sustainability is a prerequisite to understand the importance of one's own welfare and that of others.

The economic factor of sustainability is closely related to both the environmental and social factors. The economic system of each society plays an important role when it comes to using natural resources in a sensible manner and dividing them fairly. In this context it is vital that economic growth neither relies on nor leads to excessive encroachment of nature. Production and consumption are inseparable aspects of society, and no less the finances of the individual. Understanding one's own ecological footprint, and the ecological footprints of societies and nations, is conducive to sustainability and moderation. Consumer education and financial literacy are therefore an important prerequisite for being able to assess our needs now and in the future.

Education for sustainability encompasses creating a society of collective responsibility where individuals develop as active citizens, conscious of their own values, attitudes and feelings for

global impact and equality of all the inhabitants of the earth, for nature and the environment, for democracy, human rights and justice, for equality and multiculturalism, for welfare and health, and for economic development and vision of the future.

Education for sustainability further encompasses that in their studies children and youth come to grips with diverse problems and points of controversy. Teaching and working methods of the school are to be interwoven with the idea that the aim of education is capability for action. This involves training in democratic working methods and that children and youth are trained to be interested in and want to take part in society.

### **2.1.3 Democracy and human rights**

When a matter of ethical opinion arises in a democracy, people take a stand and, moreover, they take an active part in shaping society. In a democracy the citizens enjoy human rights and decide on all major issues collectively. The prerequisite of democracy is collective responsibility, consciousness and activity of the citizens and this makes them capable of participating in shaping their society and influencing it, both at home and away. Respect for the human value and health of children and youth involves both respect for their human rights and acceptance of their talents and possibilities for development. Attitudes, values and ethics are essential factors in education for democracy and are at the same time an intrinsic part of other fundamental pillars of education. Schools are to cultivate the attitude that society is to be democratic and individuals are to be critical and have a vision of the future.

Democracy is important in schools. Firstly, schools have to take into consideration that children and youth will in the future take part in democratic society and therefore it is important for children to learn about such societies. Secondly, in all their working methods schools have to take into consideration that the human rights of every individual have to be respected. It is expected that children and youth learn democracy by learning about democracy in a democracy.

In all education, tasks and methods of the school it is important to keep in mind pupils' interest and responsibility for their own education. Furthermore, knowledge of the basic rights of children and adults has to be improved, taking into consideration Icelandic legislation and international conventions. Social studies and life skills are basic subjects for knowledge of democracy and human rights, and of attitudes towards these factors. Democratic outlook is, however, relevant in all other subjects. Democratic values will not be established, unless all subjects and all fields of study are used for this purpose. Concern for people, animals and the environment is also part of democratic education and relevant in all subjects.

Education for democracy and human rights is based on critical thinking and reflection on the basic values of society. Such education relies on cooperation with parties outside the school, no less than cooperation within the school. Thus active cooperation is expected from the homes of children and youth concerning sports and youth work. Active cooperation with the local community within the municipality or area is required, but such cooperation is one of

the key factors of sustainability. It is essential for democratic schools to take in this way part in creating a sustainable society of collective responsibility.

### 2.1.4 Equality

The objective of education for equality is to give every individual an opportunity to develop on his or her own terms, nurture their talents and lead a responsible life in a free society in the spirit of understanding, peace, tolerance, broadmindedness and equality. In all school activities everyone should take an active part in creating a society of equality and justice. Equality education involves critical examination of the established ideas in society and its institutions in order to teach children and youth to analyse the circumstances that lead to discrimination of some and privileges for others.

Equality education refers to both the content of education, study methods and learning environment. Equality is an umbrella concept that involves a number of factors. The following are some of these factors in an alphabetical order: age, class, culture, descent, gender, disability, language, nationality, outlook on life, race, religion, residence, sexual orientation. At every school level, education for equality should address how these factors can establish discrimination and privileges for people.

The Act on Equal Status and Equal Rights of Women and Men, No. 10/2008, has clear provisions that at all school levels pupils should be educated in equal rights where an effort should be made to prepare both genders for equal participation in society, both in family life and on the labour market. Emphasis should be on boys and girls having as extensive and as equal opportunities as possible. Nowhere in school activities, content, or in working methods should there be any obstacles for either gender. It is important that all school activities, both in classes as in all communication, should be guided by these provisions of the Equality Act. At the same time, it is important to point out that some people have to live with various kinds of discrimination when more than one of these factors come together, for example, gender and disability, sexual orientation and nationality, age and residence. For this purpose it is reasonable for schools to make use of the knowledge that has been acquired in new studies, such as gender studies, queer theory, multicultural studies and disability studies

Equality education incorporates, among other things, studies of gender and sexual orientation. The fundamental pillar equality also emphasises education concerning culture, nationality, languages, religion and values. One of the tasks is the development of Iceland as a multicultural society. With equality emphasis is also put on social understanding of the nature of disabilities. The challenges of people with disabilities derive from the environment no less than from their disabilities. In all school activities the emphasis is on inclusive education.

An effort should be made to create awareness of the different social position and significance of the young and old in comparison to those who are middle aged. Use can be made of the stereotypes, characteristics and historical development of different age groups, that is: childhood, teenage years, adulthood and old age, and the different meaning of these ages



at different times in history and in different cultures. The different access to social values depending on class, residence and resources may also be studied. Additionally, the influence of class and residence on health, education and employment opportunities, and access to positions of authority may be studied.

### **2.1.5 Health and welfare**

Health is based on mental, physical and social wellbeing. It is subject to complex interrelation of the individual, circumstances and environment. As children and youth spend a good part of the day at school, all school activities should encourage health and systematically nurture welfare and wellbeing.

Schools have to create a positive atmosphere and health-promoting environment where development and health are systematically supported in various ways. The main health factors that are to be encouraged are: positive self-image, exercise, nutrition, rest, mental wellbeing, positive communication, security, hygiene, sexual health and understanding of one's own feelings and those of others.

School administrators, teachers and other school personnel should be aware of what is involved in health-related preventive measures and to be able to utilise reliable information concerning the factors that influence health. Schools are to create an environment that contributes to healthy ways of life for children and youth. Their competence is to be encouraged in communication, creating self-image, decision-making, setting goals and stress management. It is necessary that they understand the influence that culture, mass media and technology can have on health and wellbeing. The objective is, among other things, to enable children and youth to make informed and responsible decisions concerning their health.

Schools that emphasise daily exercise and systematically encourage physical exercise as part of daily life, lay the foundation for lifelong physical, mental and social wellbeing. Exercise should be taught, motor skills improved and a secure environment created to encourage physical training for everyone. This has to be kept in mind in physical education and all other school activities. In the same way, healthy diet should be encouraged in schools through education and abundant supply of varied foods. Emphasis should be on the pedagogic and social value of meals by, among other things, giving enough time for meals.

It is important that schools take into consideration the individual needs of children and youth. Everyone needs an opportunity to enjoy their strengths, which is a key factor in building a positive self-image. Many hobbies of children and youth advance health and can be of use in this context. By making room for their interest areas in school activities, it is possible to develop strengths and interest, stimulate a positive self-image and thus encourage health.

In order to meet the emphasis on health, school personnel have to review their work with regard to health and cooperate towards clear objectives that support positive school atmosphere, improve educational performance and wellbeing. In this context school



personnel are important as role models. At the same time, close cooperation with parents, healthcare personnel and people from the local community is essential since such cooperation is a prerequisite for success.

### 2.1.6 Creativity

Learning takes place when an individual responds to stimulus, connects it to previous knowledge and creates new. In this sense education is essentially self-creation, a means of a well-informed individual to become “a new and better person”. The creative incentive has its origin in innate curiosity, desire for enterprise, and stimulates individual initiative. The creative force engenders interest in education when children and youth understand the meaning of tasks and their value.

Creation involves forming tasks and communicating them, to make something, make something new or different from what the individual knows or has done before. Creation is to invent, enjoy, encourage curiosity and interest, engage the imagination and play with possibilities. Creativity is to sense what lies ahead and carry it out. Creativity is based on curiosity, challenge, excitement and search. Grappling the problem and finding a solution can, in itself, be the reward of creation. Creativity disrupts traditional patterns, rules and systems and shows phenomena and received ideas in a different light.

Creativity involves critical thinking and methods that constantly offer new possibilities and therefore the creative process matters no less than the final product. To create is to go outside the known set and thereby increase one’s knowledge and skills. Although the general sense of creation is closely connected to art and art studies, creativity as a fundamental pillar is no more limited to art studies than other subjects or fields of study. Creativity as a fundamental pillar is to encourage reflection, personal education and initiative in educational work.

Creative force and intuition are key elements in this context. Critical thinking is a key factor in literacy and creativity and they are interlinked with the role of critical thinking in democracy. Creativity utilises ideas and shapes attitudes, values and competence. Working methods in artistic creation and science are often characterised by joy of creation, initiative and originality. Such working methods are desirable in all educational work. Creativity not only concerns something new and original but also utilises what already exists. It encompasses task solutions and search for new possibilities. This harmonises well with education towards sustainability and literacy in the widest sense.

Play is an important learning method and opens new dimensions where the joy of creation for children and youth can come into its own. Happiness and joy depends on finding an outlet for one’s talent as an individual and part of a whole. Creation is an important basis for a vision of the future and for creating such a vision, for participating in creating democratic society and a role of one’s own in it.

## 2.2 Competence

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Modern society makes numerous and often contradictory demands on its citizens. The role of the educational system is, among other things, to prepare individuals for the challenges and tasks of everyday life and assist them to understand the complicated relationship of nature and society, objects and ideas. General education aims at increasing the self-understanding of the individuals and their competence to participate in a complicated society. Pupils have to know what they know and what they are capable of, and how best to utilise their knowledge and skills to influence their environment and improve it. Competence is therefore more than knowledge and skills; it also encompasses attitudes and moral strength, feelings and creative force, social skills and initiative.

The pupil not only needs to have acquired knowledge, skills and competence but also to be able to acquire new knowledge, skills and competence, analyse it and communicate. Education has to incorporate all these factors. Such education is based on a learning community which is characterised by the fundamental pillars of education: literacy, sustainability, democracy and human rights, health and welfare and creativity.

When organising educational work, emphasis is to be on the education of children and youth and their competence at study completion. Teaching methods and forms of communication, study material and teaching equipment should first and foremost aim at supporting pupils in their studies. Educational objectives focus on the competence that the pupil acquires during the learning process and has acquired at study completion.

Educational work, as defined by the fundamental pillars of education, takes place in fields of study, school subjects and course units. On the other hand, many tasks require being dealt with in an interdisciplinary and integral manner. In the National Curriculum Guide for each school level the fundamental pillars are further developed. There the scope of school activities is described and the role of teachers at each school level defined. The cooperation of homes and school is also discussed.

The fundamental pillars of education are developed at each school level corresponding to the law on preschool, compulsory school and upper secondary school. In the National Curriculum Guide for Preschool, the fundamental pillars are connected to the fields of education of the preschool, in the compulsory school the fundamental pillars are connected to the school subjects, and in the upper secondary school the fundamental pillars of education are developed in course units and different study programmes. The fundamental pillars are therefore developed in a different manner at the various school levels. In the curriculum guides for each school level continuity and tasks are further discussed, and so are progression, demands for competence and division into levels in accordance with the characteristics and working methods at each school level.

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## 2.3 Learnability

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Pupils should know how to acquire new knowledge and skills, in addition to applying the knowledge they have already acquired. They should also be conscious of the importance of being responsible and creative in seeking knowledge, in reflection and reasoning. In order to acquire diverse competences, pupils should get an opportunity to work on different tasks that are connected to the culture of society, the environment of children and youth and everyday life. In all educational work, both in classes and at other times, children and youth should be encouraged to attain learnability both in general and in specific fields.

Learnability is thus a fundamental pillar in all educational work and is based on self-understanding and interest. Learnability also includes knowing one's own strengths and weaknesses and to be able to make decisions accordingly. Learnability is based on the natural curiosity of children and youth, their motivation, their belief in their own abilities and capability of applying their competences in a constructive manner when working on various tasks.

This demands a stimulating learning environment at school. An effort should be made for the pupils to integrate their knowledge and skills as they gain experience in communication that is based on respect for human rights and equality. At the same time, pupils are to learn to express their views and explain their working methods in a responsible, critical and clear manner.

## EVALUATION AND SUPERVISION

# 3

Evaluation is an inseparable factor in school activities and the learning of children and youth. Evaluation gives information about how far children and youth have obtained learning objectives, encourages them to succeed and is useful for teachers and personnel to promote progress in learning. The objective of evaluation of school activities is to ensure that the rights of children and youth are secured and they obtain the education and service they are entitled to according to law. Evaluation is divided into two parts: On the one hand, there is evaluation that schools carry out themselves and is here called internal evaluation. On the other hand, is evaluation by external parties for local authorities, the Ministry of Education or other parties, and is here called external evaluation.

### 3.1 Assessment

Assessment of children and youth's achievement and improvement is a regular part of educational work, inseparable from learning and teaching. The main objectives of assessment of education are to give guiding information about education and how far its objectives have been achieved. Assessment is used to examine whether the general competence standard of the National Curriculum Guide has been met, educational progression is encouraged, pupils are encouraged to improve their achievement, and to evaluate what assistance pupils require.

Assessment is aimed at gaining information about educational performance and how individuals and groups achieve set objectives. Assessment should give pupils and their parents, teachers, receiving schools and school authorities the necessary information about study progress which can be a guideline in educational planning. If assessment is to fulfil

these multiple roles, it has to meet the requirements of being fair and reliable. Assessment has to be planned and carried out in such a way that it evaluates what is supposed to evaluate in a reliable manner.

### Evaluation in school curriculum guides and school operation plans

School curriculum guides should detail the guiding principles of assessment and references so that pupils, parents and school personnel are fully aware of the demands that are made and how the school plans to assess how they are met. Pupils, parents, teachers and other personnel have to be able to understand the outcome of assessment in a similar way. This is a prerequisite for information to be used to improve learning and teaching.

### Varied assessment methods

Objectives of school activities are diverse and different means can be employed to obtain them. Therefore assessment methods have to be varied. They are to be consistent with competence criteria, mirror issues emphasised in educational work and be pupil oriented. Assessment is to be reliable, impartial, honest and fair. All aspects of education are to be evaluated: knowledge, skill, competence with reference to the criteria of the National Curriculum Guide.

Teachers should assist children and youth in making a realistic self-evaluation, explain to them the objectives of education and how they are progressing towards them. Emphasis should be on formative assessment where pupils regularly consider their education with their teachers in order to attain their own educational goals and decide where to head. Criteria, on which the assessment is based, have to be absolutely clear to pupils.

The methods of assessment have to be varied and in accordance with the emphases of educational work and apply to as many aspects of learning as possible. Therefore both oral, practical, written and pictorial assignments are to be assessed, also short specific exercises and more thorough studies, individual and group work, projects carried out within a limited timeframe and with unlimited time, and additionally various types of examinations. Portfolios or workbooks, where various tasks and solutions are collected, for example digitally, can be useful to give an overview of the pupils' work and to show their application, activity, work methods, progress and social skills. Assessment has to give special consideration to the needs of pupils and especially their learning disabilities. Schools are to make an effort to meet the needs of pupils in such cases. Special arrangements should be made for these pupils when it comes to general assessment, for example, longer time to complete examinations, being given customised examinations, use of support materials and assistance during examinations and oral examinations.

## 3.2 Evaluation of school activities

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Evaluation of school activities is by law part of the supervisory work of schools and school authorities in order to ensure the rights of pupils and promote school improvement. The

objectives of evaluation and supervision are primarily divided into three parts. Firstly, it is to examine whether school activities are in line with the provisions of law, regulations and the National Curriculum Guide. Secondly, to improve the quality of educational work and encourage improvements, ensure that the rights of pupils are observed and that they are provided with the service that they are entitled to in accordance with law. Thirdly, it is to provide information about school activities, their results and development.

Schools are responsible for internal evaluation but the Ministry of Education, and depending on circumstances, local authorities carry out the external evaluation. External evaluation comprises, for example, evaluations of school activities as a whole or specific aspects of these activities, comprehensive evaluation of the activities of individual schools, evaluation of school subjects and aspects of learning, and supervision of internal evaluation of schools. Additionally, the Ministry of Education is responsible for supervising that local authorities fulfil their relevant responsibilities created by laws on schools. Furthermore, the Ministry of Education is to supervise the status and development of the educational system. To that end, the Ministry of Education collects diverse data on school management, for example, through participation in international surveys of learning outcomes and other aspects of educational work.

The Ministry of Education makes a plan about evaluation at all school levels and places it on its website. Additionally, the Ministry of Education publishes detailed directions on internal evaluation that schools can use, if they wish.

The National Curriculum Guide is the basis for criteria on evaluation of school activities but school curriculum guides further detail the objectives and criteria that are stipulated in the National Curriculum Guide and, depending on circumstances, school curriculum guides. It is important that internal and external evaluation incorporates all the objectives of school activities stipulated by law, including the role of schools to encourage pupils to participate in democratic society, support initiative and independent thinking, social skills and other factors that are, among other things, related to the fundamental pillars of education.

### **3.2.1 Internal evaluation**

Internal evaluation should specify the connection with the objectives stipulated in the school curriculum guide. Each school develops methods that take into account the unique emphases of the school in order to determine to what extent these objectives have been achieved. The methods of internal evaluation take into account the educational work that is being carried out in each case.

The internal evaluation of each school is based on a systematic method that is described in the school curriculum guide. Each school year, the school operation plan presents what aspects are to be targeted in the internal evaluation. The school internal evaluation is an effective part of everyday work and includes all aspects of school activities, such as administration, teaching, study requirements, assessment and communication within and outside the



classroom. Emphasis should be on the active participation of personnel, pupils, parents and other interested parties, depending on circumstances.

Information has to be collected by various means in order to evaluate school activities realistically. The internal school evaluation is based on diverse data. The selection of information and data that the evaluation is based on is determined by the research topic each time.

Objectives and means are to be evaluated regularly. Internal evaluation gives information about the strengths in the activities of the school and where improvement is needed. With regard to the findings of the internal evaluation, improvements are defined and planned. Schools publish the outcomes of the internal evaluation and improvement plans. Personal information is exempt from publication.

### 3.2.2 External evaluation

The Ministry of Education, and depending on circumstances local authorities, are responsible for the external evaluation of preschools, compulsory schools and upper secondary schools, as described in the relevant regulation. The Ministry of Education makes a three-year plan for external evaluation, surveys and evaluations to provide information about the execution of school activities in preschools, compulsory schools and upper secondary schools. The plans are revised each year and published on the website of the Ministry of Education.

The Ministry of Education makes a plan for each evaluation where its objectives, principal criteria and emphases are presented. To execute the evaluation the Ministry of Education brings in independent specialists selected according to the Ministry's procedure policy. Schools, and depending on circumstances local authorities, are notified in writing at least two weeks in advance.

External evaluation is to be based on varied data and information, such as findings of internal evaluation and other written documents from the schools, school visits and interviews, as relevant, and observation of teaching. Schools are to inform external evaluators as thoroughly as possible about those aspects of the school activities that the evaluation comprises.

External evaluators give the Ministry of Education a report on their findings. Before an evaluation report is sent to the Ministry of Education, the school in question gets an opportunity to make substantive comments. The school's comments are to be published as an appendix to the report, if requested. The external evaluation is open to public scrutiny, and its findings are to be placed on the website of the school and the Ministry of Education or in another way made accessible to the public. Similarly and depending on circumstances, the improvement plans based on the evaluation of local authorities and schools are to be published on the website of the Ministry of Education. The findings of the external evaluation are to be effectively followed up. The Ministry of Education requests responses from upper secondary schools and local authorities to the findings of external evaluations. On the basis of these responses the Ministry of Education decides what measures are to be taken.



## ROLE OF THE COMPULSORY SCHOOL

# 4

The years that children study at compulsory school are an important formative period for them as individuals and citizens. School should give pupils an opportunity to acquire knowledge, skill and competence that prepares them for studies upon the completion of compulsory school and for lifelong education. In compulsory school the basis is laid for the participation of individuals in democratic society and for the human values that are to encourage their overall development, enhance their awareness of Icelandic culture and respect for the culture of other nations.

According to the Compulsory School Act, No. 91, 12 June 2008, the compulsory school is 10 years in duration. As a rule, children begin compulsory school study in the calendar year they reach six years of age. According to law, however, commencement of school study can begin earlier or later, and it can be completed earlier. Most pupils begin compulsory education the year they reach six years of age and conclude their compulsory study the year they reach sixteen years of age. Pupils move automatically from grade 1 to grade 10 irrespective of study progress or status in other respects. The second article of the Compulsory School Act, No. 91, 12 June 2008 defines the objectives of compulsory school.

## Article 2

### *Objective*

The role of the compulsory school, in cooperation with the home, is to 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 characterised 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 organise its activities to correspond fully with the position and needs of their pupils and encourage the overall development, well-being and education of each individual.

The objective article shows that the objectives of school activities include various issues. A number of these issues are of greater importance than individual subjects or fields of education. This indicates that each school is responsible for deciding how these issues are included in the pupils' tasks and work methods. Equal emphasis is on the school procedures and the content of the studies, and these two aspects are to form a cohesive whole in school activities. It is important that each school defines in the school curriculum guide how these objectives are to be achieved. The welfare of children is a fundamental issue in the activities of compulsory schools, in their collaboration with the homes and the prerequisite for education. Health and a healthy lifestyle are essential for the welfare of the pupils. Compulsory school begins where preschool ends and lays the foundation for further studies and life in a sustainable society. School is the children's workplace for ten years during an important period of development and formation in their lives. Compulsory school is therefore an important factor in the individual's progress towards overall development and general education. Compulsory school is to create conditions for pupils to enjoy their childhood and encourage their self-confidence and social skills, stimulate their creative force and increase their understanding of human values.

Local authorities are primarily responsible for operating schools and implementing the Compulsory School Act. Compulsory school, as the name indicates, is mandatory and each local authority must provide schooling for all children 6 to 16 years of age who are legal residents there. This applies also to those children who have been placed in foster care with foster parents residing in the municipality. The Compulsory School Act provides for a nine-month school year, during which pupils are to have a minimum of 180 days of teaching.

Compulsory schools must educate all children in an effective manner. According to law, all children are entitled to appropriate education in compulsory school, both academic, vocational and artistic, and local authorities are required to offer appropriate study opportunities regardless of the children's physical or mental capabilities, emotional or social situation or linguistic development. This applies to all children: children with or without disabilities, with

long-term illnesses, exceptionally intelligent children and children with mental disabilities, children from remote communities and children from ethnic, linguistic or cultural minorities.

Parents must see to it that their children are enrolled in a compulsory school and that they attend school. Parents are entitled to select a compulsory school within the municipality for their children according to the regulations of the municipality. The local school board is to ensure that all children of compulsory school age receive the education provided for by law. In addition to public schools, there are schools accredited by the Ministry of Education but run by others than the local authorities. These schools are subsidised by the municipality and parents can choose to enrol their children in these schools according to the rules of the relevant municipality.

Clear responsibility, rights and obligations of children and parents enhance the welfare of the pupils. Therefore, the participation of parents in school activities should be encouraged and good relations between them and school authorities, teachers and the school community as a whole. Increased rights necessitate increased responsibility which occurs through active parent involvement and careful selection of representatives on the school council, and furthermore, with effective exchange of information and consultation with other parents.

The Compulsory School Act gives local authorities and schools substantial latitude and autonomy to plan education to fit the needs and conditions of each community; the central principle, however, as laid down in the act and the National Curriculum Guide, is to make it possible for all children to study in their local inclusive schools. The law also covers private schools, specialised schools and special treatment within general compulsory schools, experimental schools at the compulsory school level and other recognised education at compulsory school level, such as home tutoring, distance learning and flexible learning.

## STUDY ASSESSMENT IN COMPULSORY SCHOOL

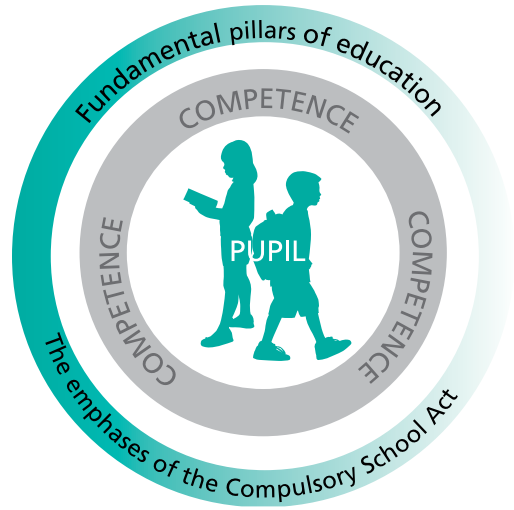
# 5

Education in compulsory school is primarily based on the Compulsory School Act, No. 91, 12 June 2008, in addition to later regulations concerning the act. In Article 2 the role of the compulsory school is stipulated and Article 24 stipulates the content of education and emphasizes not directly connected to specific subjects or subject areas. Article 25 stipulates that the National Curriculum Guide is to include provisions on the content and organisation of teaching in certain subjects and subject areas.

According to law, the objective of compulsory school is twofold. On the one hand, it is general education that encourages the general development of all pupils and their active participation in democratic society, and on the other hand, preparation for employment and further studies. This involves that pupils know their strengths, both regarding academic knowledge and moreover their vocational knowledge and skill. General education strengthens the individuals' competence considered necessary to live and work in harmony with themselves, to have an opportunity to develop in and with their environment and to be able to improve their living conditions by, for example, making conscious decisions and continuing their studies.

Based on the objective articles of the preschool, compulsory school and upper secondary school acts, the fundamental pillars of education have been defined. These fundamental pillars, in addition to the emphases of Article 24 of the Compulsory School Act, define the competence that pupils should achieve at compulsory school. The connections between these factors are shown in this figure.

In the innermost ring is the pupil on whom compulsory school education is focused. Next to him is defined the competence that the pupil is to have achieved upon graduation from compulsory school. This is followed by the fundamental pillars of education in Iceland and the emphases stipulated by the Compulsory School Act and are to be the guidelines for all education and school activities. Each of these issues will be discussed further in the next chapter.



## FUNDAMENTAL PILLARS OF EDUCATION AND EMPHASES OF THE COMPULSORY SCHOOL ACT

# 6

In the general introduction, common for both preschool, compulsory school and upper secondary school, the fundamental pillars of education in Iceland are defined. They are:

- Literacy in the widest sense
- Education towards sustainability
- Health and welfare
- Democracy and human rights
- Equality
- Creativity

The fundamental pillars of education and the emphases of the Compulsory School Act are to be the guidelines for general education and work methods of the compulsory school. They are to appear in the content of subjects and subject areas of the National Curriculum Guide, the pupils' competence, study assessment, school curriculum guide and the internal evaluation of schools. The compulsory school is the only school level that is mandatory for pupils and is therefore an important forum for developing their competence consistent with the fundamental pillars and for preparing them for participation in democratic society.

According to Article 24 of the Compulsory School Act, certain aspects of learning and teaching are to be emphasised. These emphases are further development of the objective article of the act and the fundamental pillars of education in Iceland. Most of them have in common not

to be confined to specific subjects or school activities but are to be general guidelines for all compulsory school education, both formal and non-formal, and in all school activities. Below each of these important issues will be discussed briefly in the same order as they appear in Article 24. The National Curriculum Guide shall among other things emphasise the following:

**Self-consciousness.** This involves that pupils acquire realistic and healthy self-image. It means that pupils know their feelings, their strengths and weaknesses and are confident of their competence to deal with a variety of daily tasks

**Ethical consciousness** involves that pupils strengthen their moral maturity and are able to identify with others. Pupils' feelings and experience are essential in the development of their moral sensibility, which consists of learning what is considered right and wrong, good and bad in human behaviour. Pupils should learn to take a moral stand on matters of opinion and respect the right of others to express their opinions. Additionally, to learn to make a distinction between positive and negative behaviour patterns in relations and to respect others.

**Social awareness and civil consciousness.** These concepts include competence to perceive, understand and respond to the feelings of others and what it involves to live in society with others. Civil consciousness denotes the attitude and competence to be an active participant in democratic society in accordance with one's responsibilities and duties.

**Social competence** aims at having positive and effective relations with others. Healthy self-image is the basis for social competence. Children with healthy social competence are more likely to take the initiative towards relations, maintain them and adjust to new circumstances. Mature social competence is the basis for the full and happy life of the individual.

**Physical and mental welfare.** An effort should be made to help pupils to adopt a healthy lifestyle and responsible approach towards living beings and the environment. Exercise, hygiene and a healthy lifestyle are important criteria in school activities. Health is defined as physical, mental and social welfare. In order to support good health an effort should be made, in collaboration with the homes, to encourage the pupils' healthy lifestyle and that they are aware of their responsibility and understand that a healthy life leads to general welfare. Good health is the basis for achievement in employment and active participation in society.

It is important that pupils acquire competence in Icelandic in their studies, play and work. In all studies emphasis should be put on training pupils in Icelandic. This applies equally for those whose native language is Icelandic, those who are of foreign origin and those whose native language is sign language. An effort should be made to train pupils in expressing



their knowledge, opinions and feelings in various ways, therefore emphasis should be put on dramatic and artistic expression and experience in school activities.

Pupils' reasoning and critical thinking should be encouraged as well as their creative thinking and problem solving. Pupils should be trained in reasoning and supporting their views orally and in writing. It is important that pupils learn to reflect on their ideas and realise what effect feelings have on their thoughts, sound judgement and ability to respond to new circumstances.

It should be emphasised that pupils gain deep understanding of the phenomena they are engaged with in their studies. This can, for example, be done by emphasising productive and creative work, vocational skill, innovation and entrepreneurial studies where initiative and self-reliance are encouraged in working methods and utilisation both in school activities and in everyday life.

Balance between academic and practical education is essential. Both mind and hand play an important role in encouraging the overall development of the pupil. When school activities are organised, the share of practical studies must not be detrimentally limited. This refers both to the proportion of academic and practical subjects and also to the work methods and tasks within each subject from the beginning to the end of compulsory school.

To children play is a spontaneous means of learning and developing. In compulsory school it is important to retain this method in school activities and develop it as the pupils grow older. Play is as fruitful means of development and understanding for a 15-year-old pupil as it is for a six-year-old child. Play can be integrated into every subject and learning area in a varied learning and working environment and in extracurricular activities

Education is to make pupils capable of grappling with the tasks of everyday life and at the same time prepare them for further studies and employment upon graduation from compulsory school. Emphasis on overall development is, however, always essential. For their education and increased maturation, pupils need an opportunity to exercise their strengths and interest and to link their education to what they know from home, the local community and the wide world.

Both sexes have to be prepared equally for active participation in society, both in private life, family life and employment. Gender studies and their concepts are an important factor to make pupils conscious of the status of the sexes in society. It is vital that boys and girls share equally the tasks that school sets them. All tasks are to be based on equality and equal rights.

Learnability is a basic factor in all school activities and is based on the pupil's self-understanding and involves know one's own strengths and weaknesses and be able to make decisions on this basis. Learnability involves, for example, competence to acquire knowledge and skill in various ways. Pupils should learn these ways, for example, by mastering technological media, be able to utilise information and communication technology and different sources



of knowledge through research in libraries and various data bases. Additionally, nature and the environment should, as far as possible, be used as a forum for learning and teaching, for example, in outdoor classes but also through the human resources of the local community, for example, the experience of parents and family.

Pupils should be prepared for further studies and employment through systematic vocational and study counselling, extensive introduction of the study offer available upon graduation from compulsory school, introduction of the labour market and how studies prepare people for the variety of occupations that society has to offer.

## 6.1 Knowledge, skill and competence

One of the primary objectives of compulsory education from the first grade to the last, is the overall development and general education of the individual. From a tender age, each pupil is to prepare for lifelong education. By defining from the beginning of compulsory school the competence that is aimed at upon graduation, foundation is laid for integral general education. Competence involves the pupil and is a pupil-oriented implementation of the fundamental pillars and emphases.

### Definition of the concepts knowledge, skill and competence:

#### KNOWLEDGE

is an accumulation of facts, principles, theories, and methods. It is both theoretical and practical.

- Knowledge is acquired by watching, listening, discussing or from experience through action.
- Knowledge is analysed through discussion, classification, and comparison.
- Knowledge is communicated through various forms of expression, for example, verbally, in writing, and vocationally.

#### SKILL

is both intellectual and practical. It involves ability to utilise methods, practices and logical thinking.

- Skills are acquired through exercising methods and practices.
- Skill involves analysis by choosing between methods and organised procedures.
- Skills are communicated by using the working methods, tools and methods of the various forms of expression.

#### COMPETENCE

involves overview and ability to utilise knowledge and skills.

- The prerequisites of competence are a sense of responsibility, respect, broadmindedness, creativity, moral awareness and the individuals' understanding of their own capabilities. Additionally, self-confidence and ability to work autonomously are of importance.
- Competence involves the students' analysis of their own knowledge and skills by comparing, connecting, simplifying, drawing conclusions and reasoning. Analytical competence is based on critical thinking and professional reflection.
- Communicating competence involves various forms of expression where cognitive, artistic, and practical knowledge and skills are interconnected with the moral and social attitudes of the individual. Communicating competence requires creativity, responsibility, and functionality



At compulsory school pupils' competence is developed within each learning area and subject and as competence criteria upon completion of compulsory school education. Compulsory schools decide themselves how the competence criteria are implemented in school activities but work methods are to be explained in the school curriculum guide.

In the National Curriculum Guide special chapters stipulate the content and organisation of studies in Icelandic or Icelandic as second language or Icelandic sign language, mathematics, English, Danish or other Nordic languages, artistic and practical subjects, natural sciences, physical education, social sciences, equal rights affairs, religious studies, life skills and information and communication technology. The subjects and subject areas of the compulsory school are aids so that pupils can achieve the competence criteria laid out in the National Curriculum Guide. Each compulsory school determines if particular subjects or subject areas are to be taught separately or in an integrated manner, but effort should be made to ensure that studies are as integrated as possible. Information concerning this is to be issued in the school curriculum guide.

Requirements for specialised and general education of the pupils are presented as competence criteria. Study assessment in compulsory school is based on pupils' competence with regard to general competence criteria and the specific competence criteria of each learning area and subject. The criteria are diverse. They comprise both limited aspects of knowledge and skill but also long-term objectives, both those that schools are to attend to and those that are the lifelong task of each individual. Competence criteria refer to knowledge as well as work methods. The competence criteria that concern social development will only be obtained if pupils have an opportunity to cooperate and through democratic working methods in the organisation of education and school activities.

The final learning outcomes that should be achieved upon study completion at compulsory school are to be defined for each learning area and subject.

The following figure describes competence upon study completion at compulsory school. It also includes the first level of competence at the upper secondary school.

**Description of competence upon study completion at compulsory school. includes the first level of competence at the upper secondary school.**

**STUDENTS HAVE ACQUIRED:**

- varied vocabulary to be able to express their opinions and support them
- knowledge of social values, morality, human rights and equality
- knowledge concerning being an active citizen in a democratic society
- knowledge concerning the Icelandic environment in a global context (e.g. culture, society, nature, sustainability)
- knowledge useful as preparation for further studies
- vocabulary to be able to express themselves in a simple manner in foreign languages and insight into the respective cultures
- knowledge and understanding of the influence of role models and stereotypes on their own image and lifestyle

**STUDENTS HAVE ACQUIRED SKILL TO:**

- express themselves clearly, responsibly and creatively
- take part in a conversation, support their views and respect the views of others
- be self-sufficient at work and in everyday life
- apply creative thinking in all their work
- work autonomously, responsibly and creatively under supervision
- use different techniques in acquiring and communicating knowledge in a responsible and critical manner
- use varied study methods
- treat their environment with sustainability in mind

**STUDENTS**

- have acquired competence to express their thoughts and feelings in a rational context
- have acquired competence to express themselves in a simple manner in foreign languages
- have a clear self-image and are aware of how they can use their strengths in a creative way
- can have positive and constructive relationships and collaboration with others
- respect the values of life, human rights and equality
- show respect for the environment in a global context
- have responsible attitude towards their own welfare, both physical and mental
- have acquired a positive attitude towards education
- have acquired a competence to be an active and a responsible citizen in a democratic local community and in society as a whole
- have acquired competence to link their knowledge and skill with everyday life, technology and science

In the chapter on study assessment these issues are the basis for the key competence criteria that are accredited upon study completion at compulsory school.

## LEARNING AND TEACHING

# 7

This chapter describes the main emphases concerning learning and teaching which are to encourage the best possible study achievement compared to the pupils' capabilities. These are to be the guidelines in all school activities and guide school authorities and teachers in organising learning and teaching. Each school is to detail this in the school curriculum guide and teachers in the preparation and implementation of teaching.

### 7.1 Appropriate education

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Article 2 of the Compulsory School Act emphasises that the main objective of the compulsory school is to encourage the general development of all pupils. This entails that education is based on the capabilities of each pupil and within an encouraging study environment where the pupils feel safe and able to apply their talents.

Compulsory school education takes into account the development, personality, talent, abilities and interest of each individual pupil. This is to be the foundation for the organisation of all school activities and teaching. It requires teachers to make an effort to get to know all the pupils that they teach, evaluate their situation with regard to their studies and consult with both the pupils and their parents about the objectives to be aimed at each time. Parents should be encouraged to follow the study progress of their children.

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## 7.2 Equal study opportunities

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At compulsory school all pupils are entitled to appropriate education. Pupils should have equal opportunities, regardless of their abilities or circumstances. Therefore special effort should be made to prevent discrimination on the basis of whether the pupil is of Icelandic or foreign origin. Opportunities are not to depend on whether pupils are boys or girls, where they live, what class they belong to, their sexual orientation, their health or whether they have disabilities or their circumstances in other respects.

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## 7.3 Inclusive school

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At the compulsory school level, all pupils have the right to compulsory education in common inclusive schools which all children are entitled to attending. Inclusive school means a compulsory school in the pupils' municipality or local community where the educational and social requirements of each pupil are met with emphasis on respect for human values and social justice. The inclusive school assumes that everyone has equal or equivalent study opportunities and the education is appropriate for each individual. The attitude of the inclusive school is characterised by respect for the rights of all pupils to participate in the learning community of the local school regardless of their attainment or status. This basic principle in school operations in Iceland involves universal involvement, access and participation of every pupil in school activities. Inclusive education is a continuous process that aims at offering good education for everyone. Respect is shown for the diversity and different needs, abilities and characteristics of the pupils and an effort is made to eliminate all forms of discrimination and disintegration at school.

Compulsory school pupils are a diverse group and their needs are varied. Local authorities are to ensure that children at compulsory school age, who are legal residents of the municipality and children who have been placed in foster care with foster parents residing in the municipality, receive special support, according to evaluation of their special needs. Pupils with special needs are defined as those who have difficulties studying because of specialised study problems, emotional or social problems and/or disabilities, dyslexic pupils, pupils suffering from long term illnesses, developmental disorders, mental disturbances and other pupils with health-related special needs. Precocious pupils and pupils with special talents in particular fields are also entitled to appropriate study opportunities. They should be given the opportunity to develop their special abilities and to put their time to good use by attempting additional and more complex objectives and more demanding and meaningful study based on their own capabilities.

If parents and school specialists believe that a pupil's special situation is such that it is to his/her best advantage to attend specialised school, the parents can ask that their child is admitted a specialised school temporarily or permanently. In this situation, any decision is to take into consideration the general welfare of the pupil.



## 7.4 Pupils should enjoy their childhood

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School should be the pupils' refuge where they feel safe, have an opportunity to develop and use their abilities and to enjoy their childhood. Childhood and youth are an important period in the life of each individual. The possibilities for development that every school day and every class offers are to be used to the full. It is important to sustain the child's natural curiosity for it is one of the most important preconditions of education. Play is children's way to learn from the world and to learn about the world. It is essential that compulsory school encourages play as an educational method and that this emphasis is not limited to the youngest grades. This right also demonstrates that childhood and youth have their own intrinsic value and are not only preparation for further studies and employment. Pupils are entitled to express their opinion regarding their study environment, the organisation of studies and school activities, and other decisions that affect them. Their opinion should be taken into account whenever possible. Pupils should be able to express their opinion in all school activities, for example, in regular discussions in class under the direction of their supervisory teacher, when the occasion arises. Furthermore, pupils should be able to express their opinion through their representatives on the pupils' association board in the school council.

## 7.5 The role of teachers

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The primary role of the teacher is educational and pedagogical work with pupils, to raise and maintain the pupils' interest in their study, guide them in various ways, encourage good working atmosphere among the pupils and give them a chance to work in peace. This role can also be described as leadership role: to be the pupils' leader in their studies. This involves an effort to create an encouraging and productive study environment. Professional teaching that adjusts to the needs of individual pupils in an inclusive school increases the likelihood of success. From the beginning to the end of compulsory school, it is important that teachers cooperate on the pupils' education as far as possible and that teaching and upbringing are not separated.

Each pupil is to have a supervisory teacher. Supervisory teachers are, more than other personnel, responsible for their pupils' studies and their development, their wellbeing and general welfare. Supervisory teachers make an effort to get to know their pupils, their parents and circumstances. They work closely with those other teachers who teach the pupils they supervise, collect information and send them further either to others at school or to parents in order to make parents able to take part in decisions concerning their child and school activities. Supervisory teachers play a crucial role in good cooperation between school and home, and are the main link between school and home.

## 7.6 School atmosphere

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In everyday life pupils need to learn various means to become active participants in democratic society; among these are communicative competence, respect, tolerance and an understanding of the structure of democratic society. Pupils have to learn to associate peacefully with each other and school personnel, to take responsibility for their conduct and behaviour and to respect school rules. Pupils' study discipline and self-discipline should be prioritised. In order to make this possible, school personnel should, in collaboration with pupils, parents and other personnel, encourage positive working spirit and mutual respect within the school. The pupils' social competence should be encouraged by giving them an opportunity to actively participate in school activities. Positive school atmosphere is essentially a preventive measure which can reduce negative relations, such as bullying and other forms of violence. Among pupils' basic rights is to have peace to work at school so that they can get to grips with their study and take full advantage of the education offered. Therefore, emphasis must be on good atmosphere in each school and on good working spirit in each class.

## 7.7 Cooperation between home and school

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The welfare of children and successful study progress is to a great extent based on parents supporting their studies and protecting their interest in every way, that their cooperation with the school is positive, that they give the school the necessary information and that they take part in their children's study and in parental work from the beginning to the end of the children's compulsory school attendance. Mutual and effective exchange of information between homes and school and consultation between school personnel and parents concerning learning and teaching increases the likelihood of success in school activities. Schools are responsible for establishing such cooperation and sustaining it throughout the child's compulsory school attendance. Parents' active share and participation in the studies and activities of their children is the prerequisite for parents being able to take on their share of the responsibility for the successful upbringing and education of their children.

## 7.8 Preventive measures

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Compulsory schools are to organise preventive measures and health promotion with regard to the mental, physical and social wellbeing of the pupils. Emphasis should be on general preventive measures, such as concerning tobacco, alcohol and other intoxicants and other forms of addiction, for example, web or gambling addiction. All compulsory schools should issue a prevention plan which should be part of the school curriculum guide. This plan is to include, among other things, the school's plan for preventive measures against addiction, alcohol and tobacco, a plan against violence, a plan on

security and accident prevention and a policy on discipline. In addition, there should be guidelines on what action to take if school rules are violated. The prevention plan is to be made known to all members of the school community: the school personnel, parents and pupils and it is to be issued in the school curriculum guide.

## **7.9 Connections between school and the local community**

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It is important that schools establish active connections with their local community, and they encourage positive relations and collaboration with individuals, organisations, businesses and institutions. This is necessary to increase diversity in studies, for example, in electives at the lower secondary level and to link the pupils' education with the reality of their immediate environment and thus make it more meaningful. Such connections concern, for example, the environment, culture, the arts, social and leisure activity and the economy. The school is often the heart of the community where generations meet and can be compared to the bustling squares of cities and it is therefore important that schools use the possibilities this offers to link the generations of the community. An effort should therefore be made to encourage active and good relations between school and the local community based on mutual respect for the needs and obligations of everyone. The school curriculum guide is to describe the relations between the school and local community.

## **7.10 Specialist services in compulsory schools**

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The municipalities' specialist services for compulsory schools aim at furthering compulsory schools as professional institutions which can solve most problems that occur in school activities and to give school personnel appropriate guidance and assistance in their work.

On the one hand, specialist services involve support for school operations and school personnel with the pupils' interest in mind, and on the other hand, to support compulsory school pupils and their parents. The objective of the specialist services is to provide pedagogical, psychological, developmental and sociological knowledge to the advantage of the schools. In implementing specialist services, municipalities should emphasis preventive measures in order to systematically enhance the general welfare of the pupils and avert difficulties. Early evaluation of the pupil's status followed by counselling is an important response to educational, social or psychological difficulties so that subsequently it is possible to organise education and assistance in a manner appropriate for each pupil and in cooperation with the personnel of the inclusive school. Specialist services are to be based on comprehensive overview of the circumstances and interest of the pupils, irrespective of the profession of the specialist or who provides the services. Thus the determinant should always be the pupil's welfare.



The specialist services should through counselling and education support school activities and practice and school personnel and parents in various ways. Appropriate interpretation services are necessary to ensure that information and counselling are of use for parents and pupils; therefore good access to such services is essential.

Laws on preschool, compulsory school and upper secondary school emphasise continuation in education. In the implementation of the specialist services it is, therefore, important to emphasise sound continuity marked by systematic dissemination of information of the pupils' status and circumstances when they transfer from one school level to the next. Discontinuity of their education when transferring is to be avoided and attention paid to provisions of law concerning exchange of information at transfer between school levels.

### **7.11 Study and vocational counselling**

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Study and vocational counselling is by law part of school specialist services. Study and vocational counselling in compulsory schools involves cooperating with pupils, parents, teachers, school authorities and other school personnel on various welfare activities concerning the education, wellbeing and future plans of the pupils. Study and vocational counselling involves assisting pupils to channel their abilities, interest and strengths. An effort should be made to assist pupils to solve problems if difficulties emerge in their studies or work at school. Study and vocational counsellors can assist pupils to interpret information concerning their studies and guiding them towards further studies and employment. Equality is to be emphasised in study and vocational counselling by presenting to boys and girls varied study offers and employment upon graduation from compulsory school. An effort should be made to introduce to both sexes the occupations that previously have been considered either only for men or women. It is important to introduce to pupils new occupations and the development of employment in modern society.

## STUDY CONTENT AND STUDY ORGANISATION

# 8

### 8.1 Teaching and teaching methods

Teaching aims at assisting pupils to acquire knowledge, skill and a positive attitude and thus obtain the competence that is the objective of education.

Activities in an inclusive school should involve a wide variety of working and teaching methods. Teachers are professionally responsible for implementing the most successful working and teaching methods to achieve the best results in accordance with the competence criteria laid down each time. When selecting teaching and working methods, attention should be paid to the age, development and abilities of the pupils and the nature of the task. Carefully prepared teaching which adjusts to the requirements and status of individual pupils in an inclusive school is likely to be successful.

The teaching and working methods are to be conducive to the competence criteria at which the school aims. As an example of this, one could mention those concerning the encouragement of moral and social development, democratic participation and civil consciousness which cannot be obtained except by enhancing the ethics and the pupils' social competence in a systematic manner and by encouraging positive school atmosphere characterised by democratic working methods and collaboration.

Selection of teaching methods and school organisation is to be based on the obligation of the compulsory school to provide each pupil with the best possibilities available for

education and development. Teaching is to take into consideration the requirements and experience of individual pupils and to encourage the pupils' interest and pleasure in their work. Teaching methods are to take equality and equal rights into consideration and must not discriminate against pupils, for example, because of gender, residence, origin, race, disabilities, religion, sexual orientation or social status.

## 8.2 Educational materials

Educational materials play a very important role as a means to achieving the objectives of school activities. According to the Compulsory School Act and the Educational Materials Act, pupils in compulsory schools are to be provided with study materials free of charge in those subjects and subject areas stipulated in the National Curriculum Guide. Pupils in compulsory study may not be charged for their instruction, study materials or anything else which they require for their study in accordance with the National Curriculum Guide or school curriculum guide. Furthermore, pupils may not be charged for field trips that are part of compulsory studies, except for subsistence during field trips, in consultation with parents.

Educational materials, teaching and working methods which schools choose to use together with the organisation of school activities and assessment, should all be based on defined competence criteria and implemented in order to fully realise each pupils' potential for achieving them. Educational materials include all the material which is used to achieve the objectives of learning and teaching. Educational materials should be varied and carefully made, exploiting the newest knowledge in education and pedagogy. Educational material include printed material, such as text books, reference books, booklets on themes and guides of various sorts; visual materials of various types, such as photographs, films, educational films and documentaries, posters; audio material such as CDs and digital audio files, computer programs; internet material; multimedia content; material for practical and outdoor teaching, etc. Nature and the school's cultural environment are also an important source of education and development.

School libraries play a key role in creating conditions for development and increasing pupils' understanding of the nature of information and data which they need to have access to in their studies, and at the same time to encourage initiative and independent working methods.

Educational materials are to be in accordance with law and the National Curriculum Guide at any given time. Educational materials which are especially compiled or selected for use in compulsory schools must appeal to pupils, be attractive and interesting, present the material clearly and logically, and have regard for the competence which pupils are presumed to have already acquired.

In preparing teaching materials and selecting them for use, care should be taken that they are in accordance with the fundamental pillars of education, that is: literacy, democracy and human rights equality, health and welfare, education towards sustainability and creative employment. Educational materials should appeal equally to both sexes and not discriminate between individuals or groups on the basis of their gender, sexual orientation, residence, origin, race, disabilities, religion or social status.

### 8.3 Options and electives

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The possibility of choice regarding studies is part of the education policy of each municipality and school. One of the roles of the school council of a compulsory school is to discuss policy making and the characteristics of the school, including electives offered. When deciding on study offer and the diversity of electives, it is important to take into consideration the conditions, culture and history of the local community.

Electives are part of compulsory education. In grades 8, 9 and 10, elective subjects and subject areas selected by pupils may account for up to one-fifth of study time, but schools can organise different ratio of electives for various grades, and this is to appear in the annual operation plan. The purpose of pupils' options at the lower secondary level is to adapt studies as much as possible to the individuals' needs and enable each pupil to determine the emphasis of his or her study based on interest areas and plans for the future, in cooperation with parents, teachers and school counsellors.

Selection of studies should aim at systematic preparation for studies at the upper secondary level and is considered direct preparation for academic, vocational, artistic or technical study. For this purpose, pupils get an opportunity to deepen their knowledge of the subject areas or within mandatory subjects. Additionally, pupils can select tasks aimed in particular at broadening their horizons or giving pleasure or deepen their knowledge, skill and competence in specific areas in which they are interested.

Schools are to define the arrangement of electives in their operation plan and make them known to pupils and parents after a reference from the school council and consent from the school board. Schools are to explain the objectives of the electives offered, provide teaching plans and a summary of the study materials and decisions on study assessment. The elective study offer is to be part of the operation plan of the school.

If parents request, pupils' temporary participation in employment, regular participation in social activities, sports or organised voluntary work may be evaluated as part of compulsory education as long as it complies with school operation objectives. Additionally, organised study carried out outside of the compulsory school, such as in upper secondary school, art school and language school, may be evaluated as part of compulsory education. In each case, the relevant school evaluates the extent of such education. Such cases are

to be handled with equality in mind. On the average, this study is not to exceed 160 minutes a week each school year at the lower secondary level and can then be accredited as the pupils' electives.

## **8.4 Subjects and subject areas**

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The fundamental pillars of education are to appear in all school activities. They are to be part of the content of subjects and subject areas, both in the methods employed and the knowledge, skill and competence that the pupils are to obtain. The ideas that they are based on should be reflected in every subject. In order to acquire varied competence, pupils need to work on different tasks related to their working environment and everyday life. This requires study methods and tasks which require that the pupils integrate their knowledge and skills and link them to daily life, fields of interest and relations with other people. In the curriculum for each subject the fundamental pillars and key competence are linked to tasks and working methods of particular subjects.

Subjects are important part of school activities but not objectives as such. It is not the role of schools to teach subjects but to educate pupils and encourage their overall development.

Through the tasks and methods of the subjects, pupils get acquainted with different aspects of the world; the world of objects and concepts, nature and culture. They learn about their local community and distant countries, the microscopic world of particles and the wide expanses of space. Subjects offer pupils possibilities to study and discuss customs and ways of life, knowledge and ideas, theories and facts, laws and rules which endow their life and environment with meaning and purpose. Additionally, subjects include different methods and techniques conducive to study and development. The content and working methods of subjects should appeal equally to the pupils' reasoning and feelings and encourage their curiosity and creative incentive. The methodology and techniques of different subjects encourage varied studies and general education. In society, problems are usually not fragmented and isolated but an integration of many factors. This is vital to keep in mind when organising school activities. Therefore emphasis should be on integration of subjects with the focus on problems which connect various subjects. The objective of making education more meaningful to pupils can be achieved in this way, and at the same time, make clear to them the interconnection of subjects and the necessity of having insight into their world.

## **8.5 Reference timetable**

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The Compulsory School Act stipulates further the subject areas and tasks of school operations. According to Article 25, provisions are to be laid down for the content and organisation of study in the following fields: Icelandic, Icelandic as a second language



Subjects – Subject areas	Grades 1 - 4	Grades 5 – 7	Grades 8 – 10	Weekly classes	Weekly classes
	Total time in Grades 1 - 4 Minutes per week	Total time in Grades 5 - 7 Minutes per week	Total time in Grades 8 - 10 Minutes per week	Total time in Grades 1 - 10 Minutes per week	Proportion
Icelandic, Icelandic as second language or Icelandic sign language	1.120	680	630	2.430	18,08%
Foreign languages: English, Danish or other Nordic language	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 sciences, religious studies, life skills, equal rights affairs, ethics	580	600	360	1.540	11,46%
Mathematics	800	600	600	2.000	14,88%
Information and communication technology	120	160	80	360	2,68%
School electives	300	160	870	1.330	9,90%
<b>Total</b>	<b>4.800</b>	<b>4.200</b>	<b>4.440</b>	<b>13.440</b>	<b>100%</b>

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. Furthermore, it stipulates that the proportional division of time between different subjects and subject areas in compulsory school is to be specified. Effort is to be made to ensure as much integration of studies as possible, but each compulsory school determines if particular subjects are to be taught in a separate or integrated manner. The head teacher is responsible for study organisation. Generally subjects and subject areas are taught continuously throughout the study period and according to professional opinions. Nevertheless, the reference timetable allows certain flexibility within subject areas and between units, the arrangement is to be issued in the school operation plan.

### Explanations for subject areas in reference timetable:

**Foreign languages:** To these belong English and Danish where English is considered the first foreign language and Danish, Norwegian or Swedish the second foreign language.

**Arts and crafts:** To arts belong music and visual arts and dramatic art. To crafts belong design and handicraft, textiles and home economics. These two areas should have equal weight within the total hours.

**Natural sciences:** To these belong, for example, natural history, physics, chemistry, geology, biology and ecology.

**Physical education:** To this belong sports and swimming.

**Social sciences:** To these belong, for example social studies, history, geography and sociology, religious studies, life skills, equal rights affairs, ethics and philosophy.

**Information and communication technology:** To these belong, for example, media studies, library studies, computer use and information and communication technology.

**Options and electives:** To these belong the hours allocated to schools, especially for grades 1 to 7 and pupils' electives in grades 8 to 10. According to the emphases in the Compulsory School Act, balance between academic and practical education is to be kept and the share of practical studies must not be detrimentally limited when school activities are organised. This is also valid for the organisation of electives. Therefore, up to half of the hours for electives are reserved for arts and crafts.

The organisation of subject areas and subjects should be based on the fundamental pillars of education, the emphases of the National Curriculum Guide and key competence. In addition to the subjects and subject areas mentioned in the reference timetable, several interdisciplinary factors, such as, innovation, entrepreneurial studies and new media are considered part of the curriculum.

When planning school operations and reference timetable, it is important to keep in mind the framework for weighing subjects and subject areas in the time framework of the schools. No decision is made how much time is allotted for each subject each week. What the timetable looks like is for each school to decide in consultation with the school community. There is nothing against subjects or subject areas being worked on for a shorter period than a whole school year so that they will have more weight for a certain period but are not on the timetable at other times. Schools have flexibility to decide this.

Special chapters in the National Curriculum Guide will lay down provisions for the content and organisation of those subjects and subject areas specified in the Compulsory School Act. These chapters will discuss:

- **Educational value and main objectives of the subject.** This is based on the educational policy of the general introduction of the National Curriculum Guide and the general section of National Curriculum Guide for Compulsory Schools, especially the fundamental pillars of education and the emphases of the Compulsory School Act.



- **Teaching methods.** The teaching methods which are characteristic for the subject or the subject area are described.
- **Study assessment.** Diverse assessment methods based on main objectives and competence criteria are described. Competence criteria for assessment based on provisions of the National Curriculum Guide are laid out.
- **Competence criteria.** This is description of competence criteria which involve knowledge and skill for each subject or subject area and the key competence at which they aim at the:
  - Completion of grade 4
  - Completion of grade 7
  - Completion of grade 10
- Other issues concerning the special status of the subject or subject area, for example, connection with interdisciplinary factors, integration, cooperation between home and school and the possible utilisation of the local environment.



## STUDY ASSESSMENT IN COMPULSORY SCHOOL

# 9

### 9.1 Objectives of study assessment in compulsory school

Assessment of the pupils' competence and progress is a regular part of school activities, inseparable from learning and teaching. The main objective of assessment is to guide pupils through their education and how they can attain its main objectives. Study assessment shows how far pupils achieve the general competence criteria of the National Curriculum Guide, supports study motivation, encourages pupils for progress and evaluates who require special assistance.

Assessment is also to give pupils and their parents, teachers, receiving schools and school authorities information on the pupils' study progress, their competence, working methods and progress and can be used, for example, for further organisation of their studies.

### 9.2 Study assessment in school curriculum guide and school operation plan

Study assessment criteria and standards are to be described in the school curriculum guide so pupils, parents and school personnel are aware of what requirements are made and how the school plans to assess how they are met. Those involved, pupils, parents, teachers and other school personnel, have to be able to understand the outcome of assessment in a similar way. This is a prerequisite for information to be useful to improve learning and teaching.

### 9.3 Varied assessment methods

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The objectives of school activities are varied and there are various means to obtain them and therefore assessment methods have to be varied. They have to be appropriate for the competence criteria, mirror issues emphasised in teaching and take the pupils into account. Study assessment is to be reliable, impartial, honest and fair for pupils. All aspects of education are to be evaluated: knowledge, skills, competence with reference to the criteria of the National Curriculum Guide.

### 9.4 Criteria for study assessment in compulsory school

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Study assessment in compulsory school is to evaluate pupils' competence within each subject area and this applies equally to academic, practical and artistic study. The criteria for the various subject areas will be elaborated in the relevant chapters of the National Curriculum Guide. Additionally, the pupils' competence in each subject area is to be assessed based on key competence and the emphases of the Compulsory School Act. This is called key competence at the completion of compulsory school.

Criteria for assessment of key competence in compulsory school are stipulated in the following five points which are common for all subject areas:

- Pupils' competence to express their thoughts, feelings and opinions orally, in writing or in other manner. Competence to communicate their knowledge and skill and express themselves clearly and in a listenable manner and to take part in conversation and discussion.
- Creative thinking and initiative in presentation and processing of material. Competence to use knowledge and skill, to draw conclusions, confidence to seek new solutions and use critical thinking and reasoning.
- Competence to work independently, in cooperation with others and under supervision.
- Competence to use various media in seeking, processing and communicating knowledge, and in using information in a responsible, creative and critical manner.
- Pupils' competence to be responsible for their education and to evaluate their work methods and performance.

It is difficult to assess certain aspects of compulsory school education. This is true of, for example, morality, moral attitudes, equality, democracy, human rights, civil consciousness, sustainability and health. School are to find means to evaluate these factors but the pupils' self-evaluation, peer assessment, parent assessment and evaluation of school atmosphere may be useful as part of internal evaluation of schools. It should be kept in mind that by nature some objectives are such that it is not known whether they have been achieved or not until later in life.

Four standardised evaluation criteria are defined for each subject area, A – D. These are, on one hand, used to assess how far pupils have achieved the competence criteria of each subject area and, on the other hand, the pupils' key competence described above. The standardised criteria are to be used when pupils graduate from compulsory school. They can also be used at the completion of grades 4 and 7 and in study assessment generally. The standard can be adapted to the requirements of the school each time.

Standard	Subject Area	Key Competence
<b>A</b>	Exceptional learning competence and performance with reference to the competence criteria of the subject or field of education.	Exceptional competence with reference to the criteria of competence.
<b>B</b>	Good learning competence and performance with reference to the competence criteria of the subject or field of education.	Good competence with reference to the criteria of competence.
<b>C</b>	Passable learning competence and performance with reference to the competence criteria of the subject or field of education.	Passable competence with reference to the criteria of competence.
<b>D</b>	Defective learning competence and performance with reference to the competence criteria of the subject or field of education.	Defective competence with reference to the criteria of competence.

Upon completion of compulsory school education, pupils are to receive a certificate attesting to the completion of compulsory studies. The certificate is to record the pupils' study assessment report for the study undertaken during their final year of compulsory school education, it is, however, desirable to refer to studies in grades 8 to 10. The reference is to be twofold as shown in the evaluation criteria above. The certificate shall, furthermore, record the criteria on which the study assessment is based. For the information on study assessment to be trustworthy, fair and reliable, and suitable to enhance the pupils' realistic self-evaluation, two things should be kept in mind. On the one hand, the pupil being assessed and his/her progress, application and achievement with reference to his/her own status, and on the other hand, in comparison with others, for example, those of the same age.

## 9.5 Links with the competence levels of the upper secondary school

Education at the upper secondary school is linked to four competence levels which overlap, on one hand, with the lower secondary level of the compulsory school, and on the other, with the university level. The levels show gradually increased demand on

the pupils' knowledge, skills and competence. It is important that pupils begin their studies at an appropriate level of the upper secondary school. Common criteria for study assessment at the completion of compulsory school and a common standard support this. Pupils begin their studies at upper secondary school either at the first or second level according to more detailed arrangement in the National Curriculum Guide for Upper Secondary Schools and the school curriculum guide of the relevant school. Evaluation of what is the appropriate level for each pupil is decided by the relevant upper secondary school in consultation with pupils and their parents and is further defined in the National Curriculum Guide for Upper Secondary Schools. The assessment is always individual oriented. Compulsory school is responsible for the assessment being fair and reliable and to give pupils, their parents and the upper secondary school the best possible guidance for studies at upper secondary school.

## **9.6 Study assessment throughout the school year**

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Teachers should assist their pupils towards realistic self-evaluation, explain to them the objectives of education and how they are progressing towards these objectives. Emphasis should be on formative assessment, which is based on pupils regularly examining their studies with their teachers in order to understand their own objectives and to decide where to aim. Pupils should be aware of the criteria on which the assessment is based.

## **9.7 Varied study assessment**

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The form of assessment material is to be varied and in accordance with the method of teaching and to apply to as many aspects of learning as possible. The assessment is to involve both oral, practical, written and pictorial assignments, also short specific exercises and more thorough studies, individual and group work, projects carried out within a limited timeframe and with unlimited time, and additionally, various types of examinations. Portfolios or workbooks, where various tasks and solutions are collected, for example digitally, can be useful to give an overview of the pupils' work and to show their application, activity, working methods, progress and social skills.

Assessment is to take into consideration the special needs of pupils and especially their learning disabilities. Schools are to make an effort to meet the needs of pupils in such cases. These pupils are entitled to special arrangements when it comes to general assessment, for example, longer time to complete examinations, being given customised examinations, use of support materials and assistance during examinations and oral examinations, or in some appropriate manner that meets the pupils' needs.

## **9.8 Coherent national assessment in compulsory schools**

The Ministry of Education organises coherent national assessment in compulsory schools, provides schools with standardised achievement examinations for that purpose and carries out national assessments.

All pupils in grades 4, 7 and 10 of compulsory school are to undergo national achievement examinations in Icelandic and mathematics. Pupils in grade 10 additionally undergo a national achievement examination in English. The Minister of Education can implement other examinations according to decision. National achievement examinations in these grades are intended, in particular, to assess whether the National Curriculum Guide's intermediate objectives have been achieved and to provide pupils, parents, school personnel and educational authorities with nation-wide information and references. A head teacher may exempt pupils from undergoing national achievement examinations in particular subjects in grades 4, 7 and 10, provided that valid arguments and parental consent support the decision. This concerns, for example, pupils of foreign origin who have recently moved to the country and have limited knowledge of Icelandic, pupils with special needs and pupils with long-term illnesses.

An overall summary of the national achievement examination results is to be issued and distributed to compulsory schools, school councils in compulsory schools, school boards and educational authorities. Information on the results of national achievement examinations may be released to other parties but confidentiality is to be ensured concerning individual pupils' results.

## **9.9 Standardised examinations and scanning tests in compulsory schools**

Schools should have access to diagnostic tests and other assessment forms which facilitate scrutiny of specific aspects of study and teaching in order to use the results for appropriate guidance and teaching for their pupils. Standardised examinations, for example, reading tests, mathematics tests, motor development tests, screening tests to predict potential reading difficulties, standardised questionnaires, and other such instruments can prove to be very useful aids in diagnosing problems at an early stage of schooling, thereby increasing the likelihood that they can be corrected through systematic action.

## **9.10 Graduation before completing 10-year education**

If parents consider their child fulfils the requirements to enrol in upper secondary school, they may apply to the head teacher of a compulsory school for their child to graduate from compulsory school before 10 years of compulsory education are concluded. The



head teacher is to consult with the supervisory teacher of the child and the specialist services of the municipality before making a decision. The head teacher is to determine when a pupil has concluded compulsory school education and is responsible for the pupil's graduation from compulsory school. The pupil is to complete all compulsory education according to the National Curriculum Guide with exceptional results in order to graduate, cf. the following criteria:

- The pupil has fulfilled requirements with regard to the competence criteria of the National Curriculum Guide with exceptional results.
- The pupil has received study and vocational counselling.
- The head teacher, supervisory teacher and specialist services consider the graduation advisable
- The pupil has acquired social maturity to handle upper secondary school environment.

Pupils who have not concluded compulsory school education can, however, begin studies concurrently in the upper secondary school in consultation with their parents, the relevant upper secondary school and municipality in order to make clear how the studies will be assessed. According to the Compulsory School Act, the relevant compulsory school and upper secondary school are to come to an agreement concerning the execution and arrangement.

Should a head teacher deny parents graduation from compulsory school before 10 years of compulsory education is concluded, parents may make an appeal to the Ministry of Education who administers resolution.

## EVALUATION OF COMPULSORY SCHOOL OPERATIONS

# 10

According to the Compulsory School Act, the objectives of evaluation and supervision of the quality of compulsory school activities are:

- to provide information about school activities, school achievements and development for educational authorities, compulsory school personnel, receiving schools, parents and pupils
- to ensure that school activities are according to law, regulations and the National Curriculum Guide for Compulsory Schools
- to increase the quality of education and school activities and encourage improvements
- to ensure that pupils' rights are respected and that they get the service that they are entitled to according to law

Evaluation is divided into two parts: On the one hand, there is evaluation that schools carry out themselves and is here called internal evaluation. On the other hand, is evaluation by external parties for local authorities, the Ministry of Education or other parties, and is here called external evaluation (cf. chapter 3).

### **10.1 Internal evaluation of compulsory school**

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The head teacher in collaboration with school personnel is responsible for the quality of the activities of the relevant school. Each school is to formulate a clear policy in

accordance with the fundamental pillars of education, objectives and emphases of the Compulsory School Act, the provisions of the National Curriculum Guide for Compulsory Schools and the school policy of the relevant municipality. Furthermore, the internal evaluation should take into account the work methods and characteristics of each school as defined in the school curriculum guide. The school curriculum guide is to define emphases and plans for internal evaluation.

Each compulsory school is to systematically evaluate the achievements and quality of school activities. There are various ways for schools to evaluate their activities and it is important that the system used is appropriate for the activities of the relevant school. When carrying out internal evaluation, the links with the objectives stipulated in the school curriculum guide are to be defined. The characteristics of the school should be the foundation of the methods that each school develops in order to evaluate to what extent the school's objectives have been obtained. The methods of the internal evaluation should take into account the tasks that the school is engaged in each time.

Internal evaluation is to be an integral part of daily school activities, encourage the personnel's knowledge, competence and reflection on their work and enhance their sense of responsibility. Democratic work methods regarding the internal evaluation, where the opinions of those involved in the school activities are considered, enhance work quality. The findings of the internal evaluation are to be used for improving school activities in consultation with the school board.

## 10.2 External evaluation in compulsory school

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### Evaluation and supervision by municipalities

School boards, on behalf of the local government, are to supervise that school operations in compulsory schools are according to the Compulsory School Act, regulations and the National Curriculum Guide for Compulsory Schools. This is valid for both schools run by municipalities and those run by other parties. The school board is responsible for school activities being evaluated with regard to the circumstances and characteristics of each school. The evaluation can be based on a variety of information. This can, for example, be information from internal evaluation, evaluation of the school curriculum guide and operation plan, the implementation of the municipal school policy, statistical information and other relevant data. The school board is also responsible for the school internal evaluation being systematic. The school board should make an effort that the findings of the internal evaluation increase the quality and improve achievement in every aspect of school activities.

The local government is to ensure that information concerning school operations is advanced to the Ministry of Education, school personnel, parents and pupils. The local



government is also to issue relevant information within the municipality concerning the assessments and evaluations of school operations.

The evaluation and assessment findings are to be systematically followed up but this is to be done in accordance with the tasks and the findings.

### External evaluation by the Ministry of Education

The Ministry of Education supervises whether municipalities fulfil the obligations that the Compulsory School Act, regulations and the National Curriculum Guide stipulate. Regular external evaluation by the Ministry of Education involves reports, surveys and research in addition to general collection, analysis and dissemination of information. The Ministry of Education sets an agenda for three years at a time regarding surveys and assessments that aim at providing information on implementation of school operations.

The findings of all surveys and reports appear on the website of the Ministry of Education. Reports and improvement plans of the local governments based on the findings of the external evaluation are also issued there. Emphasis is on whether school operations are according to provisions of law and regulations and the objectives laid down by municipalities and individual schools. Findings are to be applied and the follow-up of the Ministry of Education is based on the findings each time.

# SCHOOL DEVELOPMENT

# 11

School activities should develop steadily. New pedagogical and educational knowledge demands revision and this applies equally to new knowledge within the fields of knowledge which are the basis for subject areas and subjects. New social circumstances and technical innovation also necessitate changes. Collaboration and coordination are key factors in successful development in education. Educational authorities, local governments, specialist services, school authorities and teachers are collectively responsible for continuous revision and that improvement characterises the activities of all involved. School development is organised, systematic and continuous effort for improvement in school activities. School development should always be advantageous for children.

## 11.1 Municipal school policy

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Municipalities are to formulate their own school policy based on local circumstances and the emphases they want to establish. Policy formulation should be carried out in comprehensive cooperation of all those directly involved. Among these are school boards, parents, pupils, school authorities, teachers and other school personnel, in addition to those parties involved in or affected by the school policy. Municipal school policy is to give the individual institutions it concerns scope for making professional decisions. Private schools formulate their own emphases and guidelines for school development within the framework of their service agreement.

## 11.2 School policy

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Each school formulates its school policy in its curriculum guide. School development and improvement is detailed in the guide. Governmental and municipal education policies are the framework for individual schools. School development is based on cooperation of school personnel, parents and pupils and this is to shape all work methods.

School internal evaluation is to encourage improvement. Internal evaluation brings out the strengths and weaknesses and based on these pressing tasks may be prioritised. The findings of internal evaluation can also stimulate school development.

New knowledge is another source of developmental efforts. Continuing education for personnel can encourage such knowledge based on professional progress and research. School policy and continuing education plans for individual employees or the school as a whole are to be consistent with and support improvement plans.

School development is based both on attitudes and work methods. When schools formulate their plans a few years ahead, it is easier to outline individual tasks and coordinate them to the comprehensive school policy. Both professional leadership and organised guidance is an important prerequisite for successful development work.

## SCHOOL CURRICULUM GUIDE AND OPERATION PLAN

# 12

Each school is to issue its policy in two ways. On the one hand, the general policy is issued in the school curriculum guide, and on the other hand, information that is variable from one year to the next appears in the annual operation plan. The head teacher is responsible for the implementation of the school curriculum guide and operation plan and shall devise them in consultation with teachers and other school personnel who have thereby committed themselves to implement them. The school council is to discuss the school curriculum guide and the annual school operation plan. The school board approves these after it has been verified that they are in accordance with law, regulations, the National Curriculum Guide, school policy, collective bargaining agreements and the decisions of the local government concerning the arrangement of school operations. The following chapters are the framework for issues that are to be part of the school curriculum guide, on the one hand, and the operation plan, on the other. Schools have substantial latitude to implement these issues.

### 12.1 School curriculum guide

Each school devises a school curriculum guide. The school curriculum guide details how it makes use of the latitude for decisions that are stipulated in law, regulations, the National Curriculum Guide and the school policy of the relevant local government. Private schools, which do not belong to a particular municipality, do not have to work according to the municipal school policy.

The school curriculum guide is a more detailed version of the National Curriculum Guide and there is scope to adapt official provisions to the characteristics of each school and local circumstances and to describe how these circumstances are used to enhance learning and teaching.

The school curriculum guide describes the values that are the basis for all school activities. There the general criteria stipulated in the National Curriculum Guide are detailed.

The school curriculum guide is to give information concerning:

- School operations and the main issues in their development since the establishment of the school
- School policy; values, pedagogical and educational policy and teaching methods
- The implementation of the fundamental pillars of education and emphases of the Compulsory School Act
- The objectives of education with regard to the provisions of the National Curriculum Guide
- The study assessment and reference system of the school
- Internal evaluation of achievement and quality
- Plans for improvement and development
- Cooperation between the school and the home, information dissemination
- Cooperation with preschool and upper secondary school, reception and transfer plans
- Relations with the local community and how to utilise it for education and development
- Plans for:
  - reception of new pupils
  - preventive measures against alcohol and intoxicants
  - measures against bullying and other forms of violence
  - security and accident prevention
  - equality and human rights
  - emergency measures
  - discipline

## Operation plan

The annual operation plan provides information on the school calendar, including important dates. The operation plan details how the 180 school days that each school has at its disposal are to be spent. The plan includes the school calendar showing when school begins in the autumn and ends in spring.

The school operation plan is to give information concerning:

- The school's administrative infrastructure, including organisation chart
- School personnel
- School calendar, including duration of Christmas vacation, Easter vacation and other winter vacations. The school calendar is to mark with explanations the ten days when the pupils' attendance is permitted to be cut
- The arrangement of teaching, for example, teaching plans
- The tasks of internal evaluation
- The pupils' operation plan, including information on the pupils' timetable, parent-teacher interviews, the main events of the school year and field trips
- Pupils' electives in grades 8 to 10
- School board, parent council, pupils' association and their operation plans
- School rules
- Information on support services, including school health care and specialist services
- Information on extra-curricular and social activities
- Continuing education plan
- Evacuation plan
- Contingency plan for epidemics, storms, volcanic eruptions, earthquakes
- Other aspects concerning school activities each year, such as practical information on the school's opening hours, consultation hours of specialists, canteen, absence and vacations.

## RESPONSIBILITIES AND OBLIGATIONS OF PUPILS, PERSONNEL AND PARENTS

# 13

The whole school community should make an effort to encourage and support good work atmosphere and positive school spirit characterised by mutual trust, respect and shared responsibility, where security and healthy lifestyle are valued.

### 13.1 Pupils' responsibilities and obligations

The concepts pupils' responsibilities and pupils' obligations are closely linked. Pupils' obligations cannot be discussed without taking their responsibilities into consideration. Rights and obligations cannot be separated and both demand responsibility. This is both a question of individual responsibility and shared responsibility. This means that pupils are, on the one hand, responsible as individuals for their actions, and on the other hand, share responsibility as members of a group/community and therefore share responsibility with others in the group/community.

#### 13.1.1 Pupils' responsibility for their studies

An effort should be made to teach pupils to be responsible for their studies and they from early on adapt good work methods. The pupils' sense of responsibility develops as they get opportunities to select their tasks and make decisions concerning their studies so that they become meaningful to them. In this their age and level of maturity should be kept in mind. Pupils are expected to make such decisions from the beginning of their compulsory school attendance. A sense of responsibility only develops if pupils get used



to making decisions and standing by them, both decisions made on their own and those made in consultation with others. The same applies to study methods that pupils adapt, and it is therefore necessary that pupils at any age have a choice of various methods in their studies. Pupils should be allowed to apply different methods in their studies and be trained to work both on their own and to collaborate with others. They do this by selecting tasks within the limits laid down by the official objectives of education in individual subjects or subject areas, whether they are in the National Curriculum Guide or the curriculum guide of their school. Additionally, according to the Compulsory School Act and reference timetable, pupils may select subjects and subject areas, especially at the lower secondary level.

### **13.1.2 Pupils' responsibility for their behaviour and relations**

It is important that pupils are not only responsible for their studies but also their behaviour and conduct at school. This concerns various aspects of behaviour towards their peers, personnel and various other individuals that they come into contact with at school and elsewhere. Pupils are responsible for their behaviour and relations with others, considering their age and level of maturity. Pupils are to obey instructions from teachers and school personnel in every way regarding school-related matters and follow school rules and general rules of conduct in their relations with school personnel as well as with their fellow pupils. When school rules are devised, it is important that pupils participate in their making and that their opinions are taken into consideration and thus gain their support for the rules. Parents' views are also to be considered when school rules are devised and decided what measures to take if school rules are violated. This is conducive towards good working spirit, positive school atmosphere and democratic upbringing of the pupils.

The school curriculum guide is to detail the aspects that the school considers most important to create good school spirit. The participation of everyone involved in school activities and their solidarity is essential for good school spirit. It is important that pupils, considering their age and level of maturity, are aware of their responsibility for how good school spirit is created, what it involves and that each individual is part of a larger whole that is the shared responsibility of everyone.

### **13.1.3 Freedom of expression**

Pupils should have an opportunity to express their opinions on everything that takes place at school, whether it concerns their study, wellbeing, facilities or social conditions. It is fair that their views are taken into consideration but with regard to their age, level of maturity and the nature of the matter.

From the beginning of their compulsory school attendance, the pupils' association is an important forum for pupils to express their opinions and look out for their interests.



Pupils elect their representatives for the school council and it is important that they seek the pupils' opinion and have an opportunity to support their interests in the school council. The procedures of the school council are to take the pupils' active participation into consideration.

## **13.2 Personnel's responsibilities and obligations**

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### **13.2.1 Professionalism and attention**

This involves the personnel carrying out their work in an attentive manner and meeting the educational and social needs of the pupils. The personnel do this by regularly reflecting on their job, seeking new means, acquiring new knowledge and thus constantly striving to learn more and do better. All personnel should show consideration towards children and parents as well as colleagues.

### **13.2.2 Positive school atmosphere**

In all their activities, school authorities, teachers and other personnel are to encourage positive school atmosphere and working spirit with their pupils' welfare and security in mind. School authorities should endeavour to create positive communication and mutual trust in the school as a whole, considering the age and level of maturity of the pupils in this context.

Personnel are to emphasise the pupils' study discipline and self-discipline, orderliness, positive relations, forgiveness, tolerance and politeness. An effort should also be made to build the self-image of the pupils, enhance their self-respect and their respect for others, the possessions of others and the environment.

### **13.2.3 Confidentiality**

School personnel should observe confidentiality in regard to the situation of children in all their relations with the pupils, their parents and other personnel both at school and outside it. School personnel should observe confidentiality regarding the matters of which they gain knowledge in their work and concerns pupils or their parents, keeping the pupils' interests in mind. The obligation of confidentiality does not include matters which, according to law, are to be reported to the police or to the Child Welfare Authorities.

## **13.3 Parents' responsibilities and obligations**

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According to the Compulsory School Act, parents are responsible for the upbringing of their children; they are responsible for the enrolment of their children when they reach compulsory school age and their school attendance. Parents look out for the interests



of their children and that they apply themselves to their studies. Parents look after their children's study process in cooperation with them and their teachers and report to the school issues that may influence their study process, application and behaviour. At the same time, parents have the opportunity to take part in their children's education and school activities in general. Parents should consult the school regarding their children's schooling, follow and support their education and study process and make sure that the children come to school rested and obey school rules.

## CONNECTIONS BETWEEN HOME AND SCHOOL

# 14

School personnel, pupils and parents comprise the school community of each school. It is important for these groups to co-operate effectively in shaping this society and the rules of interaction which should characterise relations within and outside the school. To accomplish this requires regular discussions on emphases and agreement on main points of reference.

According to the Act in respect of Children, No 76, 2003, parents are those that are responsible for the legal custody of children. Parents are responsible for the upbringing of their children. They are obliged to ensure that their children attend school and are as receptive as possible for the education the school provides. The school assists parents in bringing up their children and offers them educational opportunities. The pupils' education and welfare is a joint task of the home and school. This cooperation must be based on mutual respect and trust, mutual exchange of information and joint decisions and responsibility. Emphasis should primarily be placed on cooperation between home and school concerning each individual, his/her study and welfare, and on the home and school as the forum for education. Priority should also be given to cooperation in individual classes or groups taught as a unit and grades, both with respect to study, pupils' welfare, class spirit and main points of reference for the school's educational efforts. School authorities and supervisory teachers, with the assistance of other teachers, are primarily responsible for active collaboration. They should endeavour to create opportunities for parents to participate in school activities and encourage active collaboration based on equality.



Parents should have an opportunity to take part in the education of their children and in school activities generally. Parents are obliged to provide the compulsory school with information regarding their child that is necessary for school activities and the child's welfare. Parents are responsible for their children doing the homework on which the school and the parents have agreed and that hobbies and work outside school are not detrimental to the children's education.

Finally, it is important that there is solid collaboration between home and school concerning school activities as a whole, for example, guidelines concerning behaviour, orderliness, school atmosphere and emphases in the school policy of individual schools or local governments. Parents are expected to participate in the formation of the school community and undertake with school authorities, teachers and other school personnel to implement the objectives of the school operations and join forces to ensure their children optimal conditions to grow up in and their general welfare.

Experience shows that effective parental involvement and solidarity concerning basic guidelines is the best preventive measure against various threats, such as drug abuse and undesirable behaviour. If the parents of pupils in the same class or school manage to coordinate their efforts concerning educational guidelines, the likelihood of success in school operations increases.

## 14.1 Information dissemination

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Mutual and effective exchange of information between parents and school personnel encourages mutual trust between them and assists them to share responsibility and make decisions concerning the welfare of the pupils. Increased awareness on the part of parents of daily school operations and systematic cooperation concerning its activities increases the likelihood of their active participation in decisions and responsibility. Increased parental participation encourages the children's progress at school and their overall welfare. It is essential that schools regularly provide clear information on school operations and plans for future activities. This can be done in various ways, for example, in interviews with parents, at information meetings with groups of parents, in the school curriculum guide and through communication software and on the school's website. Parents are to inform the school on the child's situation and general development and those factors that can influence their wellbeing and study achievement.

## 14.2 Parent council

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The compulsory school is to operate a parent council. The head teacher is responsible for its foundation and guarantees that it is provided with all necessary assistance. The role of the parent council is to support school activities, support pupils' welfare and

improve the relations between school and home. The parent council of each compulsory school sets its own rules, for example, regarding elections for its board and election of representatives for the school council

Decision making in school affairs has moved closer to parents, underlining the need for a formal avenue for parental participation. An efficient and active parents' association in each school gives parents an opportunity to encourage and support good school atmosphere and get acquainted with other parents, pupils and the school personnel. It provides parents with a forum to discuss their children's schooling, together with other questions concerning child rearing and education. In order to achieve success, it is necessary for all involved to consider the objectives of the council and how its efforts can be organised to achieve these objectives. With an active parent council, it is possible to join forces for the interest and wellbeing of children. Parent councils are to emphasise parental involvement in individual supervision groups or classes. Parent councils are to cooperate with the school council and pupils' association.

### **14.3 School council**

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According to law, the school council is a consultation platform for the head teacher and school community regarding school operations. The school council takes part in formulating school policy and school characteristics. The school council discusses the school curriculum guide, annual operation plan, financial plan and other plans regarding school operations. Any plans for major changes in school operations and activities are to be referred to the school council before a final decision is made. The school council is to monitor security, conditions and general well-being of pupils. The head teacher is responsible for the school council work and that it sets its own rules.

## CONNECTIONS BETWEEN SCHOOL LEVELS

# 15

One of the main issues of the new school policy, which was formulated in 2008 with the introduction of the Preschool Act, the Compulsory School Act, and the Upper Secondary School Act, is to increase latitude, flexibility and continuity between the three school levels and within each level. Emphasis is on accommodating the diverse needs of children, but this calls for increased flexibility in organisation, for example, length of study and divisions between school levels. The main objectives of collaboration and connections between school levels are to create continuity in children's education, accommodate their needs and encourage effective organisation of study. Furthermore, to ensure mutual knowledge and understanding of teachers' work and pupils' education and contribute to the wellbeing and security of children when they transfer between school levels.

### 15.1 Connections between preschool and compulsory school

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Flexibility in the organisation of education, including length of study, is necessary in order to accommodate the different needs of children. A head teacher may authorise that a child may start school attendance before the age of six. Before such a decision is made, it is essential that the personnel of the relevant preschool and compulsory school have discussed the matter. According to the Preschool Act and the Compulsory School Act, municipalities are to initiate cooperation between preschools and compulsory schools.

The school curriculum guide is to detail this cooperation and how to arrange efficient transfer and adaptation between school levels. Continuation in children's schooling is of importance so that experience and study at previous school levels is useful at the next. When children's compulsory school attendance begins, their preschool study and experience should be the basis for their compulsory school study. The competence that the children acquired at preschool is to be the basis for their compulsory school study. Positive transfer from preschool to compulsory school also involves the children's preparation and adaptation. Preschool children need an opportunity to get acquainted with the receiving school while they are still at preschool, and the first weeks of compulsory school attendance should be viewed as preparation and adaptation.

### **15.1.1 Information between school levels**

At the completion of preschool certain information exists on the children. In order to ensure that study at compulsory school is based on the study and experience at preschool, and to optimise their adaptation, certain information on all children is to follow them to compulsory school. This can, for example, be in the form of a portfolio that the children have taken part in making. Parents are important contacts between the two school levels and give information on their children and their preschool attendance. Furthermore, they are entitled to be informed about the data that follow each child from preschool to compulsory school and have a possibility to respond to them.

### **15.1.2 Cooperation**

The connection between preschool and compulsory school is a cooperative venture for parents and teachers of both school levels where the welfare of the child is in focus. Teachers at both school levels should study the education and working methods of each other for children to experience continuity from preschool to compulsory school. In order to ensure this, preschools and compulsory schools should work out a plan that contains the common emphases of both school levels according to the National Curriculum Guide in addition to processes and responsibilities for the implementation. Such plans are to be issued in school curriculum guides at both school levels.

## **15.2 Connections between compulsory school and upper secondary school**

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The great majority of pupils commence their upper secondary school study immediately upon completing compulsory school. It is important that pupils get reliable information on the upper secondary school level as a whole and also on specific schools, especially local schools. The upper secondary school is responsible for this information which should be accessible for all.



Compulsory school pupils are entitled to dependable study and vocational counselling which facilitates selecting appropriate education. Local authorities initiate cooperation between compulsory schools and upper secondary schools. Head teachers of compulsory schools and principals of upper secondary schools are responsible for this cooperation. The cooperation involves responsibility for dissemination of information between schools and to pupils and parents concerning education at the upper secondary school level and how best to organise this cooperation.

Compulsory school pupils are entitled to enrol in particular subjects at upper secondary level upon completion of compulsory school study in the relevant subjects. Compulsory school pupils are also entitled to enrol in such course units while still at compulsory school, as long as they demonstrate the necessary competence. In these circumstances mutual trust is essential between the compulsory and upper secondary schools. The study is the responsibility of the compulsory school and assessment is accredited in the pupil's certificate at the completion of compulsory school study. Upper secondary school education is linked to competence levels. The relevant upper secondary school validates that the studies meet the school's criteria and accredits them as such.

If compulsory school pupils participate in courses at upper secondary level and their studies are considered as part of compulsory school studies, the cost of teaching at the upper secondary school level is according to the Compulsory School Act and Upper Secondary School Act. Further implementation and arrangement is to be negotiated between the compulsory school and upper secondary school in question

If compulsory school pupils have been admitted to special treatment within general compulsory school or to a specialised school, teachers and other specialists, in cooperation with the pupils and their parents, should participate in devising and organising the transference plan for their future enrolment in upper secondary school, with the preparation to starting in grade 9.

- The Ministry of Education issues regulations concerning enrolment in upper secondary schools. The following rules are valid for compulsory school pupils enrolling in upper secondary schools:
- All pupils who have completed their compulsory school education or reached the age of 16 are entitled to enrol in upper secondary school.
- Pupils who have completed compulsory school education according to the National Curriculum Guide for the Compulsory School are entitled to enrol in the study programmes of the upper secondary school, provided special requirements are not made.
- An effort should be made that pupils can attend upper secondary school near their home or in an upper secondary school near to their municipality of residence.



## EXEMPTIONS FROM THE NATIONAL CURRICULUM GUIDE

# 16

Study in accordance with the National Curriculum Guide for Compulsory Schools is mandatory study, and therefore no exceptions can be made. There are, however, several provisions in the Compulsory School Act which authorise exemptions from compulsory study and the instructions of the National Curriculum Guide.

As a rule, children begin their compulsory school attendance in the calendar year that they turn six years of age. According to the Preschool Act and the Compulsory School Act, however, commencement of school study can begin earlier or later in special instances. A head teacher may authorise a child to begin school study at the age of five or seven years if certain requirements are met.

The Compulsory School Act, furthermore, permits pupils to finish compulsory school in less than ten years. This refers to precocious pupils who may graduate from compulsory school earlier than is normal for their age. This is the responsibility of the relevant school with the assistance of the specialist services of the municipality and at the parents' initiative or after receiving their approval to assess when and how acceleration of this sort should take place. Pupils have to complete all their compulsory school study according to the National Curriculum Guide before graduating from compulsory school in less than ten years. Notwithstanding permission to complete compulsory school in less than ten years, compulsory schools should offer precocious pupils opportunities to deepen their knowledge in the subject areas of the compulsory school or to take electives in other subjects, depending on their interest.



## 16.1 Exemption from attending school

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If parents of pupils of compulsory school age apply for exemption for the child from attending school temporarily, the head teacher may grant such an exemption in particular subjects or completely from attending school. This should be done in consultation with the supervisory teacher and the arguments presented are considered to be valid. The National Curriculum Guide does not give detailed instructions on what are to be considered valid arguments, but in all instances the parents must ensure that the pupils catch up on any studies missed during the period of the exemption. Valid arguments can, for example, concern participation in activities for national teams in sport at the lower secondary school level, youth work, family journeys or volunteer work.

## 16.2 Validation of study outside of compulsory school

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A head teacher of a compulsory school may, by law, recognise study outside of compulsory school or competence that a pupil has acquired as the equivalent to study in a compulsory subject from the beginning of compulsory school to its end. As an example of this, is the competence of pupils whose native language is other than Icelandic in their native language, the competence of Icelandic pupils in other foreign languages than English and Danish, study at music schools, at other art schools and language schools. Participation in social life, sports or organised volunteer work may also be assessed as electives at the lower secondary school level.

## 16.3 National achievement examinations

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Compulsory school pupils in grades 4, 7 and 10 are to undergo national achievement examinations. Head teachers may exempt pupils from undergoing national examinations in individual subjects or in all subjects, provided that valid arguments and parents' and teachers' consent support the decision. The head teacher's exemption may concern pupils whose native language is other than Icelandic and have recently moved to Iceland, pupils with special needs in general compulsory schools or specialised schools or pupils who due to circumstances beyond their control cannot sit the examinations.

## 16.4 Experimental schools

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The Minister of Education, Science and Culture may authorise municipalities or other organisations to organise experimental schools or to carry out experiments in particular aspects of school activities. In such cases temporary exemptions may be made from the National Curriculum Guide for Compulsory Schools. Such exemptions may concern, for example, education, the school's operating time, organisation of teaching, number of classes, deviation from reference timetable and deviations from the National Curriculum

Guide. As an example of this, are schools organised according to accredited national curriculum guides of other countries or international curriculum guides and organisation. Reasonable time limits are always to be stipulated for such experiments and the Ministry of Education evaluates such experiments upon conclusion. Such experimental schools may be run as general compulsory schools under the auspices of municipalities, as a department within a compulsory school or as an independent private school accredited by the Ministry of Education and funded by the municipality according to law.

## **16.5 Home tutoring**

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Local government may exempt parents in order to teach their children at home according to further provisions laid out in regulation. Parents who wish for an exemption in order to teach their children at home, in part or totally, shall apply for such exemption from their municipality. A head teacher may provide an exemption in consultation with the school board and specialist services. At least one of the parents granted permission to take care of home tutoring is to be a certified compulsory school teacher. Children that receive home tutoring are exempt from compulsory schooling but are to be supervised by the municipality and their study be evaluated regularly. They are to undergo national achievement examinations and have access to the specialist services of the municipality and other support services. The municipality appoints a particular school to handle the connection with the home. Pupils receiving home tutoring should have an opportunity to take part in extracurricular activities and have access to school activities as they wish. Although children receive home tutoring, their wishes for participation in common school activities should be taken into consideration

## **16.6 Special teaching because of medical condition**

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All compulsory school pupils are entitled to appropriate teaching without discrimination and regardless of their physical or mental attainment. Pupils, who have difficulties studying because of specialised study problems, emotional or social problems and/or disabilities, dyslexic pupils, pupils suffering from long-term illnesses and pupils with health-related special needs, have the right to special study support, according to evaluation of their special needs

Pupils that are considered unable to attend school according to doctor's evaluation because of an accident or a long-term illness, have the right to special teaching because of their condition, either in their home or at a medical institution. If possible, schools should utilise information technology and distance learning for these pupils so that they are able to continue their study as best they can and keep up connections with their school and friends. Special teaching because of medical condition does not apply to illness shorter than a week.



## 16.7 Distance and flexible education

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The main objectives of distance and flexible education at compulsory school should be to give those pupils who wish an opportunity to study regardless of residence. This especially refers to education that is not offered in the relevant school, such as, language study for pupils of foreign origin and various kinds of electives. This also applies to pupils who have the competence to take particular course units at upper secondary school as distance or flexible education while still at compulsory school. In order to encourage flexibility at the connection of compulsory and upper secondary school, compulsory school pupils should preferably be offered to take distance or flexible education at upper secondary school as part of their compulsory education without special fee. The arrangement of distance and flexible education is to be detailed in the school curriculum guide.

## 16.8 Exemption from compulsory education

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According to the Compulsory School Act, a head teacher is authorised to exempt a pupil from compulsory education in a particular subject if there are valid arguments to support this. This, for example, applies to exemption for pupils whose native language is other than Icelandic for education in Danish. This also applies to teenagers who have lived abroad for a long time. Additionally, pupils with special needs or disabilities may be granted exemption from a particular subject in consultation with specialists. Pupils should be offered other subjects instead, for example, in their native language or Icelandic. Furthermore, this exemption may be used for pupils who have shown exceptional achievement in a particular field, for example, are on the youth national teams in sports or in artistic study as can be seen in the guidelines for schools concerning such issues and are detailed below.

It is important that schools show consideration and understanding in discussing issues connected to homes. This applies especially to religious beliefs and ideologies. With regard to the special position of such factors, and especially to freedom of religion, individual students can be exempted from specific aspects of compulsory study related to religion and ideologies on their parents' request and if valid arguments support it. Compulsory schools should organise their activities in such a way that pupils do not need exemption from particular school activities because of their religion or ideologies.

If a pupil has been granted exemption from a compulsory subject at compulsory school, it is natural that such exemption is valid for the same subjects in upper secondary school.

Guidelines for compulsory school procedure regarding parents' request for exemption from compulsory education in a particular subject, cf. Article 15 of the Compulsory School Act:

- The request is to be in writing. The request should be approved by the parent/guardian

of the pupil and head teacher. The request is to include name, ID number, address, and the compulsory school of the pupil.

- The request is to include arguments for and explanation of the reasons, or these to be enclosed. Explanations and arguments may come from parents, teachers, specialist services, specialists, doctors (health certificate), depending on circumstances.
- Further explanations should be acquired if necessary. Specialist opinion or that of others acquired if this is considered necessary. The school may offer other studies instead, but this is not mandatory if the pupil has met competence requirements or if it is considered desirable to decrease study requirements.
- Head teacher is to file the request as a separate topic and answer formally in writing.

Guidelines for compulsory school procedure regarding exemption from physical education at compulsory school level, cf. Article 15 of the Compulsory School Act:

- Formal request for exemption from physical education is to be sent to the head teacher signed by the pupil's parents and the pupil in question. Included are to be information about the pupil, that is, name, ID number, address, compulsory school, sports club and sport, in addition to clear arguments for the exemption request.
- Enclosed should be verification from the relevant sports club concerning the pupil's training of the sport in question.
- Enclosed is to be the relevant coach's report on the pupil's status. At the end of term the coach is to turn in an assessment of the pupil's effort and achievement.
- A pupil who has gained exceptional achievement in swimming with a sports club may generally only be exempted from school swimming, not physical education in general.
- A pupil who has gained exceptional achievement in a sport (other than swimming) generally is not exempted from school swimming.
- Generally, the head teacher only exempts compulsory school pupils in grades 8 to 10 from physical education if they have gained exceptional achievement in their sport. Exception is not granted if the sport has been assessed as part of electives.
- The head teacher is to accord equitable treatment when handling exemption requests.
- Head teachers are not to exempt compulsory school pupils in grades 1 to 7 from physical education because of sport in a sport club.
- Head teachers are not to accept exemption requests except when enclosed information is sufficient.
- Head teachers may, with reference to Article 15 of the Compulsory School Act, exempt individual pupils partly from physical education for a certain period. Parents are nonetheless to take care that the pupil catches up on what he/she might lose out on while he/she is exempt from attendance.

BÆRNI  
HEILBRIGÐI OG VELFERÐ  
JAFNRÉT





STAFES

SKÖPUN

YÐR  
BREDI  
SVALE

## SUBJECT AREAS

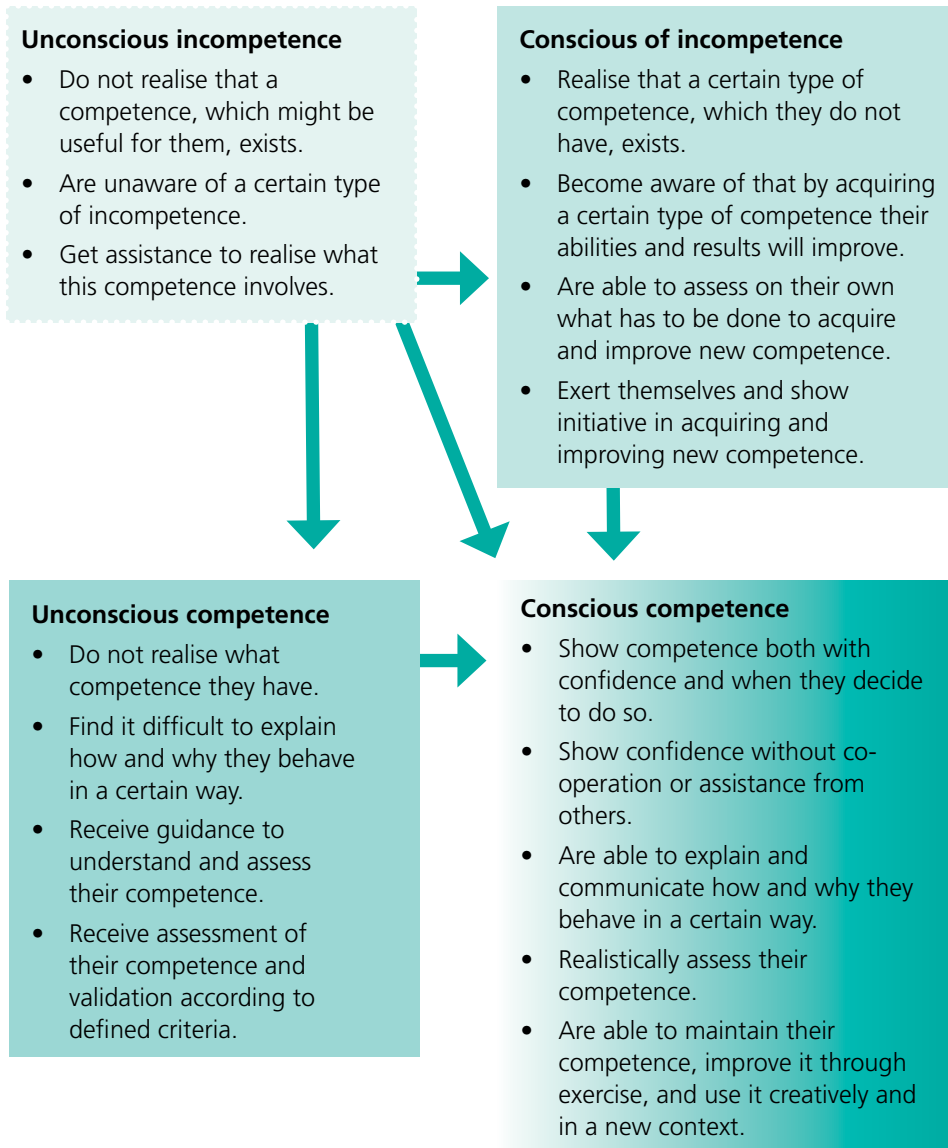
# 17

Key competences, subject areas and individual subjects will be discussed in the following chapters in line with the *Compulsory School Act No. 91/2008*. The emphasis is both on general key competences and specific competences for the respective subjects or subject areas. These chapters deal with educational values and main objectives, competence criteria, teaching methods and assessment. The competence criteria for Grades 4, 7 and 10 are specified, in addition to the assessment criteria for the completion of Grade 10, except for foreign languages, which are organised according to levels instead of grades. Based on the competence criteria, teachers and pupils select teaching methods, study materials and assessment methods, and these should be detailed in the curriculum guide of each school.

The competence concept is explained in the General Section of the *National Curriculum Guide for Preschools, Compulsory Schools and Upper Secondary Schools*. It consists of knowledge and skills and is interconnected with the pupils' ethical views. Knowledge is both academic and practical. Pupils should learn to discuss, categorise, compare and present their knowledge and skills in various ways, both orally and in writing, and by practical or artistic means. Skills are both intellectual and practical, involving methods, practice and logical thinking. Skills are acquired through diverse methods and practices. Competence involves overview and the ability to use knowledge and skills. It requires a sense of responsibility, respect, broadmindedness, creativity, moral awareness, communicative competence, capability for action and that individuals understand their abilities. Competence is communicated in various ways where intellectual, artistic and



practical knowledge and skills are integrated with the ethical and social views of the individual. When enhancing the pupils' competence, it should be kept in mind that pupils do not always grasp what competence they have acquired. Certain forms of competence are difficult to assess and it is not until later in life that it becomes clear whether this competence has been achieved or not. The diagram below shows examples of processes that should be taken into consideration as pupils' competence is encouraged and assessed in various ways.



## KEY COMPETENCES

# 18

In this chapter the key competences in compulsory school are defined with regard to the six pillars of education as detailed in Chapter 2, as are the emphases from Chapter 6 and the key competences as defined in Chapter 9.4. Competence criteria for the completion of Grades 4, 7, and 10 are detailed. This is followed by a discussion of teaching methods and assessment as described in the emphases of the competence criteria. Based on the competence criteria, teachers and pupils select learning strategies, study materials and assessment methods; this is to be detailed in the curriculum guide of each school. Finally there are assessment criteria that should be used, as appropriate, to describe the pupils' competence at the completion of compulsory school.

### 18.1 Educational values and main objectives of key competences

In Chapter 6 the fundamental pillars of education and the emphases of the *Compulsory School Act* are formulated as the guidelines for general education and the work methods of compulsory school. In addition, it is emphasised how important it is for compulsory school to become a forum for developing the competence of pupils in harmony with the fundamental pillars and preparing them for participation in democratic society. Key competences are the type of competences that focus on the pupil and that are meant to enhance the pupil's general development. Key competences are integrated into all subject areas. They concern the pupils' competence for expression and communication, creative and critical thinking, independence and cooperation, use of media and information, and responsibility for and evaluation of their studies.

The educational values of key competences consist, among other things, of developing pupils' self-consciousness and communicative competence, preparing them for active participation in democratic society and enhancing their ability to use their strengths, in due time, for further studies and work development. By defining the competence criteria for the key competences in every aspect of education from the beginning of compulsory school to its completion, a basis is laid for the pupils' general development. Competence in expression, critical thinking, competence in cooperation, self-knowledge, responsibility and independence, initiative and creative thinking are some of the factors that lay the foundation for a lifelong and comprehensive general education.

## 18.2 Competence criteria for key competences

Competence criteria are defined at the completion of Grades 4, 7 and 10. They are divided into five categories in accordance with the criteria for assessment of key competences in Chapter 9.4; that is, expression and communication, creative and critical thinking, independence and cooperation, using media and information, and responsibility for and evaluation of one's own education.

### Expression and communication

The pupils' competence to express their thoughts, feelings and opinions orally, in writing or in other ways. Competence to communicate their knowledge and skills and express themselves clearly and in an understandable manner and to take part in conversation and discussion.

Expression and communication		
At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>express their thoughts and opinions and formulate them in a suitable manner,</li> <li>listen for information and arguments in conversation,</li> </ul>	<ul style="list-style-type: none"> <li>express their thoughts and opinions appropriately and in an organised manner using various media,</li> <li>seek arguments and information in conversation, organise their reasoning and show regard for different views,</li> </ul>	<ul style="list-style-type: none"> <li>express their thoughts, ideas and feelings in an organised, clear and suitable manner,</li> <li>react with reasoning to information and ideas presented in various forms, take part in discussions, support their ideas with self-possession and show regard for different views,</li> </ul>



<ul style="list-style-type: none"> <li>• adapt their expression to those they are talking to and use common vocabulary suitable for the discussion topic each time,</li> <li>• describe their thoughts, opinions and knowledge in a manner suitable each time,</li> </ul>	<ul style="list-style-type: none"> <li>• adapt and adjust their presentation to the demands or requirements of those they are talking to and use suitable concepts and vocabulary related to the discussion topic each time,</li> <li>• describe and present their knowledge and skills, their opinions, thoughts and feelings in a manner suitable each time.</li> </ul>	<ul style="list-style-type: none"> <li>• talk in an appropriate manner about a subject so as to arouse the interest of those they are talking to,</li> <li>• use varied vocabulary and suitable concepts with regard to different topics,</li> <li>• use varied methods to communicate their knowledge and skills, their opinions, thoughts and feelings in an organised manner, appropriate each time.</li> </ul>
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## Creative and critical thinking

Creative thinking and initiative in the treatment and processing of material. The pupils' competence to use their knowledge and skills, draw conclusions, the confidence to seek new solutions and use critical thinking and reasoning.

### Creative and critical thinking

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>• organise treatment and methods for carrying out assignments,</li> <li>• take part in defining standards for achievement,</li> <li>• realise that more than one solution is often possible when carrying out assignments and that one can learn from mistakes and use this in a creative manner,</li> </ul>	<ul style="list-style-type: none"> <li>• ask questions and plan the contents and execution of projects</li> <li>• define standards and achievement,</li> <li>• learn from mistakes and creatively use unexpected solutions in carrying out assignments,</li> </ul>	<ul style="list-style-type: none"> <li>• make enquiries, make their own plans and review a process for the treatment of material, and carry out assignments,</li> <li>• define and justify standards of achievement,</li> <li>• honestly make use of mistakes and unexpected solutions in a critical and creative manner, and see new opportunities in this,</li> </ul>

<ul style="list-style-type: none"> <li>distinguish between facts and opinions,</li> <li>creatively review assignment solutions from different points of view.</li> </ul>	<ul style="list-style-type: none"> <li>discern different interpretations and distinguish between facts and opinions through reasoning,</li> <li>decide if a method for project work has been successful and take part in forming and presenting a task in a creative manner.</li> </ul>	<ul style="list-style-type: none"> <li>take an informed stance on data and information, draw conclusions and create their own meaning,</li> <li>use different points of view and critical thinking for creatively forming and presenting tasks.</li> </ul>
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## Independence and cooperation

Competence to work independently, in cooperation with others and under supervision.

Independence and cooperation		
At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>follow instructions and take responsibility for their tasks and work methods, as appropriate,</li> <li>recognise their strengths,</li> <li>cooperate with others on organised tasks connected to their studies and social activities within the school,</li> <li>recognise their own role in cooperation,</li> <li>take positive part in work and play within their school community,</li> <li>work under supervision in a positive manner.</li> </ul>	<ul style="list-style-type: none"> <li>realise what is expected of them in their studies and school activities and act accordingly, both in their studies and at work,</li> <li>recognise their strengths in order to enhance and reinforce their self-image,</li> <li>cooperate with others and contribute to cooperation related to studies and social activities within the school,</li> <li>recognise their own role in cooperation and take part in plans to achieve common goals,</li> <li>actively influence the school community through participation in play and work,</li> <li>accept guidance and criticism in a positive manner.</li> </ul>	<ul style="list-style-type: none"> <li>take initiative in their studies and be independent and responsible in their work methods,</li> <li>realise how they use their strengths and have a clear self-image,</li> <li>cooperate with others and participate in communication in a positive manner; contribute to constructive cooperation related to studies and social activities within the school,</li> <li>take a leading role in cooperation and be responsible for means to achieve common goals,</li> <li>use their competence to be active and responsible citizens in a democratic society,</li> <li>accept guidance and criticism in a constructive manner, and also present their criticism in a constructive manner.</li> </ul>



## Using media and information

Competence to use various media in seeking, processing and communicating knowledge, and in using information in a responsible, creative and critical manner.

### Using media and information

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"><li>• seek information in various media for their studies,</li><li>• use media fairly independently for innovation, concept work and presentation of material,</li><li>• use information in a responsible manner and be aware of the importance of responsible internet usage.</li></ul>	<ul style="list-style-type: none"><li>• use various data banks and resources to acquire information and for reference in their studies,</li><li>• use various media in innovation, development and presentation of information and ideas,</li><li>• show responsibility in using and distributing information, both for personal use and project work, and use electronic and social media in a responsible manner.</li></ul>	<ul style="list-style-type: none"><li>• use various media and aids in a responsible manner when seeking information and for reference in their studies,</li><li>• independently and in cooperation with others use various media for planning, innovation, development and presentation of information and ideas,</li><li>• show responsibility in using information and source material and be aware of the moral value of responsible internet usage and show responsibility in private communication on the net and in web media.</li></ul>

## Responsibility and evaluation of their own education

Competence to be responsible for one's own education and to evaluate one's work methods and achievement.

### Responsibility and evaluation of one's own education

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"><li>• recognise their strengths and what aspects of their studies they can improve,</li><li>• with assistance, set themselves goals in their studies,</li></ul>	<ul style="list-style-type: none"><li>• recognise their strengths and how they can be used in their studies,</li><li>• set themselves goals in their studies and work to achieve them,</li></ul>	<ul style="list-style-type: none"><li>• recognise how they can use their strengths in a creative manner in their studies and have a clear self-image,</li><li>• set themselves realistic goals for their achievement and study progress, work according to them and evaluate what they have achieved,</li></ul>

- take part in planning their studies with regard to the competence criteria of the *National Curriculum Guide*.

- plan their studies with regard to the competence criteria of the *National Curriculum Guide*.

- plan and be responsible for their studies with regard to the competence criteria of the *National Curriculum Guide*; plan and review with regard to the evaluation of achievement.

### 18.3 Teaching methods and assessment of key competences

If pupils are to achieve the competence criteria set for them, varied learning environments, together with encouraging and supportive teaching methods, are essential. This applies both to teaching methods within subjects and subject areas as well as to the study environment, which is the result of a positive school atmosphere and active cooperation between home and school. In each subject there is an emphasis both on general key competences and on competences defined for each subject or subject area. A good school atmosphere enhances the pupils' communicative competence and their development towards respect and tolerance, equality and communication with other people, the environment and nature. Assignments that connect studies with everyday life and the economy enhance the pupils' literacy of their environment. Thus the learning and teaching strategies of each subject, in addition to a good school atmosphere, enhance the pupils' general development, welfare and key competences.

Each teacher, all the teaching staff, and other school personnel as a whole, share the responsibility for the pupils achieving the competence criteria on which key competences are based.

It is important that all school activities aim at making pupils active and independent in their studies, able to acquire knowledge on their own, and also at giving them an opportunity to use their abilities and a chance to get feedback on their work. The emphasis on pupils' comprehensive competence requires varied methods to assess the pupils' competence and give them the guidance to achieve the goals that have been set.

### 18.4 Assessment criteria for key competences at the completion of compulsory school

The *National Curriculum Guide* stipulates the assessment criteria for subjects, subject areas and key competences. Assessment criteria describe to what extent a pupil has acquired defined competences. The assessment criteria are only obligatory for Grade 10, where they support assessment at the completion of compulsory school. Schools are expected to define assessment criteria for other grades and describe them in the school



curriculum guide. The assessment criteria for Grade 10 describe competences on a scale that appears in the *National Curriculum Guide*: the scale A, B, C, D is used, where A stands for exceptional competence, B for good competence, C for passable competence, and D for competence that does not reach the standard described in C.

Assessment criteria in category B are based on competence criteria for Grade 10 and their presentation is such that most pupils are expected to acquire the competences that are described there. An A is for those who have acquired exceptional competence and C for those who do not quite meet the requirements that are set for the B criterion. No criterion is set for D as this assessment is used when the pupil does not meet the requirements that are set for the C criterion. In such cases the school explains the competence of the pupil in question. Each criterion is a general description of the pupil's competence.

In the final assessment it is of fundamental importance that teachers assess what the criteria stipulate, make sure that the assessment is based on reliable data and that they use a variety of methods to acquire data, in order to give pupils, their parents and the school as clear information as possible on the pupils' status. Thus teachers can gain better insight into the studies of each pupil. For an accurate conclusion, such as from conversations or on-site inspection, it may be relevant for teachers to cooperate when they consider the data that the assessment is based on and to use precise criteria.

The assessment scale is obligatory at pupils' graduation at the completion of Grade 10. In other respects, schools may decide how they conduct their assessment, grading or school reports for pupils in other grades. School reports at the completion of Grade 10 are taken into consideration when pupils enrol in upper secondary schools and select study programmes.

The following issues may be useful in securing the reliability and validity of the assessment.

- Set clear criteria or describe what is to be assessed.
- Select assessment factors that are suitable for assessment criteria, study materials and teaching methods.
- Prepare a description of what is to be assessed or show examples of assignments that are of good quality.
- Ascertain that assignments are in accordance with criteria.
- Be aware of issues that could distort the conclusion.
- Make clear instructions for assessment methods, processing and interpretation of data.



The assessment of key competences at the completion of compulsory school is a cooperative venture between the pupil's teacher and the pupil, when appropriate. At the completion of Grade 10, each teacher makes an assessment of how far each pupil has acquired the competence criteria and assessment criteria of the five key competence pillars of education with regard to each subject area or subject. Teachers then present a common assessment for each key competence that appears in the pupil's school report at the completion of compulsory school. They come to an agreement to what extent the pupil has acquired the key competences. The letters A, B, C and D are to be used for each key competence, as appropriate.

### Expression and communication

Pupils are able to:

Take an **active** part in conversation and discussion with confidence and explain their opinions in a **clear** and **informative** manner. Use different media with resourcefulness in order to present their knowledge, skills, opinions and feelings.

A

Take an **active** part in conversation and discussion and explain their opinions in a **clear** manner. Use different media with resourcefulness in order to present their knowledge, skills, opinions and feelings.

B

Take an active part in conversation and discussion and explain their opinions. Use different media in a suitable manner in order to present their knowledge, skills, opinions and feelings.

C

### Creative and critical thinking

Pupils are able to:

Ask critical and enquiring questions and **use their own methods to work** on assignments. Give a **clear** and **well-founded** explanation of the basis of results and use in a creative manner the possibilities that mistakes and unexpected solutions have to offer. Use information **critically** and draw **well-grounded** conclusions, show initiative and use different points of view when organising and presenting tasks.

A



**B** Ask enquiring questions and work **independently** on assignments. Give a **clear** and **comparatively** well-founded explanation of the basis of results and use in a **creative** manner the possibilities that mistakes and unexpected solutions have to offer. Use information **critically** and draw conclusions, create their own meaning, and use different points of view **fairly well** when organising and presenting tasks.

**C** Ask questions and work **fairly** independently on assignments. Give an explanation of the basis of results and use in a creative manner the possibilities that mistakes and unexpected solutions have to offer. Use information, create their own meaning **to a certain extent**, and use different points of view when organising and presenting tasks.

### Independence and cooperation

Pupils are able to:

**A** **As a rule**, show initiative and independence in their work methods. Show **initiative**, be **responsible** for and take **active** part in cooperation in a constructive manner. **Confidently** accept and present orderly criticism in a **responsible** and **constructive** manner and take active part in the school community in a democratic manner.

**B** Show initiative and independence in their work methods. Show **initiative** and **responsibility** and take a **fairly active** part in cooperation. Accept and present **orderly** criticism in a **responsible** and **constructive** manner and take a **fairly** active part in the school community in a democratic manner.

**C** Show **some** initiative and independence in their work methods. Show **some initiative** and **some responsibility** and take part in cooperation. Accept and present criticism in a **responsible** manner and take part in the school community in a democratic manner.

## Using media and information

Pupils are able to:

**Confidently** and in a responsible, critical, creative and **constructive** manner, use different media in their studies; acquire information and evaluate its quality and credibility and present it in a critical and creative manner.

# A

**Fairly confidently** and in a responsible, creative and **constructive** manner, use different media in their studies; acquire information and evaluate its quality and credibility and present it in a critical and creative manner.

# B

**To some extent** and in a responsible, creative and constructive manner, use different media in their studies, acquire information and evaluate its quality and credibility and present it in a creative manner.

# C

## Responsibility and evaluation of one's own education

Pupils are able to:

With regard to their strengths, use the competence criteria **very well** in their studies, work independently and as a rule set clear, **realistic** goals. Show responsibility for their education and confidently evaluate achievement and reorganise learning strategies with regard to achievement.

# A

With regard to their strengths, use the competence criteria **fairly well** in their studies, work independently and as a rule set realistic goals. Show some responsibility for their education and evaluate achievements and reorganise learning strategies with regard to achievement.

# B

With regard to their strengths, **to some extent** use competence criteria in their studies, work independently and as a rule set goals. Show **some** responsibility for their education and, **to some extent**, evaluate achievements and reorganise learning strategies with regard to achievement.

# C

## ICELANDIC

# 19

This chapter is divided into three parts: Icelandic; Icelandic for those with a mother tongue other than Icelandic, or those who have lived abroad for a long time and are not sufficiently fluent in Icelandic; and finally Icelandic Sign Language, for those who are Deaf or Hearing impaired. The third part concerns those pupils who have the fewest prerequisites for learning Icelandic. For pupils who are hearing impaired, but able to achieve the competence criteria in spoken Icelandic, elements from the curriculum guide for Icelandic should be added to the individual curriculum. The same applies for pupils with a mother tongue other than Icelandic. While criteria that concern these pupils are defined, competence criteria in Icelandic are also referred to, where appropriate. It should be pointed out that according to the *Act on the status of the Icelandic language and Icelandic Sign Language*, No 1/2011, Deaf and Hearing Impaired children have the right to obtain knowledge and skills in two languages: Icelandic Sign Language and Icelandic, as both languages are of equal status although they play a different role in the pupils' lives. Furthermore, it is important that pupils with a mother tongue other than Icelandic maintain and improve their competence in that language, although the goal of the *Compulsory School Act* is for these pupils to be bilingual.

The educational values and main objectives are described in this chapter. These objectives and values are based on the six fundamental pillars of education described in Chapter 2, as are the emphases of the *Compulsory School Act* dealt with in Chapter 6 and the key competences defined in Chapter 9.4 and Chapter 18. Competence criteria are defined for the completion of Grades 4, 7 and 10. This is followed by a discussion of teaching methods and assessment, based on the emphases of the competence criteria. Teaching

methods, study materials and assessment methods should be selected based on these competence criteria. They should appear in the school curriculum guide of the respective school. At the end of the chapter there are assessment criteria, which are to be used, as appropriate, to describe the pupils' competence when they finish compulsory school. Criteria are set separately for Icelandic and Icelandic Sign Language. There are no special assessment criteria for Icelandic as a second language, as the assessment criteria for Icelandic should be used.

## **19.1 Educational values and main objectives of Icelandic**

A solid knowledge of one's language is the principal foundation of a durable education. At the same time, reading is a powerful way for pupils to acquire knowledge, and the ability to express oneself, both orally and in writing, is one of the most important prerequisites for participation in society.

Children begin school speaking their mother tongue, whether it is Icelandic, Icelandic Sign Language or another language. From the beginning, the school, in cooperation with the home, is an active participant in the child's linguistic education. Consequently, Icelandic as a subject and Icelandic Sign Language for the Deaf and Hearing Impaired, have a unique position amongst school subjects.

The task of teaching Icelandic and Icelandic Sign Language, and that of language education in general, is extensive and complicated. Language and literature are the cultural heritage of the nation and should be nurtured, respected and developed. This heritage is, without doubt, an important factor in the nation's literacy status and how natural we think it to learn to read, write and produce language that can be understood. Furthermore, teaching the mother tongue has another objective: that of enhancing expression and creativity in both speech and writing, using the language and learning to know its power. A good, rich spoken language is one of the prerequisites of communication, and the same applies to the written language, which is a medium for creativity and conveying new knowledge. In this way, teaching Icelandic and Icelandic Sign Language enhances the role of the language as the medium of thinking and of the writer's inner monologue, when necessary. Education in these languages should, therefore, be based on this; it should be an education in language and literature and, not least, in usage. At the completion of compulsory school, pupils should be able to recognise their status and responsibility as language users. They should realise that once they have finished school, it is their responsibility to nurture and use the language as a means for education, communication and participation in a democratic society. It is the right of every individual to acquire knowledge and skill in language. It is also important that a child with a language other than Icelandic has the opportunity to learn Icelandic well enough to be able to participate fully in society, to take pleasure in culture and to take part in the forming of that culture. The same applies to those who are Deaf or



Hearing impaired. Icelandic Sign Language is no less important than Icelandic as a key to society and active participation in it.

The intricate role of the study of Icelandic calls for solidarity and cooperation within the school with regard to linguistic upbringing. It is important that compulsory schools formulate their own language policy based on the *National Curriculum Guide* and the parliamentary resolution passed by Althing on Icelandic Language Policy, and that this is observed in all subject areas. The main objectives of teaching Icelandic can be divided into four categories.

### **19.1.1 Spoken language, listening and observing**

In a democratic society it is of vital importance to be able to take part in discussions of various kinds, where the mother tongue is a powerful means of communication. It is important to be able to present one's opinions, whether at school or work, in social or private life. Those who have a good command of spoken language, enunciation and conversation are better equipped to take part in social discourse and to communicate their knowledge with ease.

It is important that pupils are trained to narrate in an organised manner and to explain their opinions and knowledge. From the time children start school, there should be a focus on practising how to express oneself and guidance in enunciation and clear pronunciation. Good command of oral expression of the mother tongue is the basis for language learning and is useful in all other subjects. Training can be divided into two categories: on the one hand, pronunciation and enunciation, and, on the other, narration, conversation, discussion and discourse. It is, however, often effective to integrate these elements. A steady progression is important in these studies. At the beginning, emphasis should be placed on practising simple narration and retelling, participation in ordinary conversations and role play. The natural pronunciation of all the sounds of the language should be checked. Later, the characteristics of spoken language should be added, as well as techniques for dramatic expression and discussion.

A significant factor in general education is knowing how to listen and watch attentively and critically. It is necessary to be able to receive information communicated through various forms of media, such as audio-visual or multimedia, and to interpret and evaluate this information critically. Listening is an essential part of human communication. It is important that pupils learn to listen to others and acknowledge their opinions in conversation and discussion. The teaching of spoken language and listening focuses not only on improving conversation and relations in the classroom but also on strengthening pupils' ability to use various communication media, such as web media, where spoken language and listening are used. Here, among other things, ethics in communication and language usage should be considered.

### 19.1.2 Reading and literature

The concept of literacy involves principally reading and writing. Here the focus is on reading, but the connection between reading and writing should be emphasised. Well-developed reading skills involve, among other things, the competence to decipher writing, understand and interpret what a text contains, learn from it and be able to communicate what one knows to listeners and readers.

The demand that society makes on reading skills has changed radically in recent years. Mainly this relates to the texts that readers want to read, or are supposed to read, and which are significantly more varied than they were before, appearing not only on paper but also in electronic form, often consisting of a written text, pictures, symbols, gestures, sound and animation. Additionally, it should be pointed out that a good deal of what pupils read appears in the web media without being reviewed or edited in any way. This calls for a critical reading of the text; that the reader is capable of various forms of understanding and interpretation and is able to critically evaluate the validity of the information.

One of the important goals of teaching reading is to encourage pupils towards independence so that little by little they choose their own reading material and discover its worth in relation to education, needs and interests. Additionally, it is important that they learn and are able to apply understanding and reading strategies that are in keeping with the goals of the reading. Good reading skills are the basis for lifelong learning and the ability to acquire the necessary information to participate in the life and culture of the nation. Resources must be utilised to improve the status of those pupils who for some reason have difficulty learning to read and this should be done as soon as possible.

Icelandic cultural heritage is predominantly related to books and therefore the best way for pupils to become acquainted with it is by reading various kinds of literature. Young readers find role models in literature and are able to put themselves in the position of the characters. Thus the teaching of literature in schools can reinforce pupils' self-image and teach them tolerance towards minority cultures. In the upper grades of compulsory school, literary concepts and criticism should, of course, be used for sharpening the pupils' understanding of literature and its characteristics.

### 19.1.3 Writing

Society makes increasing demands on people's ability to write a variety of texts and to express themselves in their studies, at work, and in their social and personal life. Those who have a good command of written language can communicate what they want to others. They are also likely to enjoy good quality and appreciate what others publish. In this way reading and writing are related; one is enriched by the other. Therefore, to encourage gradual development in writing competence, it is necessary to teach reading and writing in parallel over the entire course of a school education.

Although essentially integrated, writing training may be divided into two main components. On the one hand is the text itself, which includes selecting types of text, structure, register and style. On the other hand, there are technical issues, such as writing, spelling, layout and applying finishing touches.

A special emphasis should be put on pupils' ability to formulate their own material clearly in various ways, for different types of readers and for various purposes, both as digital and handwritten texts. When writing texts, it is essential to keep in mind the two main components mentioned above. This is equally true whether the pupil is writing a literary or a non-fiction text, essays or reflections.

Pupils should learn to criticise and review their own texts and accept constructive and professional criticism from others, and consequently to use this to improve their writing. At the same time, they should have an opportunity to rewrite and improve their texts as necessary and to use available aids for this purpose.

### **19.1.4 Grammar**

Language skills, both in the mother tongue and in foreign languages, are essential in human relations. The purpose of teaching grammar in compulsory school is to enable pupils to discuss language and language usage, to make them better language users, and to encourage their interest in their mother tongue. By being introduced to the diversity of languages and bilingualism, pupils develop a better understanding of the number of languages spoken in Icelandic schools, and this encourages tolerance. Naturally, the relationships between the Nordic languages should also be discussed and pupils should be given the chance to understand the spoken and written languages of other Nordic nations. Grammatical concepts are useful when language and language usage are discussed. They are also necessary to make full use of dictionaries, manuals and other linguistic sources.

During the first grades of compulsory school, the emphasis is mainly on vocabulary, language performance and feel for the language. Discussions of grammar should be based on the pupils' language abilities and should aim at encouraging self-confidence and an awareness of their competence. Neologism, poetry and various language games make use of the creativity and diversity of language and pupils should be made aware of this.

When the occasion arises, grammatical concepts should be used as explanation, for example when writing texts, or when discussing literature and language use. Grammar and the teaching of it should not be experienced in isolation but actively used when examining texts and written language, especially the pupils' own texts.



## 19.2 Competence criteria for Icelandic

The competence criteria for Icelandic are detailed in four different categories: the first category is spoken language, listening and looking at pictures, next comes reading and literature, then writing, and finally grammar. As a whole, the table shows the competence that each individual should have achieved at the completion of Grades 4, 7 and 10.

Spoken language, listening and observing		
At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>• use clear and understandable pronunciation,</li> <li>• express themselves through dramatic expression in front of a group and defend their opinions,</li> <li>• describe a memorable event and a specific phenomenon, retell a piece that they have listened to or read,</li> <li>• listen to or watch attentively a recital, a piece of drama, a poem or song and describe the experience,</li> <li>• use and retell electronic material,</li> <li>• have good relations, listen and behave politely.</li> </ul>	<ul style="list-style-type: none"> <li>• express themselves in a clear and understandable manner and realise the value of good pronunciation,</li> <li>• present their opinions and feelings and keep the attention of listeners, for example with dramatic expression,</li> <li>• take part in conversation and discussion according to rules,</li> <li>• listen attentively and use their knowledge and experience to understand what is said and describe the main points,</li> <li>• use visual and electronic material in a critical manner,</li> <li>• have good relations, listen, be discreet and polite.</li> </ul>	<ul style="list-style-type: none"> <li>• speak in a clear and understandable manner and have mastered appropriate speed and bearing when speaking,</li> <li>• realise the nature of good elocution and pronunciation and use instructions on elocution, such as stress, intonation, inflection and bearing, and adapt this to the listener and communication media in a varied manner, for example through dramatic expression,</li> <li>• use methods that they have learnt to take an active part in cooperation, conversation and discussion, express their opinions in various ways, support them and select a suitable media for them,</li> <li>• listen, pay attention and use information in spoken language for knowledge and pleasure, also enjoy visual material, recital, drama and music, and present their opinions on the material in question,</li> <li>• use mass media, such as radio, television, films and digital material, and form an opinion of what is shown there,</li> <li>• have good relations where language, listening, consideration, respect and politeness are observed.</li> </ul>

## Reading and literature

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>• apply the methods of word and letter decoding so that reading becomes unhesitating and clear,</li> <li>• use good vocabulary to understand texts and guess the meaning of a word from its context,</li> <li>• link their knowledge and experience to the reading material in order to understand its meaning,</li> <li>• choose reading material based on interests or need and read stories, poetry and educational material that is suitable for their reading ability for both pleasure and instruction,</li> <li>• read fairy tales, stories and poetry written for children,</li> <li>• apply concepts such as character, plot, setting and moral,</li> <li>• apply a few common prosody concepts such as, rhyme, poem, stanza and verse,</li> <li>• acquire information from different sources of data, such as books and material in electronic form,</li> </ul>	<ul style="list-style-type: none"> <li>• read a suitable text at a good reading rate and with understanding, evaluate and interpret it,</li> <li>• use knowledge and experience in addition to a copious vocabulary to read and understand texts,</li> <li>• analyse and discuss the main points and topics of texts and use different methods for reading and understanding texts,</li> <li>• read for pleasure and instruction and present to others the effects that a text has had on them,</li> <li>• read old and new literature, such as folk tales, poetry, and literature written for children and adolescents,</li> <li>• analyse several narrative forms of literature and apply a few literary concepts to enhance understanding, such as time, point of view, setting and moral,</li> <li>• apply several concepts to discuss form and subject matter in poetry, such as rhyme, alliteration, rhythm, metaphor and moral,</li> <li>• acquire information from books and a variety of electronic material and use it in assignments, evaluate to a certain extent the value and validity of information,</li> </ul>	<ul style="list-style-type: none"> <li>• read common texts with confidence, understand them well, evaluate and interpret,</li> <li>• recognise the importance of literacy and enhance their own literacy,</li> <li>• choose different reading strategies,</li> <li>• analyse and understand major and minor issues in various texts and understand how topics are connected,</li> <li>• recognise the nature and characteristics of various types of texts and explain this to others,</li> <li>• read, interpret, evaluate and discuss a variety of Icelandic and foreign literature and understand the value of literature,</li> <li>• apply a few basic literary concepts, such as motif, plot, point of view and setting and recognise imagery, common symbols and styles,</li> <li>• use common concepts in prosody when discussing poetry and prose; read and interpret various types of poems from different periods,</li> </ul>

<ul style="list-style-type: none"> <li>• decipher symbols and visual material, such as simple figures, maps and graphs,</li> <li>• choose books or other reading material and read for pleasure.</li> </ul>	<ul style="list-style-type: none"> <li>• decipher simple statistical and visual information and interpret it.</li> </ul>	<ul style="list-style-type: none"> <li>• search for and acquire information from different data sources and evaluate the validity of written language, such as mass media and multimedia material and form a critical opinion of it,</li> <li>• process statistical and visual information, interpret it; link material that is presented in different forms and use it,</li> <li>• choose reading material for instruction and pleasure and act as independent readers who are aware of the value of reading.</li> </ul>
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## Writing

<b>At the completion of Grade 4, pupils are able to:</b>	<b>At the completion of Grade 7, pupils are able to:</b>	<b>At the completion of Grade 10, pupils are able to:</b>
<ul style="list-style-type: none"> <li>• write all the letters, write clearly and in a understandable manner,</li> <li>• in writing, use their knowledge of the basic elements of text structure, such as beginning, body text, and conclusion,</li> <li>• write their own text, such as a story, narrative, poem or message,</li> <li>• use simple spelling rules and available aids, as appropriate,</li> <li>• use models in writing, for example, from reading of books, newspapers and electronic material,</li> </ul>	<ul style="list-style-type: none"> <li>• write legibly and with confidence in personal handwriting, apply common word processing functions, apply finishing touches and use dictionaries,</li> <li>• choose a type of text, organise and formulate texts, such as stories, narratives, descriptions and instructions in a form suitable for the occasion,</li> <li>• write a text of their own creation, enjoy expressing their ideas and experience and sharing this with others by presenting what they have written or allowing others to read it,</li> <li>• apply the main rules of spelling and punctuation and have mastered these rules,</li> <li>• read a text and examine it in order to study how the author writes and apply this to their own writing,</li> </ul>	<ul style="list-style-type: none"> <li>• write clearly and legibly, use word processing, use dictionaries and other aids, apply finishing touches, cite and enter references,</li> <li>• use orderly work methods when writing, arrange topics in logical context and form sentences and paragraphs,</li> <li>• express their ideas and opinions and support them in writing, write their own text and not shy away from using a copious vocabulary in creative writing,</li> <li>• apply spelling rules, have acquired a good command of spelling and realise that correct spelling shows respect for language, text and reader,</li> <li>• select and write different types of texts suitable for the work in question and use diverse vocabulary and register, as appropriate,</li> </ul>



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|---|---|---|
| <ul style="list-style-type: none"><li>• use computers for writing and apply simple word processing functions,</li><li>• write and let others enjoy what they have written by reading it out loud or by offering others to read it themselves.</li></ul> | <ul style="list-style-type: none"><li>• use computers for writing their own texts, apply a few word processing functions, cite references,</li><li>• write by hand or use word processing to write a text with a specific reader in mind,</li></ul> | <ul style="list-style-type: none"><li>• use the chief word processing functions, choose suitable references, cite them and file according to rules,</li><li>• write an electronic text and link text, pictures and sound, as appropriate, recognise the reader and write accordingly.</li></ul> |
|---|---|---|

## Grammar

<b>At the completion of Grade 4, pupils are able to:</b>	<b>At the completion of Grade 7, pupils are able to:</b>	<b>At the completion of Grade 10, pupils are able to:</b>
<ul style="list-style-type: none"><li>• use spoken and written language with certain confidence and command of vocabulary and language comprehension in accordance with their age,</li><li>• know and identify the chief elements of language, such as letters, sounds, words, compound words and sentence,</li><li>• file alphabetically and understand its use for search and organisation,</li><li>• recognise the different functions of nouns, adjectives and verbs,</li><li>• play with the various characteristics of language, such as the ambiguity of words and identify gender and number forms,</li></ul>	<ul style="list-style-type: none"><li>• to a certain extent realise their own language and usage and recognise the importance of improving it,</li><li>• use a fairly copious vocabulary in speech and writing, realise the ambiguity of words and make use of grammatical knowledge for word formation in both spoken and written language,</li><li>• use their knowledge and skills to look up in dictionaries and other language sources,</li><li>• realise how the vocabulary is divided into verbs, nominal and indeclinable words and analyse their function and main characteristics,</li><li>• use phrases and proverbs in spoken and written language and realise their usefulness in texts,</li></ul>	<ul style="list-style-type: none"><li>• apply the chief grammatical concepts in discussing language usage and development,</li><li>• choose words in spoken and written language according to register, realise how important it is to cultivate their vocabulary and use rules for word formation and components of words when writing and spelling,</li><li>• look up in manuals, dictionaries and electronic word banks and use the information that they find there,</li><li>• recognise the inflective and semantic characteristics of word classes and realise their function in their own texts and those of others,</li><li>• use famous quotations, common idioms, proverbs and phrases to enrich their language, and realise the importance of reading, especially of literature, for this purpose,</li></ul>

<ul style="list-style-type: none"> <li>• form a sentence and identify sentences in their own texts,</li> <li>• distinguish between common nouns and proper nouns by, for example, identifying them in a text,</li> <li>• play with words and meaning, such as by rhyming or playing on words,</li> <li>• recognise the purpose of learning Icelandic grammar,</li> <li>• use their own vocabulary for creating new words and idioms and use these in a text,</li> <li>• recognise the usefulness of Icelandic grammar, such as in writing and spelling.</li> </ul>	<ul style="list-style-type: none"> <li>• use their grammatical knowledge to write clauses, sentences and paragraphs and recognise the diversity of language,</li> <li>• use their knowledge of grammatical concepts in discussions of language, especially their own language, both spoken and written.</li> </ul>	<ul style="list-style-type: none"> <li>• recognise different usage and register depending on subject and occasion; be aware of regional, job- and age-specific variations of vocabulary and usage, and recognise the most prominent pronunciation dialects,</li> <li>• realise the relationship of Icelandic with other languages and that languages, including Icelandic, change constantly,</li> <li>• recognise and apply the creativity of language and use this, for example, in writing, speaking, neologism, wordplay and literature,</li> <li>• recognise the importance of linguistic ability and their responsibility for enhancing their language; use their knowledge of Icelandic grammar when studying foreign languages.</li> </ul>
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### 19.3 Icelandic as a second language

It is an important task to improve the knowledge of the Icelandic language of those pupils who have a mother tongue other than Icelandic. Competence in Icelandic is an important precondition for their becoming active participants in a democratic and egalitarian society and acquiring a general education in Icelandic schools. This is a challenging task. These pupils are of highly varied origin. The language of some of them belongs to the same language family as Icelandic and many teachers know these languages, such as English, German, and the Nordic languages. These languages can become supportive in teaching and learning as it is possible to explain various elements in the study of Icelandic by referring to the mother tongue of these pupils. Other pupils have a mother tongue that is completely unrelated to Icelandic and that even has a different writing system. Many children have parents who have the same mother tongue as the child, but sometimes the parents do not share the mother tongue of their children, and in some instances



Icelandic is the mother tongue of one of the parents but not the other. This can influence the linguistic upbringing of the child and the relationship between the home and the school. It influences the acquisition of a new language, the children's educational status, cultural difference and the parents' education. It is, however, essential to encourage parents to support their children's Icelandic studies and at the same time to nurture and develop their own mother tongue to encourage the active bilingualism of all pupils with a mother tongue other than Icelandic.

A significant number of children have Icelandic as their mother tongue but have lived abroad for most of their lives. Their language at school and outside the home has been a language other than Icelandic. These pupils often need quite a lot of assistance at school although this is not always evident from the beginning.

It is important for the self-image of pupils with a mother tongue other than Icelandic that they preserve their knowledge and skills in their own mother tongue. It is an advantage for anyone to be fluent in more than one language and, moreover, this is valuable for society. A solid knowledge of the mother tongue strengthens family ties and bonds with cultural heritage. Therefore, it is essential that parents are made aware of the importance of the mother tongue for the pupil and that they are encouraged and supported in emphasising linguistic upbringing at home by nurturing the pupil's mother tongue. Parents and schools should, of course, seek assistance where they can find it, such as from institutions and individuals that are knowledgeable about the acquisition of a second language and multiculturalism. Activity of this kind also supports the teaching of Icelandic and encourages active bilingualism.

The *Compulsory School Act* (Article 16) stipulates that schools should receive pupils who are starting school in Iceland according to the school's or municipality's reception plan. The reception plan for pupils with a mother tongue other than Icelandic should take into account the pupil's background, language skills and competence in other fields of study. These pupils and their parents should be guaranteed adequate counselling and access to information on compulsory school activities. In the case of pupils who are not native speakers of Icelandic, the same article stipulates that compulsory schools may accredit pupils' knowledge in their mother tongue as part of their compulsory education by letting it replace the compulsory education in another foreign language. It is important to offer pupils education in their own language so that they have an opportunity to learn about the language, literature and culture and to practise usage.

Teaching Icelandic as a second language at specific levels of compulsory school should take into account the age, maturity and requirements of pupils. Their experience, cultural background and status in education should also be kept in mind. In this case, course units are divided into levels that correspond to competence in Icelandic at the completion of each level. The first level refers to beginners, the next to more advanced

pupils and the last to the most advanced. Pupils can be at any level, irrespective of age. Regarding grammar, grammatical competence criteria may be selected for those who have Icelandic as their mother tongue.

It is important that pupils with a mother tongue other than Icelandic develop literacy, reading and writing to the same extent as other pupils. It is also essential that they keep up with their schoolmates in other school subjects and receive the necessary support to be able to do so. Studying Icelandic, including reading, is to be integrated into education in all the other subject areas of the school.

The emphasis should be on extensive cooperation with home in practising Icelandic as a second language at all levels of compulsory school. This is an important cooperative task for both home and school as the family plays a significant role in creating a climate of respect for both languages, encouraging and nurturing them, and in maintaining the interest of pupils in active bilingualism.

## 19.4 Competence criteria for Icelandic as a second language

The competence criteria for Icelandic as a second language are stipulated in three categories: that is, in reading, literature and writing. As a whole, the table shows the competence that each individual is to acquire as a beginner, as a more advanced pupil and finally for the most advanced pupils. The reason why the criteria are stipulated in this manner is that pupils begin their studies of Icelandic as a second language at all levels of compulsory school and therefore no age-specific criteria can be stipulated.

Listening and spoken language		
Pupils who are beginners are able to:	Pupils who are more advanced are able to:	Pupils who are most advanced are able to:
<ul style="list-style-type: none"> <li>understand simple messages and react to them,</li> <li>express their feelings and talk about their thoughts and feelings,</li> <li>ask questions and ask for explanation, for example, of specific words and expressions,</li> </ul>	<ul style="list-style-type: none"> <li>take part in conversation at school about the study material and other issues being discussed,</li> <li>describe events, persons and objects and retell a simple text that they have read,</li> <li>ask and answer questions related to specific school subjects and ask for assistance when they need to,</li> </ul>	<ul style="list-style-type: none"> <li>take part in a conversation and discussions on topics and not shy away from making a suggestion,</li> <li>listen to a story or another type of text, briefly retell and interpret it,</li> <li>use Icelandic to their advantage in communicating with others, for example to say what they mean and need,</li> </ul>



- take part in a simple conversation and catch the attention of those they are speaking to,
- pronounce the most common speech sounds and talk with fairly clear pronunciation.

- take part in a conversation where explanations and reasoning are applied,
- pronounce Icelandic without obvious influence from their mother tongue.

- use diction and linguistic behaviour appropriate for the occasion and show consideration for those they are talking to,
- pronounce Icelandic speech sounds and compound sounds and use Icelandic stress and intonation.

## Reading, literature and writing

<b>Pupils who are beginners are able to:</b>	<b>Pupils who are more advanced are able to:</b>	<b>Pupils who are most advanced are able to:</b>
<ul style="list-style-type: none"><li>• read and understand a text suitable for them, such as study material, and ask for assistance when they need to,</li><li>• read and present literature in their mother tongue and use this experience to read Icelandic children's books,</li><li>• use the Icelandic alphabet and link letters and sounds,</li><li>• apply simple spelling rules,</li><li>• write a short simple narrative, description or message,</li><li>• take notes and write down conclusions, for example in group work.</li></ul>	<ul style="list-style-type: none"><li>• read fluently simple texts for pleasure and instruction, such as short stories or coverage of an interesting subject and express themselves on this subject matter,</li><li>• read simple Icelandic children's literature and literature in their mother tongue, interpret and express themselves on what they have read,</li><li>• spell a simple text fairly correctly and apply some of the main spelling rules,</li><li>• write a story or an account in understandable language. Briefly express their feelings and experience and present this to their schoolmates,</li><li>• take an active part in cooperation with schoolmates and contribute to a solution that requires discussion, reading and writing,</li><li>• use available data for their benefit in reading and writing, such as dictionaries and electronic aids.</li></ul>	<ul style="list-style-type: none"><li>• choose and read for pleasure and instruction a variety of reading material in Icelandic and use various aids that explain words and phrases,</li><li>• choose literature in Icelandic and their mother tongue suitable for their age and interests, understand, interpret and enjoy this,</li><li>• spell and apply finishing touches in accordance with Icelandic rules, using aids such as dictionaries and web material,</li><li>• summarise the main points or relevant information from a text,</li><li>• write papers, reports and narratives and use computers for communication, select style and register with regard to reader, topic and occasion,</li><li>• use Icelandic websites for instruction and pleasure.</li></ul>



## 19.5 Icelandic Sign Language (ÍTM, íslenskt táknmál) and Icelandic

A solid knowledge of Icelandic Sign Language (ÍTM) and Icelandic is one of the mainstays of a stable education for the Deaf and Hearing Impaired. The bilingual school subject of Icelandic Sign Language and Icelandic is organised as an integral subject in the same way as Icelandic as a mother tongue. In addition, practice in Icelandic Sign Language, written Icelandic, and even spoken Icelandic, when children use it for communication, is integrated into all compulsory school subjects. This chapter details the competence criteria for signing and expression with or without a sign language interpreter, Icelandic Sign Language and Icelandic, reading and literature, recording Icelandic Sign Language texts and writing, and finally grammar. Special competence criteria are not stipulated here for sign language in other school subjects or subject areas, but the special needs of sign language pupils should be kept in mind when they are studying other subjects, especially foreign languages. Sign language pupils should get an opportunity to use Icelandic Sign Language in their studies in all subjects, as far as possible, and receive suitable sign language interpretation.

Icelandic Sign Language is accepted as a daily communication and education language, in addition to Icelandic, or at least to written Icelandic. Active cooperation with the home should be emphasised in practising Icelandic Sign Language and Icelandic at every level of compulsory school. This is a valuable cooperation task for the home and the school as the family plays an important role in creating respect for both languages, strengthening them, and nurturing and maintaining the interest of pupils, especially in practising reading visual material in Icelandic Sign Language, in reading Icelandic and in overall language cultivation.

### 19.5.1 Signing and expression with and without an interpreter

In a democratic society it is as important for bilingual pupils of Icelandic Sign Language and Icelandic to take an active part in various kinds of discussions as it is for other pupils. It is necessary for them to be able to express their opinions clearly in sign language and also to be able to use sign language interpreters in their studies, at work, and in their social and personal lives. It is important that pupils get practice in talking in an orderly manner and describing their knowledge and opinions with and without a sign language interpreter. From the time they begin school, an emphasis should be put on pupils receiving instruction in clear pronunciation and diction in Icelandic Sign Language.

Knowing how to listen and watch attentively and critically is a significant element of general education. It is necessary to be able to acquire, with or without sign language interpretation, the information that is presented and then interpret and evaluate it in a critical manner. It is important that pupils that are bilingual, regarding Icelandic Sign



Language and Icelandic, learn to listen to others and show consideration for their opinions in conversations and discussions. In order to do this, the pupil has to learn to use a sign language interpreter for conversation and communication in the classroom and when using various communication media, such as web media where spoken language is used.

Fluency in Icelandic Sign Language is the basis for studies in Icelandic and other languages and is of use in every school subject. From the beginning, it is important to focus on practising simple narratives and retelling, participation in general discussions with sign language interpretation, and role play. Later, instruction in the characteristics of both languages is added, as are translations between them and further practice in dramatic expression and discussions. Using interpretation services at school should be a natural and increasing part of school activities.

### **19.5.2 Reading and literature**

Literature education for children who are bilingual in Icelandic Sign Language and Icelandic, beyond what is generally done, is intended to encourage a stronger self-image in pupils through reading Icelandic Sign Language literature that reflects the reality and history of people who use sign language. A thorough knowledge of Deaf culture is necessary for self-understanding and to create respect for Icelandic Sign Language.

Icelandic Sign Language and Icelandic play different roles in the lives of these children. Icelandic Sign Language is chiefly for immediate communication as it does not include written language and therefore written Icelandic takes its place. The literacy of Deaf children involves using both Icelandic Sign Language texts and written texts in Icelandic.

The first step is to enhance the basic skills and vocabulary of pupils in Icelandic Sign Language and at the same time to teach vocabulary and strengthen the understanding of Icelandic. It is important that pupils become independent and confident in reading. Thus they can gradually start selecting material in Icelandic Sign Language and reading material in Icelandic and appreciate its quality and links with their studies, needs and interests. Good reading skills are the basis for lifelong learning and being able to acquire information that makes pupils capable of taking part in both cultures.

## Signing and expression with and without a sign language interpreter

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>• sign clearly, have pleasant pronunciation and are able to use instruction and assistance to improve pronunciation and elocution,</li> <li>• express themselves with the assistance of dramatic expression in front of a group and interpret in Icelandic Sign Language or act out a text of various types,</li> <li>• describe a memorable event and a specific phenomenon and retell material that they have listened to, watched or read,</li> <li>• attentively listen to and watch a recital in Icelandic Sign Language, interpret dramatic action, poems or songs and describe their experience,</li> <li>• use and retell electronic material,</li> <li>• have good relations, listen and be polite.</li> </ul>	<ul style="list-style-type: none"> <li>• express themselves clearly and orderly with and without a sign language interpreter and be aware of the importance of clear diction,</li> <li>• support their ideas, express their opinions and feelings and keep the attention of those they are speaking to by, for example, using dramatic expression,</li> <li>• express themselves clearly and with suitable emphasis and interpretation and take part in conversation and discussion according to rules with and without a sign language interpreter,</li> <li>• listen attentively and use their knowledge and experience to understand what is expressed in different ways and know how to react in an appropriate manner,</li> <li>• use visual and electronic material in a critical manner,</li> <li>• have good relations, listen, show appropriate politeness and be aware of what they say.</li> </ul>	<ul style="list-style-type: none"> <li>• express themselves clearly and orderly with and without a sign language interpreter and have mastered appropriate speed and bearing when signing,</li> <li>• realise the nature of good diction and pronunciation and use instructions in elocution, such as stress, non-manuals, rhythm and bearing, and adapt this to the recipient and communication medium in a varied manner, for example, through dramatic expression,</li> <li>• use methods that they have learnt to take an active part in cooperation, conversation and discussion, express their opinions in various ways, support them and select a suitable medium for them,</li> <li>• observe Icelandic Sign Language, pay attention and use information that is interpreted from spoken language for knowledge and pleasure, also to enjoy visual material, interpreted recital, drama and music, and present their opinions on the material in question,</li> <li>• use mass media, such as television, films and electronic material, and form an opinion of what is shown there,</li> <li>• have good relations where proper use of language, watching, consideration, respect and politeness are observed and realise what is appropriate in different circumstances.</li> </ul>

## Reading and literature

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>• enjoy watching narratives and recitals in Icelandic Sign Language and assimilate the subject matter,</li> <li>• use good Icelandic Sign Language vocabulary to understand sign texts,</li> <li>• use methods to transform words into symbols and link their knowledge and experience to the reading material in order to understand the meaning and context of a simple Icelandic text,</li> <li>• choose books in Icelandic written for children and read for pleasure,</li> <li>• use Icelandic vocabulary to understand texts from study material that they are already familiar with,</li> <li>• realise the nature and structure of Icelandic Sign Language poetry fairly well, recognise poems in print and understand rhyme and symmetry,</li> <li>• recognise and use the concepts of plot, ending, character and moral,</li> <li>• take part in reciting literary texts in Icelandic Sign Language,</li> </ul>	<ul style="list-style-type: none"> <li>• understand material from books and educational material that is delivered in Icelandic Sign Language, evaluate and interpret it,</li> <li>• use knowledge and experience in addition to rich sign vocabulary, including multi-channel signs, to understand Icelandic Sign Language texts,</li> <li>• analyse and discuss the main points and topics of texts and use topics when retelling in Icelandic Sign Language,</li> <li>• read for pleasure and instruction and present to others what a text is about,</li> <li>• use knowledge and experience in addition to Icelandic vocabulary to read and understand a suitable text,</li> <li>• apply a few concepts to discuss the form and meaning of poetry in both languages,</li> <li>• use literary concepts to describe the effect that a specific literary work or Icelandic Sign Language narrative has had on them,</li> <li>• translate a simple Icelandic text into Icelandic Sign Language,</li> </ul>	<ul style="list-style-type: none"> <li>• realise different means to express a message in Icelandic Sign Language,</li> <li>• understand the importance of enhancing their understanding of different dialects and presentations in Icelandic Sign Language of people from a different age group, social status, educational and cultural background,</li> <li>• critically read and distinguish between main and minor points, draw conclusions from an Icelandic Sign Language text, news in Icelandic Sign Language and written text,</li> <li>• enjoy literature, express the feelings and effects that it has, and be familiar with various kinds of literature,</li> <li>• recognise the importance of literacy and enhance their own literacy by reading various types of texts, such as literary and instructional texts, and study material,</li> <li>• discuss poetry and prose, Icelandic Sign Language poetry and Icelandic Sign Language narratives, and read and interpret various types of poetry and be familiar with imagery in poetry and prose,</li> <li>• apply the most common literary concepts when discussing literature,</li> <li>• translate a suitable Icelandic literary text and instructional material into Icelandic Sign Language,</li> </ul>

<ul style="list-style-type: none"> <li>• decipher symbols and visual material, such as simple figures, maps and graphs,</li> <li>• acquire visual information from different sources of data, such as books and those in electronic form,</li> </ul>	<ul style="list-style-type: none"> <li>• decipher simple statistical and visual information and interpret it,</li> <li>• collect information from books or electronic material and process the material.</li> </ul>	<ul style="list-style-type: none"> <li>• use statistical and visual information, interpret it, link material that is presented in different ways and use it,</li> <li>• acquire references from different data sources, such as books, magazines and material in electronic form.</li> </ul>
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### Recording Icelandic Sign Language text and writing

<b>At the completion of Grade 4, pupils are able to:</b>	<b>At the completion of Grade 7, pupils are able to:</b>	<b>At the completion of Grade 10, pupils are able to:</b>
<ul style="list-style-type: none"> <li>• record their own Icelandic Sign Language text in a visual form,</li> <li>• write all the letters and write Icelandic clearly and in a readable manner,</li> <li>• use, when composing and writing Icelandic Sign Language text, their knowledge of the basic elements of text structure, such as beginning, body text, and conclusion,</li> <li>• compose their own Icelandic Sign Language text, such as a story, narrative, poem or message,</li> <li>• use models in composing an Icelandic Sign Language text and in writing, for example by watching published Icelandic Sign Language material, reading books, newspapers and electronic material,</li> </ul>	<ul style="list-style-type: none"> <li>• express themselves clearly and with confidence and use visual techniques to record Icelandic Sign Language text,</li> <li>• write legibly and with confidence in personal handwriting, apply common word processing functions,</li> <li>• select a type of text, organise and formulate texts both in Icelandic Sign Language and in Icelandic, such as stories, narratives, descriptions and instructions, in a form suitable for the occasion,</li> <li>• compose a text of their own creation, enjoy expressing their ideas and experience and share it with others by presenting what they have composed or by allowing others to watch or read it,</li> <li>• read a text and examine it in order to study how the author writes and use this for their own writing,</li> </ul>	<ul style="list-style-type: none"> <li>• use visual techniques and multimedia to present material in Icelandic Sign Language and Icelandic,</li> <li>• write clearly and legibly in personal handwriting, use word processing with confidence, apply finishing touches, use dictionaries and other aids,</li> <li>• apply orderly work methods for recording Icelandic Sign Language texts and in writing, arrange topics in logical context and form sentences and paragraphs,</li> <li>• express their ideas and opinions and support them in an Icelandic Sign Language text or in writing,</li> <li>• select and write different types of text suitable for the task in question and use diverse Icelandic Sign Language vocabulary and varied imagery in Icelandic Sign Language and translate this into Icelandic with diverse vocabulary and register, as appropriate,</li> </ul>

<ul style="list-style-type: none"> <li>• use facial expressions and non-manuals for punctuation in Icelandic Sign Language, use simple spelling rules in Icelandic and available aids as appropriate,</li> <li>• construct a structured narrative and write notes in Icelandic for a narrative presented in Icelandic Sign Language,</li> <li>• use computers for writing and apply simple word processing functions.</li> </ul>	<ul style="list-style-type: none"> <li>• apply the main rules of spelling and punctuation,</li> <li>• apply finishing touches and use dictionaries, spelling and grammar checkers and other aids for writing,</li> <li>• use computers for writing a text, apply several word processing functions,</li> </ul>	<ul style="list-style-type: none"> <li>• apply spelling rules, have acquired a good command of spelling and realise that correct spelling shows respect for language, text and reader,</li> <li>• use orderly work methods in writing,</li> <li>• choose suitable references, cite them and file according to rules,</li> </ul>
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## Grammar

<b>At the completion of Grade 4, pupils are able to:</b>	<b>At the completion of Grade 7, pupils are able to:</b>	<b>At the completion of Grade 10, pupils are able to:</b>
<ul style="list-style-type: none"> <li>• understand the importance of role shift and eye contact in narrative, understand the use of space and use classifier predicates and non-manuals in Icelandic Sign Language,</li> <li>• recognise the difference between verbs, nouns and adjectives and realise the difference of their function in both languages,</li> <li>• sign Icelandic Sign Language with confidence and have vocabulary and language comprehension in accordance with their maturity; know multi-channel signs and be able to use them,</li> <li>• deftly use the manual alphabet, file alphabetically and recognise the difference between vowels and consonants,</li> </ul>	<ul style="list-style-type: none"> <li>• use role shift, space and non-manuals in a creative manner,</li> <li>• find classifier predicates, name signs, adjectives and non-manuals in an Icelandic Sign Language text and find numbers and agreement in Icelandic Sign Language, and gender, number and case in Icelandic,</li> <li>• use and have acquired good vocabulary in Icelandic and Icelandic Sign Language,</li> <li>• look up words that are filed alphabetically,</li> </ul>	<ul style="list-style-type: none"> <li>• apply the concepts of classifier predicates, role shift, space and non-manuals in discussion of language,</li> <li>• use the basic competence for grammatical categories and word classes of both languages in discussing, spoken language, sign language and written language,</li> <li>• recognise the importance of word and sign vocabulary, realise the structure of the lexicon of Icelandic and Icelandic Sign Language and understand the different origin of words and signs and different usage depending on circumstances,</li> <li>• look up in manuals, dictionaries and electronic word banks and use their own grammatical knowledge to improve their usage, spelling and language studies.</li> </ul>

<ul style="list-style-type: none"> <li>• recognise the construction elements of signs and know the concepts of fingerspelling, signs, compound signs, letters, words, compounds, and sentences,</li> <li>• describe the most common rules for forming name signs, recognise the difference between common nouns and proper nouns and be able to use this knowledge for spelling,</li> <li>• find synonyms and antonyms in both languages,</li> <li>• realise the constructional differences between Icelandic Sign Language and Icelandic,</li> </ul>	<ul style="list-style-type: none"> <li>• use the concepts letter, parameter, sound, vowel, consonant, syllable, word, sign and sentence when discussing the languages,</li> <li>• use their knowledge of morphemes and compounding for spelling and discussing a written text and parameters and compounding in an Icelandic Sign Language text,</li> <li>• show comparison through non-manuals in Icelandic Sign Language, know corresponding comparisons in Icelandic and be able to recognise timelines in Icelandic Sign Language and find present, past and infinitive forms of verbs in Icelandic,</li> <li>• realise the usefulness of the grammar of Icelandic Sign Language for learning Icelandic and foreign languages.</li> </ul>	<ul style="list-style-type: none"> <li>• use the concepts of parameter, handshape, location, movement and orientation when discussing Icelandic Sign Language,</li> <li>• use their grammatical knowledge to improve their usage, spelling and language studies and understand the importance of correct use of language in both Icelandic Sign Language and Icelandic and the necessity of being confident in their knowledge of both these languages,</li> <li>• describe the different means that the languages use to express tense and comparison,</li> <li>• use their grammatical knowledge for their studies in Icelandic and foreign languages.</li> </ul>
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### 19.5.3 Recording an Icelandic Sign Language text and writing

Apart from what is stipulated concerning writing Icelandic, emphasis is to be placed on pupils becoming skilful at presenting their own material clearly and in an orderly manner in Icelandic Sign Language, both with regard to the occasion, in digital form and in various ways for different readers. Pupils should be able to communicate a variety of material to others through recording in visual form in Icelandic Sign Language and in written Icelandic for their studies and for their social and personal lives. Pupils should learn to criticise and review their texts, both in Icelandic Sign Language and Icelandic, and also to accept constructive and professional criticism from others and to use this to improve their work.

### 19.5.4 Grammar

The objective of grammar education for pupils of Icelandic Sign Language and Icelandic is, in addition to those stipulated in the chapter on Icelandic, to kindle their interest

in Icelandic Sign Language and Icelandic. Icelandic Sign Language and Icelandic are discussed simultaneously and through constant comparison and translations between the languages. Furthermore, other Nordic sign languages should be discussed and pupils should have an opportunity to try to understand the sign languages of other Nordic countries.

Grammatical concepts are essential when the two languages are discussed and knowledge of the grammar of Icelandic Sign Language is necessary to understand and learn Icelandic and other languages. Children of Deaf parents, and hearing impaired pupils, who use Icelandic for daily communication and get an opportunity to learn the grammar of Icelandic Sign Language concurrently with Icelandic grammar, can base their studies of foreign languages on the grammar of the language that they understand better. The children do not choose between the two languages, but can use both to improve their understanding of their structure.

It is important that grammatical tasks are based on the pupils' linguistic competence and aim at enhancing their self-confidence and their consciousness of their competence. At the beginning, various games are played with the parameters of Icelandic Sign Language, such as handshape and symmetry games that use the creative power of the language. Later, the parameters are named and then it is possible to examine and play with comparable elements in Icelandic. Finally, pupils should have acquired grammatical concepts and the competence to talk with understanding about both languages.

## **19.6 Competence criteria for Icelandic Sign Language (ÍTM) and Icelandic**

The competence criteria for Icelandic Sign Language are stipulated in four different categories, comparable to Icelandic, that is; first, signing and expression with and without a sign language interpreter; secondly, reading and literature; then recording an Icelandic Sign Language text and writing; and finally, grammar. As a whole, the table shows the competence that pupils should have acquired at the completion of Grades 4, 7 and 10.

## **19.7 Teaching methods and assessment in Icelandic**

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It is the task of teachers of Icelandic to encourage pupils to acquire knowledge of the language and the skills to use it in the most diverse circumstances. Pupils need to get an opportunity to put their language to the test by working on assignments and expressing their thoughts and views. Their attention should be drawn to the characteristics of the language, its wonders and power. The classroom should be a forum for discussion, communication of various kinds, reading and writing, where important issues are analysed.

Every pupil has had a linguistic upbringing of some sort. Most of them are brought up in Icelandic, a growing number has a mother tongue other than Icelandic and quite a



few have been brought up with Icelandic Sign Language. This diversity requires teaching methods where the pupils have an opportunity to come into their own, communicate their knowledge, experience and creative thinking in a way suitable for each individual. It is important that tasks appeal to the pupils and that they aim at increasing their knowledge of language and improve their spoken and written usage and general competence as language users.

Teaching language and its values are essential, practising usage in as many forms as possible and applying critical thinking in reading, writing, speaking and listening. Gradually pupils should realise that the language is theirs and at the completion of school it is important that they are able to use ways and means to improve themselves as language users and thus nurture their own language. Literacy is the key to literature and diverse information and material for new thoughts, new words and concepts and a view of life. Pupils should be able to read and understand various types of text and to evaluate them. Conversation, spoken and written expression, in addition to the courage to express one's opinions, support them and take part in discussions, are all important elements in democracy and the ability to take a stand towards ethical issues. This is the prerequisite for defending human rights, in addition to various other issues that are essential to create a society of equality, health and sustainability. Consequently, it is essential to nurture the means that enhance the competence for participation and here a rich and living language is of importance.

Language is one of mankind's most important tools for acquiring knowledge. This does not only apply to pupils at school but to lifelong education. Therefore it is important to equip pupils so that they are able to select information in accordance with their goals, expectations and longings from the data sources available at each time. Information and communication technology give pupils an opportunity to acquire more information than ever before. This means that users of these media have to shoulder more responsibility than they have previously. They have to be able to ask precise questions and evaluate the answers they get. They have to strive to evaluate their resources and to appraise what they see and hear from an ethical and critical point of view. These changes make increased demands on teachers, not least teachers of Icelandic, to prepare pupils for using these data banks in a positive, constructive and creative manner.

The competence criteria are divided into four categories: spoken language, listening and observing; reading and literature; writing; and finally grammar. These categories are not watertight compartments in the teaching of Icelandic but parts of an integrated whole. Here cooperation is productive and teachers should be kept in mind.

The main objective of assessment in Icelandic and Icelandic Sign Language is to examine the pupils' status, use the outcome to guide them through their studies and adjust teaching to their needs. Assessment has to be carried out constantly and should be an

inseparable part of the studies and teaching. Assessment has to be closely related to the competence criteria of the *National Curriculum Guide* and the school curriculum guide, and be fashioned to benefit the pupils, their parents, teachers and the school administration. It is important that pupils are informed about the prerequisites of the assessment, what is expected of them and how it is assessed.

The assessment should be used to acquire as clear information as possible about what the pupils know and are able to do, and when they are shown the outcome it is essential that they get a clear picture of what they have achieved and what should be the next step in their studies. The focus should be on the pupils developing a realistic self-image which, with other forms of assessment, gives them a clearer view of their studies and more effective work methods.

Icelandic and Icelandic Sign Language are complex subjects and, therefore, assessment must be varied. Studies that involve studying the language require an assessment that is different from, for example, assessing reading status or writing competence. Reading rate should be measured, but no less the understanding of what is read and how diverse a range of texts pupils are capable of reading. Regarding writing, it is necessary to assess spelling, editing and the layout of the text; furthermore it is no less important to assess how the text is composed and how well the material succeeds in arousing the reader's interest and understanding. The same applies to enunciation, pronunciation and expression. Here usage and clarity have to be taken into consideration, in addition to the quality of the narration and how well the pupils manage to deliver the material and arouse the interest of those they are speaking to or those who are listening to them.

It is important to assess the diverse competence of pupils, rather than only a few limited issues. In this context, individual and group assignments, self-evaluation, and peer assessment of the reactions of readers, listeners or interlocutors to what the pupil has to offer should all be taken into consideration. Examinations, such as scanning tests, are for detecting if there is a problem, for example in reading or writing; interviews and conversations with pupils, and long-term evaluations, such as portfolios, give the teacher and pupils an opportunity to evaluate the study progress or the development of long-term work methods.

The mother tongue, whatever it is, is an inseparable part of the individual, a medium to acquire knowledge, a medium to communicate one's knowledge to others and participate in society. It is important to study the pupils' opinions of language and the teaching they receive in order to, for example, find out the pupils' views and where their interests or lack of interests lie. Evaluation of this kind enhances awareness of the language and its value and is a factor in improving self-reliance and making the studies more effective.

## 19.8 Competence criteria in Icelandic at the completion of compulsory education

The *National Curriculum Guide* stipulates the assessment criteria for subjects, subject areas and key competences. Assessment criteria are a description of to what extent a pupil has acquired a certain defined competence. The assessment criteria are only obligatory for Grade 10 where they support assessment at the completion of compulsory school. Schools are expected to define assessment criteria for other grades and describe them in the school curriculum guide. The assessment criteria for Grade 10 describe competences on a scale that appears in the *National Curriculum Guide*: the scale A, B, C, D is used, where A stands for exceptional competence, B for good competence, C for passable competence, and D for competence that does not reach the standard described in C.

Assessment criteria in category B are based on competence criteria for Grade 10 and their presentation is such that most pupils are expected to acquire the competences that are described there. An A is for those who have acquired exceptional competence and C for those who do not quite meet the requirements that are set for the B criterion. No criterion is set for D as this assessment is used when the pupil does not meet the requirements that are set for the C criterion. In such cases the school explains the competence of the pupil in question. Each criterion is a general description of the pupil's competence.

In the final assessment it is of vital importance that teachers assess what the criteria stipulate, make sure that the assessment is based on reliable data and that they use a variety of methods to acquire data, to give pupils, their parents and the school as clear information as possible on the pupils' status. Thus teachers can gain better insight into the studies of each pupil. For an accurate conclusion, such as from conversations or on-site inspection, it may be relevant for teachers to cooperate when they consider the data that the assessment is based on and use precise criteria.

The assessment scale is obligatory at pupils' graduation at the completion of Grade 10. In other respects, schools may decide how they conduct their assessment, grading or school reports for pupils in other grades. School reports at the completion of Grade 10 are taken into consideration when pupils enrol in upper secondary schools and select study programmes.

The following issues may be useful in securing the reliability and validity of the assessment.

- Set clear criteria or describe what is to be assessed.
- Select assessment factors that are suitable for assessment criteria, study materials and teaching methods.



- Prepare a description of what is to be assessed or show examples of assignments that are of good quality.
- Ascertain that assignments are in accordance with criteria.
- Be aware of issues that could distort the conclusion.
- Make clear instructions for assessment methods, processing and interpretation of data.

### 19.8.1 Assessment criteria for Icelandic and Icelandic as a second language

Special criteria for Icelandic as a second language are not set, but the criteria for Icelandic are expected to be used.

#### Assessment criteria

# A

Pupils are able to express themselves in a **very** clear and understandable manner, with emphases that are suitable for the material and occasion. Listen **attentively** and use information from spoken language for instruction, pleasure and as a resource for their work. Can enjoy visual and dramatic material and music and give **independent** and **well-founded** evaluation of the material in question.

Read **very well** and **with confidence** general texts, with **very good** understanding and interpretation of their subject matter, discuss Icelandic and foreign literature in a **critical** manner and recognise **clearly** the value of literature for the culture of the nation.

Apply **orderly** and **very good** work methods for writing, arrange topics in a **logical** context and form sentences and paragraphs **with confidence** and in a **clear** manner. Use spelling and punctuation **with confidence** and apply criteria for structuring texts **very well**.

Apply grammatical concepts in discussion on usage and the development of the language **very well** and **with confidence**, and also their knowledge of inflectional and semantic characteristics of word classes, and understand their role **very clearly**.

# B

Pupils are able to express themselves in a clear and understandable manner, with emphases that are suitable for the material and occasion. Listen and use information from spoken language for instruction, pleasure and as resources for their work. Can enjoy visual and dramatic material and music and give a **well-founded** evaluation of the material in question.

Read general texts, with **good** understanding and interpretation of their subject matter, discuss Icelandic and foreign literature and recognise **clearly** the value of literature for the culture of the nation.

Apply **orderly** and **good** work methods for writing, arrange topics in context and form sentences and paragraphs in a **clear** manner. Use spelling and punctuation **with some confidence** and apply criteria for structuring texts.

Apply grammatical concepts in discussion on usage and development of the language **with some confidence, and also** their knowledge of inflectional and semantic characteristics of word classes, and understand their role **clearly**.

Pupils are able to express themselves in a **fairly clear** and **fairly** understandable manner, with emphases that are suitable for the material and occasion. Listen and **to some extent** use information from spoken language for instruction, pleasure and as resources for their work, and enjoy visual and dramatic material and music and give a **fairly good** evaluation of the material in question.



Read general texts, with **fairly good** understanding and interpretation of their subject matter, discuss Icelandic and foreign literature and recognise the value of literature for the culture of the nation.

Apply **to a certain extent good** work methods for writing, arrange topics in context and form sentences and paragraphs in a **fairly clear** manner. Use spelling and punctuation **fairly well** and **apply criteria** for structuring texts.

Apply the most common grammatical concepts in discussion on usage and the development of the language, and also **to some extent** their knowledge of inflectional and semantic characteristics of word classes, and understand their role **fairly well**.

### 19.8.2 Assessment criteria for Icelandic and Icelandic Sign Language (iTM)

The same methods and rules apply for Icelandic and Icelandic Sign Language, except that the competence of pupils in using Icelandic Sign Language for expression, and their understanding and knowledge of it, are added. The assessment may be carried out with various assignments that require expression in Icelandic or Icelandic Sign Language, with or without a sign language interpreter.

## Assessment criteria

### A

Pupils are able to express themselves in a **very** clear and nice manner, with emphases that are suitable for the material and occasion, and have **with confidence** mastered appropriate signing rate. Listen **with confidence**, observe and use information from signing for instruction, pleasure and as resources for their work, enjoy visual and dramatic material and music and give an **independent** and **well-founded** evaluation of the material in question.

Read **with confidence** general texts in Icelandic Sign Language, with very good understanding and interpretation of their subject matter, discuss Icelandic and foreign literature in a **critical** manner and understand **very clearly** the value of literature for the culture of the nation.

Apply **orderly** work methods for composing texts in Icelandic Sign Language, arrange topics in a **logical** context and form sentences and paragraphs **with confidence** and in a clear manner. Use spelling and punctuation **very well** and apply criteria for organising texts.

Apply **with confidence** grammatical concepts in discussion on usage of Icelandic Sign Language and Icelandic written language and its development.

Apply **very well** their knowledge of inflectional and semantic characteristics of grammatical categories and word classes in sign language and Icelandic and understand **clearly** their role.

### B

Pupils are able to express themselves in a clear and nice manner, with emphases that are suitable for the material and occasion, and have mastered appropriate signing rate. Listen, pay attention and use information from spoken sign language for instruction, pleasure, and also with the **assistance** of a sign language interpreter, enjoy visual and dramatic material and music and **present their well-founded** evaluation of the material in question.

Read general texts, with **good** understanding and interpretation of their subject matter, discuss Icelandic and foreign literature and recognise **clearly** the value of literature for the culture of the nation.

Apply **orderly** work methods for composing texts in sign language and writing; arrange topics in a **logical** context and form sentences and paragraphs. Use spelling and punctuation **with some confidence** and **generally** apply criteria for organising texts.

Apply grammatical concepts **with some confidence** in discussion on usage and development of Icelandic Sign Language and written language.

Apply their knowledge of inflectional and semantic characteristics of word classes, and understand their role **fairly well**.

Pupils are able to express themselves in a **fairly** clear manner although **somewhat lacking** in signing rate and emphases.

**Listen, pay attention** and **to some extent** use signing for instruction and pleasure with the assistance of a sign language interpreter, and also enjoy visual and dramatic material and music and present their evaluation of the material in question.

Read general texts with a **fairly good** understanding and interpretation of their subject matter, **to some extent** discuss Icelandic and foreign literature and recognise **to some extent** the value of literature for the culture of the nation.

Apply **fairly** good work methods for composing texts in Icelandic Sign Language and writing, **to some extent** arrange topics in context and form sentences and paragraphs, use spelling and punctuation **fairly well** and apply criteria for organising texts **to some extent**.

Apply the most common grammatical concepts in discussions on the usage and development of Icelandic Sign Language and written language.

**To some extent** apply their knowledge of inflectional and semantic characteristics of word classes and understand their role **fairly well**.





## FOREIGN LANGUAGES

# 20

The educational values and main objectives of teaching foreign languages are discussed in this chapter. This discussion is based on the six fundamental pillars described in Chapter 2, the emphases in education from Chapter 6, and key competences as defined in Chapters 9.4 and 18. Competence criteria for foreign languages are defined at three levels but not at the completion of Grades 4, 7 and 10, as in other subject areas. The reason is that pupils may begin their studies in foreign languages at a different age, depending on their school. This is followed by a discussion of teaching methods and assessment which is based on the emphases that are illustrated in the competence criteria. Based on the competence criteria, teaching methods, as well as study materials and assessment methods, are to be selected and described in the curriculum guide of each school. The assessment criteria stipulated at the end of the chapter should be used, as appropriate, to describe the pupils' competence at the completion of compulsory school.

### 20.1 Educational values and main objectives of foreign languages

Language is one of the most important means for mankind to put its thoughts into words, acquire knowledge and communicate with others. Knowledge in different languages plays an important role in the cognitive development of the individual, encourages broadmindedness and enhances development in other fields. Discussion and knowledge of other nations open up cultures and increase broadmindedness, understanding, tolerance and respect for other and different lifestyles and understanding of one's own



culture. When organising teaching of foreign languages, all competence criteria should be kept in mind and also the framework set for the subject area in the reference timetable of the general section of the *National Curriculum Guide*.

English plays a major role in international communication and commerce. The ever-growing cooperation and collaboration Iceland has with other countries calls for a substantial knowledge of English that could be crucial in commerce when Iceland's knowledge, industry, position and interests are presented in the international market. As English strengthens its position as a lingua franca, both in the economy and in leisure, the value of solid good command of English becomes more obvious. The world of information and multimedia also demands competence in English. Rapid developments in digital mass communication and information and communication technology give Iceland access to vast material that requires an understanding of different variations of English.

Good command of English gives insight into the variety of cultures of those nations that have English as their first language and nations where English is the second language. Iceland has old links with the Anglo-Saxon language, culture and history. Icelandic and English belong to the same branch of languages, and the history of the countries has been interwoven through the ages.

English is the key language in higher education and science and therefore it is essential to have a good command of English right from the beginning of university studies as most study material in Icelandic universities is in English. A number of Icelandic students go for further education in English-speaking countries or in other countries where teaching takes place in English.

Danish, or another Nordic language, is the second foreign language that pupils learn in compulsory school. Danish is generally the Nordic language that is taught in Icelandic schools, but pupils with special relations with Norway or Sweden are offered to study either Norwegian or Swedish. These studies replace learning Danish and begin at the same time as the teaching of Danish begins in the school.

Pupils who are entitled to choose between Norwegian and Swedish have mastered basic competence in one of these languages. They are, therefore, acquainted with the society and know its rules of communication and customs. Some of these pupils have linguistic and cultural roots both in Iceland and Norway or Sweden. It is important that they nurture and strengthen their links with these countries. The basic competence that these pupils must have in order to be allowed to study Norwegian or Swedish is to be able to understand spoken Norwegian/Swedish fairly well, be able to understand simple Norwegian/Swedish texts with respect to their age-group, and be able to make themselves understood in spoken Norwegian/Swedish. This basic competence is necessary so that they can make use of the Norwegian/Swedish instruction that is offered.



The Nordic languages are taught because of the relations and cultural links with the Nordic countries. Our history is intertwined with their history and culture. The cultural heritage is common for all these countries and the languages are of the same branch. The social structure of these nations is based on the same values: democracy, cooperation and equality. The image of the Nordic nations is strong on the international scene and with this in mind Nordic collaboration is important in strengthening the inter-Nordic image and fellow feeling. Nordic collaboration is wide-ranging in the field of public administration, culture, science and education, in addition to strong ties of family and friendship. Each year, numerous Icelanders work or study in the Nordic countries. The *Compulsory School Act* stipulates that the *National Curriculum Guide* is to include provisions for the contents and organisation of teaching of Danish or another Nordic language to show the intention of the authorities to give Icelanders an opportunity to be active participants in the Nordic community.

The objective of teaching Nordic languages in Iceland is to nurture and strengthen the links with the Nordic countries and ensure that Icelanders have access to the common Nordic market of education and employment. Competence and knowledge in Nordic languages enables Icelanders to maintain their position as active participants in extensive Nordic cooperation, education, employment and leisure. Additionally, the objective of the studies is to make pupils aware of the relationship between the Nordic languages and the culture on which they are based, and for them to recognise the characteristics of each language and be able to understand and express their opinions in a Nordic context. It is important that Icelanders consider the Nordic languages variations of the same language, as these languages are closely related. Teaching should emphasise what the languages and cultures have in common and for this all the languages should be introduced when the occasion arises. Thorough knowledge of one Nordic language is a key to any Nordic region and facilitates any form of communication.

The main objective of language studies is that pupils acquire general competence to use the language as a tool for diverse purposes and on varied occasions. The studies are to result in pupils acquiring the competence to internalise the subject matter of various types of spoken and written language, and the competence to evaluate and use the knowledge that they acquire. They should have an opportunity to link the content of their studies with their own experience, circumstances and interests. Pupils should in their language studies acquire competence to use the language fairly well in narratives and communication, as suitable for the purpose, circumstances and recipient on each occasion. The studies should give the pupils an opportunity to use both spoken and written language in a creative manner.

Studying languages gives pupils an opportunity to enhance their understanding of the different living standards and social and cultural circumstances of other nations. The studies are to make the pupils see themselves as participants and equals in the

international community and to increase their awareness of the opportunities that mastering foreign languages has to offer.

In their language studies pupils should learn work procedures and methods that can easily be transferred to other languages and life in general. Pupils should learn to work together on assignments and to use various aids critically. The studies should emphasise that pupils learn to be responsible for their education, that they set themselves goals, reflect on and evaluate the progress of their studies and consequently analyse their strengths and weaknesses. Thus the pupils' faith in their capabilities, their development and self-image can be encouraged.

## 20.2 Competence criteria for foreign languages

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The reference timetable defines the total hours for English, Danish/or another Nordic language. Schools organise language studies within this framework, for example when English or Danish studies begin and how the total hours are divided between the languages. As one school may differ from another with regard to when the language studies begin, the competence criteria are divided into three levels based on an equal number of hours instead of linking them to the completion of Grades 4, 7 and 10. At the completion of compulsory school, pupils are expected to have reached Level 3 in English and Danish or another Nordic language.

The competence criteria are organised so that first there are a sort of general criteria that are then more clearly defined. This three-level framework is to facilitate the organisation of individual-oriented studies, where the pupils' competence within the key competences varies, they do not all start with the same competence and their study rate differs. In accordance with the *Common European Framework of Reference for Languages: Learning Teaching, Assessment*, the majority of pupils are, at the completion of level three, expected to have fulfilled most of the criteria described there in the B1 self-evaluation frame.

## Listening

<p><b>Level 1</b></p> <p><b>At the completion of Level 1, pupils are able to:</b></p>	<p><b>Level 2</b></p> <p><b>At the completion of Level 2, pupils are able to:</b></p>	<p><b>Level 3</b></p> <p><b>At the completion of compulsory school (Level 3), pupils are able to:</b></p>
<p><i>understand simple language concerning themselves and their immediate environment, when spoken clearly,</i></p> <ul style="list-style-type: none"> <li>• understand the language used in class and react verbally or through action,</li> <li>• understand the main points of simple narratives about a familiar subject matter with the support of, for example, pictures, objects or body language and use this information in their own assignments,</li> <li>• follow simple material on visual media and from popular culture that is familiar to children and adolescents and retell the main points.</li> </ul>	<p><i>understand simple language concerning themselves, their interests and daily life when spoken in a clear and understandable manner,</i></p> <ul style="list-style-type: none"> <li>• understand most of the conversations and interviews on subjects related to daily life and subjects concerned with their studies and use this in spoken and written language,</li> <li>• understand the main points in mass media and popular culture that appeal to them and are able to retell or process them in some way,</li> <li>• listen for specific, precise issues when necessary, as for example, announcements or instructions in familiar circumstances and react verbally or through action.</li> </ul>	<p><i>without difficulty understand spoken language on varied topics in familiar circumstances when presented in an understandable manner,</i></p> <ul style="list-style-type: none"> <li>• understand the main points of presentations and narratives that are within their field of</li> <li>• interest, learning or knowledge and react to their subject matter, describe them, process or use them in some way,</li> <li>• without difficulty follow readily available material in mass and visual media for their instruction and pleasure, describe and process it, listen for precise information, select what is suitable and react to this or process it.</li> </ul>

## Reading comprehension

<b>Level 1</b> <b>At the completion of Level 1, pupils are able to:</b>	<b>Level 2</b> <b>At the completion of Level 2, pupils are able to:</b>	<b>Level 3</b> <b>At the completion of compulsory school (Level 3), pupils are able to:</b>
<p><i>read and understand short texts with the basic vocabulary of daily life on topics related to familiar circumstances and interests,</i></p> <ul style="list-style-type: none"> <li>• understand the main points of short newspaper narratives, magazines and web media with the support of, for example, pictures,</li> <li>• find specific information in a simple text and use this in assignments,</li> <li>• read for instruction and pleasure simple books and educational material for children and adolescents and discuss their subject matter with the assistance of teachers or classmates.</li> </ul>	<p><i>read for instruction and pleasure various readable texts on everyday life and interests that involve general vocabulary and apply different reading strategies depending on the nature of the text and the objective of the reading,</i></p> <ul style="list-style-type: none"> <li>• understand the main points in readable newspaper narratives, magazines and web media and react and discuss their subject matter,</li> <li>• find key information in texts with the objective of using it in assignments,</li> <li>• read for instruction and pleasure simple books and magazines for young people and discuss their subject matter and understand instructions and information concerning everyday life, for example, leisure and travel.</li> </ul>	<p><i>read for instruction and pleasure a variety of general texts with fairly diverse vocabulary and select reading strategies depending on the nature of the text and the objective of the reading,</i></p> <ul style="list-style-type: none"> <li>• acquire information from texts, distinguish between relevant and irrelevant points, recognise the most important conclusions and use them in assignments,</li> <li>• read real texts for instruction, for example from newspapers, magazines and web media, on topics regarding their life, circumstances or environment, react to this material, retell or process it in some way,</li> <li>• read for instruction, pleasure and development short stories and novels for young people and form an opinion of their subject matter, read and understand material related to other school subjects and concepts related to them and use in new contexts.</li> </ul>

## Spoken interaction

<p><b>Level 1</b></p> <p><b>At the completion of Level 1, pupils are able to:</b></p>	<p><b>Level 2</b></p> <p><b>At the completion of Level 2, pupils are able to:</b></p>	<p><b>Level 3</b></p> <p><b>At the completion of compulsory school (Level 3), pupils are able to:</b></p>
<p><i>carry on a simple conversation with the assistance of the person they are talking to using normal pronunciation and stress in key vocabulary, and use common conventions of politeness,</i></p> <ul style="list-style-type: none"> <li>• ask and give answers in a simple manner about issues they know well,</li> <li>• exchange information and opinions with their schoolmates and teachers about matters related to their studies,</li> <li>• take part in communicative plays and do conversation exercises.</li> </ul>	<p><i>show that they are capable of carrying on a conversation on topics that they know well, use language, pronunciation, stress and intonation with some confidence, understand and use common phrases of everyday speech and common conventions of politeness, and know ways to make themselves understood, for example with gestures.</i></p> <ul style="list-style-type: none"> <li>• take part in an informal chat about their interests and everyday life,</li> <li>• manage in common circumstances, for example, in shops, restaurants and when travelling,</li> <li>• use the language for spoken interaction in class; prepare, have and give an interview.</li> </ul>	<p><i>show that they are quite capable of carrying on a conversation on familiar topics, use fairly correct language, normal pronunciation, stress and intonation, use common idioms from everyday speech, common conventions of politeness and spoken communication, filler words and various means of making themselves understood and understanding others, for example by asking for rephrasing,</i></p> <ul style="list-style-type: none"> <li>• take part in informal everyday chat on topics that they know well,</li> <li>• react to various circumstances in general relations, for example giving and receiving information when travelling, as hosts or on the Internet,</li> <li>• exchange points of view, support their opinions in a simple manner and show regard for the view of the persons they are talking to.</li> </ul>

## Spoken production

<b>Level 1</b> <b>At the completion of Level 1, pupils are able to:</b>	<b>Level 2</b> <b>At the completion of Level 2, pupils are able to:</b>	<b>Level 3</b> <b>At the completion of compulsory school (Level 3), pupils are able to:</b>
<p><i>in simple language narrate and use key vocabulary that has been worked on in tasks in their studies with normal pronunciation and stress,</i></p> <ul style="list-style-type: none"> <li>• talk about or describe themselves, friends, family, hobbies and surroundings in a simple manner,</li> <li>• retell and describe events or experiences in a simple manner with the support of objects, pictures, music, etc.,</li> <li>• recite sketches, tell a short story or read aloud their own texts which they have had an opportunity to prepare,</li> </ul>	<p><i>talk about their everyday life and what is familiar to them in language that is well understandable, with regard to usage, pronunciation, stress and choice of words,</i></p> <ul style="list-style-type: none"> <li>• describe fairly well their experience, future plans and opinions,</li> <li>• talk about or describe events and actions with the support of checklists, music, pictures, etc.,</li> <li>• recite a simple, prepared presentation of material related to their studies and recite their own material or that of others, for example, short sketches or a story, alone or with others.</li> </ul>	<p><i>express themselves in a understandable manner about topics that they know, use the language fairly precisely, with regard to rules concerning usage, intonation and choice of words,</i></p> <ul style="list-style-type: none"> <li>• express themselves in an orderly manner about prepared or unprepared topics that they know, have listened to, read or worked on in their studies, express their opinions about this and react to questions,</li> <li>• recite a short narrative or presentation of a prepared topic ad lib and with some confidence,</li> <li>• write, prepare and recite their own material, for example, a short sketch or story, alone or with others.</li> </ul>

## Writing

<p><b>Level 1</b> <b>At the completion of Level 1, pupils are able to:</b></p>	<p><b>Level 2</b> <b>At the completion of Level 2, pupils are able to:</b></p>	<p><b>Level 3</b> <b>At the completion of compulsory school (Level 3), pupils are able to:</b></p>
<p><i>write a short continuous text on a topic that they are familiar with, link simple sentences, spell the most common words and use the most common punctuation, such as full stops and question marks,</i></p> <ul style="list-style-type: none"> <li>• write texts using vocabulary from a material category that is being worked on, with the support of a picture, object or checklist,</li> <li>• describe in simple language what they know well: family, hobbies, friends and surroundings,</li> <li>• write simple messages, text messages and e-mail,</li> <li>• write their own texts with the support of pictures, objects, music, etc.</li> </ul>	<p><i>write a continuous text on a topic that they are familiar with, apply fairly well the basic rules of grammar and spelling, have mastered fairly well everyday vocabulary and vocabulary that has been worked on, create cohesion in the text and use for that purpose the most common linking words and punctuation,</i></p> <ul style="list-style-type: none"> <li>• write various types of text, with the support of, for example, a checklist or models; write in a way that is suitable for the subject matter and the recipient,</li> <li>• write a fairly fluent narrative and react to what they have read, seen or heard,</li> <li>• describe a course of events or what they have experienced and use vocabulary that describes the development of speed, anticipation, etc.,</li> <li>• write an imaginative text.</li> </ul>	<p><i>write a fluent, continuous text using fairly correct language on a topic that they know, show that they have mastered vocabulary and the main rules of usage, use customary structure and cohesion in a text and suitable linking words,</i></p> <ul style="list-style-type: none"> <li>• write various types of text, both formal and informal, and write with their recipient in mind and according to the subject matter and the purpose of what they are writing,</li> <li>• write about or react to what they have listened to, seen or read, in an orderly manner, and use a certain form of text, when suitable,</li> <li>• express their opinions, feelings, experience and knowledge,</li> <li>• use language play and allow their creativity and imagination to flourish.</li> </ul>



Cultural literacy		
Level 1 At the completion of Level 1, pupils are able to:	Level 2 At the completion of Level 2, pupils are able to:	Level 3 At the completion of compulsory school (Level 3), pupils are able to:
<p><i>show that they know various aspects of daily life, such as family, leisure and holy days, and recognise what is similar and what is different from their own culture,</i></p> <ul style="list-style-type: none"> <li>• show that they know some of the exterior facts of the cultural region, such as geographical location, local conditions and well-known places,</li> <li>• show that they know characteristic elements from the culture of the speech community's children and adolescents, such as the heroes of children's books, plays, songs and fairytales,</li> <li>• show that they realise that a number of words in the foreign language resemble and are related to words that they know.</li> </ul>	<p><i>show that they are familiar with certain key cultural characteristics of the culture and speech community regarding the everyday life and circumstances of the inhabitants, especially those of young people, and are able to put themselves in their position,</i></p> <ul style="list-style-type: none"> <li>• show that they are familiar with customs and traditions of the culture and speech community and are able to compare them to their own,</li> <li>• show that they recognise the relationship of the foreign language with Icelandic, their mother tongue or other languages that they are studying.</li> </ul>	<p><i>show that they have good knowledge of the daily life and culture of the speech community and are well aware of what is similar and different from their own circumstances,</i></p> <ul style="list-style-type: none"> <li>• show that they are fairly familiar with the community structure, the characteristics of the community and what is of current interest each time,</li> <li>• show that they have some knowledge of the diverse origins of the citizens of the speech community and are aware of the limitations of stereotypes and the effects of prejudice,</li> <li>• distinguish between the chief variations of the language, for example what is Danish, Norwegian, Swedish, Faeroese, Scottish or American English.</li> </ul>

## Learning competence

<p><b>Level 1</b> At the completion of Level 1, pupils are able to:</p>	<p><b>Level 2</b> At the completion of Level 2, pupils are able to:</p>	<p><b>Level 3</b> At the completion of compulsory school (Level 3), pupils are able to:</p>
<p><i>set themselves simple goals and evaluate their study progress with the assistance of the teacher, if necessary,</i></p> <ul style="list-style-type: none"> <li>• apply simple learning strategies to make their studies easier, for example use the title of a text or accompanying pictures to facilitate the understanding of the subject matter,</li> <li>• apply self-evaluation related to the study assignments, with the assistance of the teacher, if necessary,</li> <li>• link new assignments to their experience and knowledge,</li> <li>• participate in group and pair work. Listen to and show regard for what others have to offer,</li> <li>• use aids, such as simple dictionaries, online dictionaries, spelling and grammar checkers and web portals.</li> </ul>	<p><i>set themselves fairly realistic goals, know fairly well their status regarding their studies and apply learning strategies to organise them and improve where necessary,</i></p> <ul style="list-style-type: none"> <li>• apply key learning strategies to facilitate understanding and usage and select a method suitable for the task, for example rephrase if they are missing a word and interpret a situation and guess what a conversation is about,</li> <li>• apply self-evaluation and take part in peer assessment in a realistic manner and give reasonable feedback with the assistance of the teacher,</li> <li>• use their experience and knowledge when acquiring new knowledge,</li> <li>• take part in cooperation on various assignments and show regard for others,</li> <li>• use common aids, such as reference books, online dictionaries, spelling and grammar checkers and web portals.</li> </ul>	<p><i>set themselves realistic goals, plan their studies in a systematic manner and evaluate their status and study progress,</i></p> <ul style="list-style-type: none"> <li>• apply diverse learning strategies useful for their studies and know when they are suitable, for example use context in a text or situation to guess the meaning of words,</li> <li>• in a realistic manner use self-evaluation and peer assessment with regard to study assignments and give reasonable feedback,</li> <li>• use their experience and knowledge to create new knowledge and use it in a new context,</li> <li>• work independently, with others and under supervision, and show regard for what others have to offer,</li> <li>• use in a critical manner common aids, such as further reading, mass media material, dictionaries, online dictionaries, spelling and grammar checkers, linguistic and search programs.</li> </ul>

## 20.3 Teaching methods and assessment in foreign languages

For pupils to acquire the competence criteria it is necessary to ensure that working methods, assignments, organisation and conditions optimise educational performance. Pupils have to know the competence criteria and get an opportunity to discuss them. Appropriate education for all pupils is to be aimed for so that they develop the self-confidence and maturity to face repeated challenges in their studies. Tasks and teaching methods should be suitable for the age and maturity of the pupils. It is important that pupils regard studying foreign languages as part of a general lifelong education that is both practical and educative. Studies should be comprehensive and reflect real usage. In the competence criteria tables the competence categories are separated to facilitate a broad overview. In everyday usage the competence categories are integrated and linked to activities and the same should apply for the classroom. We listen, for example, or read and process material, either in conversation or by writing about or visualising the subject. We write or talk about what we have written. We talk to each other and retell stories, either in a new conversation or a written text. Theme projects are, for example, suitable for integrating the competence criteria and there the process is no less important than the outcome. The tasks should be diverse as the pupils' talents are in different fields. Furthermore, the six fundamental pillars of education and key competences should be unaffectedly incorporated into the studies. This applies to both the subject matter and working methods. Pupils are not beginners in studying foreign languages. Therefore, it is important that their studies take into consideration their prerequisites and status as language users, their general experience, understanding of their local community, the external world and cultural diversity.

When organising teaching, diversity should be kept in mind by applying methods such as individual oriented studies, cooperative learning, pair work, group work, peer teaching, portfolio education, carousel learning, story-telling method, outdoor education and learning stations. A relaxed atmosphere and environment should be created in the classroom so that pupils feel secure. It should be a place where pupils develop academically and socially and learn democratic practices in cooperation with their schoolmates and teachers. Pupils should have an opportunity to try their hand at challenging tasks that encourage their independence and competence to plan their education. At the same time, there should be scope for play and creative activities in connection with pupils' linguistic studies. It depends mostly on the teacher to create the atmosphere and environment that has been described here.

From the beginning of their language studies, pupils should get used to hearing the language and understand how it is used in real situations and have ample opportunity

to do their best at using it themselves in a meaningful context and on their own terms. They should listen to different types of texts and the most common variations of the language with regard to speech communities. It should be kept in mind that making mistakes is a natural feature of language acquisition, although it should be emphasised that they gradually learn to use it correctly and in an appropriate manner. From the beginning normal pronunciation, stress and intonation should take priority, in addition to the pupil mastering idioms that characterise everyday language. It would be most advantageous if both teacher and pupils used the foreign language in all their interaction in class. Furthermore, pupils should be encouraged to use the language outside class, when they have a chance. It is essential to use diverse methods to train pupils in spoken language and, in this context, various communicative games, dramatic expression and creative usage.

In the beginning, the main emphasis should obviously be on spoken language and listening. Gradually the importance of reading and writing increases. Reading enhances the vocabulary and the feel for the language and therefore it is important that pupils read a lot. It is important that pupils read a variety of texts for instruction, specific purposes, pleasure, and to encourage their development, and that they gradually become skilled at the learning strategies that are necessary to master good reading comprehension. The emphasis should be on reading material that appeals to the age, development and interests of the pupils, but also on broadening their horizons and ensuring that they read material linked to current affairs, culture and lifestyles in other countries, and material that reflects the fundamental pillars of education as defined in the General Section of the National Curriculum Guide. Pupils should gradually be trained in using their own experience to read critically, to read between the lines and to interpret, for example, texts that relate to matters of dispute. It should be kept in mind, especially concerning pupils with reading difficulties, that listening also increases vocabulary and language comprehension, for example simultaneous listening and reading or reading with the support of pictures.

Writing is the feature that most pupils find it most difficult to master. Therefore it is important to begin with simple tasks and link writing to other competence criteria. It is important that pupils express themselves on what they know well and use the vocabulary that is being worked on, but gradually greater demands should be made concerning format, usage, spelling, vocabulary and subject matter. It is important that pupils write as diverse texts as possible and that their writing has a purpose; that is, to write with a recipient in mind. Most types of written text require a certain format and precise usage. Here compromises have to be made, pupils should be given time and accuracy requirements should not discourage them. In this context, it is important to find suitable tasks for each pupil. At first checklists and mind maps may be used, for example, but gradually this support should be decreased as pupils learn more. It is no less important

that pupils learn to work creatively with the language and to write in their own voice, where it is primarily subject matter, style and originality that count.

The fundamental features of each language are its structure and vocabulary. As these are underlying and integral in the competence categories, they should be trained in connection with these categories and the tasks of each day so that pupils realise how the structure and vocabulary of the language function in a comprehensive and meaningful context. Grammar is not a goal in itself at this school level but part of the overall cohesion of the language and serves usage in the same way as the vocabulary. The pupils' feel for the language increases with the systematic use of it in various situations and diverse tasks. Pupils may also be asked to examine and explore how grammar and vocabulary are integral to the text and give it life, colour and form. Pupils should be made aware of the relationship between languages, their curiosity should be raised and the common origin of the vocabulary pointed out to them. When pupils have mastered the language to some extent, they may also examine what is similar and what is different in the structure of the languages. Written expression is considered the best way to become more skilful in correctly using the structure and vocabulary effectively. Therefore it is important that written language is a normal factor in the pupils' tasks and also that they have numerous opportunities to express themselves meaningfully, without the text having to be overly long each time. Additionally, the benefit of pupils writing texts together should be pointed out and they should be trained in writing their text step by step or through process writing.

Long-term educational performance is based on pupils learning to take responsibility for their studies, planning them and evaluating their status and progress in a systematic and orderly manner. In this context, the *European Language Portfolio* is a useful tool, in addition to the teacher's assistance and assessment frameworks and checklists. Learning strategies are defined as specific methods the pupils apply to become more independent in their studies and to make the studies easier, more pleasant, successful and transferable into other fields. The learning strategies are diverse; some are conscious, others learnt but unconscious. The following are some of the linguistic learning strategies: reading, listening and understanding strategies, strategies to make oneself understood and take part in conversations, writing and retention strategies, in addition to recognising and evaluating one's own progress. It is obviously advantageous to master successful learning strategies. But to do so, pupils must have the assistance of the teacher and schoolmates and special training to know what strategies are effective and for whom. Also here the *European Language Portfolio* is useful.

Language and culture are interwoven. Language reflects culture and culture elucidates language. It is important to foster in pupils the curiosity for other nations, what people's lives are like and how they develop in different circumstances and cultures. By gaining insight into the conditions, lifestyles, cultural heritage, views and values of other nations,



pupils' horizons broaden and they get an opportunity to see themselves and their own conditions from another point of view. Such emphases should be effective in rooting out prejudices and stereotypes. Aspects of the cultural heritage, for example, literature, songs and folk tales, show people's living conditions now and in the past, and films and other visual material bring the external world closer. In order to make relations with other nations more realistic, it is ideal to organise cooperation with pupils in other countries.

Language teaching should certainly involve the numerous tools of information and communication technology that has during the last few decades become an active factor in the lives of children and adolescents. School is one of the places where adolescents use electronic media and foreign languages to acquire information and it is likely that pupils use these media in a different manner at school from how they use them during their leisure hours. Through the Internet, the present is readily accessible in the classroom as teaching material, either through text, sound or pictures. Communication technology facilitates pupils to traverse boundaries and requires pupils to react immediately. They have to learn to recognise secure and reliable information, use grammar and spelling checkers, online dictionaries and encyclopaedia websites. Additionally, they should learn to use safe tools and programs to send and receive assignments electronically, and become familiar with copyright. They should be trained to use the media in a responsible manner, learn to treat their own writings and creations and those of others with respect and according to rules.

Foreign languages are ideal for integration into other subject areas as the subject matter and tasks of linguistic studies are part of every other school subject. The story-telling method is a good example of interdisciplinary integration with social studies, and integration with natural history may involve examining nature conservation and sustainability abroad. Through interdisciplinary studies, pupils concentrate their knowledge on a specific subject, increase their understanding of scientific, artistic and social concepts and apply a register suitable for the task.

Studies, teaching and assessment should be coherent. The competence criteria are the basis for teaching methods and assessment. It is necessary that assessment is comprehensive, includes all competence categories and reflects the competence criteria and the study material that has been used. Assessment should be diverse and focus on integral usage rather than specific features of the language. The objective of assessment is to be instructive, encouraging and informative, both for the pupils, teachers and custodians, and to be fair, just and reliable. The assessment methods need to be a message to the pupils of what is essential in their language studies.

Assessment criteria should be clear and pupils should be informed about the basis of the assessment each time and they should be active participants in the assessment. The assessment should be based on what pupils are capable of, give constructive feedback

on what needs to be improved and give them insight into their study progress and status. Feedback is to be formulated in a way that pupils realise that their contribution is of some value.

The nature of language studies makes them well-suited for continuous assessment; regular assessment in connection with the assignments that pupils are working on each time. Formative assessment is advisable to record continually the pupils' status and progress, and based on this the next step is decided. It is important to apply diverse methods and data in formative assessment, such as self-evaluation, peer assessment, portfolios, logs, the *European Language Portfolio*, feedback, evaluation sheets, assessment scales, checklists, conversations and presentations.

If there are formal final examinations, they should reflect the competence criteria, assignments and subject matter of the studies and all the competence categories, which should be integrated as far as possible. It is important that the written part underlines the pupils' competence and that the examinations are comprehensible with regard to format, expression and subject matter. The spoken part may be either in the form of conversation, presentation, role play, in a formal examination or in electronic format. For beginners it is suitable to use formative assessment integrated with daily tasks.

Teachers can use the assessment to form and improve the overall organisation of the teaching, syllabus and communication with pupils and custodians. They can use the assessment to decide the next step for their pupils and how best to assist them and expand their field of study. Assessment should be part of everyday life and enhancing education. With systematic assessment, surveys and reflection, teachers acquire better understanding of their pupils' progress and their own methodology.

## **20.4 Assessment criteria for foreign languages at the completion of compulsory school**

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The *National Curriculum Guide* stipulates the assessment criteria for subjects, subject areas and key competences. Assessment criteria are a description of to what extent a pupil has acquired a defined competence. The assessment criteria are only obligatory for Grade 10 where they support assessment at the completion of compulsory school. Schools are expected to define assessment criteria for other grades and describe them in the school curriculum guide. The assessment criteria for Grade 10 describe competences on a scale that appears in the *National Curriculum Guide*: the scale A, B, C, D is used, where A stands for exceptional competence, B for good competence, C for passable competence, and D for competence that does not reach the standard described in C.

Assessment criteria in category B are based on competence criteria for Grade 10 and their presentation is such that most pupils are expected to acquire the competences



that are described there. An A is for those who have acquired exceptional competence and C for those who do not quite meet the requirements that are set for the B criterion. No criterion is set for D as this assessment is used when the pupil does not meet the requirements that are set for the C criterion. In such cases the school explains the competence of the pupil in question. Each criterion is a general description of the pupil's competence.

In the final assessment it is of vital importance that teachers assess what the criteria stipulate, make sure that the assessment is based on reliable data and that they use a variety of methods to acquire data to give pupils, their parents and the school as clear information as possible on their status. Thus teachers can gain better insight into the studies of each pupil. For an accurate conclusion, such as from conversations or on-site inspection, it may be relevant for teachers to cooperate when they consider the data that the assessment is based on and use precise criteria.

The assessment scale is obligatory at pupils' graduation at the completion of Grade 10. In other respects, schools may decide how they conduct their assessment, grading or school reports for pupils in other grades. School reports at the completion of Grade 10 are taken into consideration when pupils enrol in upper secondary schools and select study programmes.

The following issues may be useful in securing the reliability and validity of the assessment.

- Set clear criteria or describe what is to be assessed.
- Select assessment factors that are suitable for assessment criteria, study materials and teaching methods.
- Prepare a description of what is to be assessed or show examples of assignments that are of good quality.
- Ascertain that assignments are in accordance with the criteria.
- Be aware of issues that could distort the conclusion.
- Make clear instructions for assessment methods, processing and interpretation of data.

## Assessment criteria

### A

Pupils are able to show that they understand **very well** and are able to use spoken language on general topics in circumstances that they know. Have acquired **highly diverse** vocabulary and can read **fairly easily** for instruction and pleasure general texts of various types on diverse topics. They are **very well** able to take



part in a conversation and use **natural** language, pronunciation, stress and intonation **with confidence**. They are able to use idioms from everyday language **effectively** and express themselves **fluently** and in an **understandable** manner on topics that they know. They are able to **write a clear and orderly** continuous text on a topic that they know, **follow with confidence** rules on usage and customs regarding the structure of a text, and use the vocabulary that has been worked on **systematically**. They are able to show that they know daily life and the culture of the speech community **very well** and **very well** understand what is similar and what is different from their own circumstances.

Pupils are able to show that they understand **well** and are able to use spoken language on general topics in circumstances that they know. Have acquired **adequate** vocabulary to read for instruction and pleasure general texts of various types on diverse topics. They are **well** able to take part in a conversation and use natural language, pronunciation, stress and intonation. They are able to use idioms from everyday life and express themselves **in a fairly** understandable manner on topics that they know. They are able to write a **fluent** continuous text on a topic that they know, use **well** the main rules on usage, vocabulary and customs regarding the structure and cohesion of a text and use suitable linking words. They know **well** daily life and the culture of the speech community and understand **well** what is similar and what is different from their own circumstances.

B

Pupils are able to show that they understand **fairly well** and are able to use spoken language on general topics in circumstances that they know. Have acquired **adequate** vocabulary to read for instruction and pleasure, although with **some effort**, general texts of various types on diverse topics. They are **fairly well** able to take part in a conversation and use the rules of the language, pronunciation, stress and intonation in an **adequate manner** and are able to use idioms from everyday life and express themselves **fairly well** on topics that they know. They are able to write a continuous text on a topic that they know, use **well** the **basic rules** on usage and customs regarding the structure of a text and use the vocabulary that has been worked on, show that they know daily life and the culture of the speech community and understand what is similar and what is different from their own circumstances.

C

## ARTS AND CRAFTS

# 21

In this chapter the cultural value and main objectives of arts and crafts will be described. The starting point is the six fundamental pillars described in Chapter 2 of the *National Curriculum Guide*, the educational emphases in Chapter 6 and key competences as defined in Chapter 9.4 and Chapter 18.

Arts and crafts are numerous and diverse subjects. Although these subjects are related in various ways, they are in other ways different. What unites them is the emphasis on craftsmanship, technology, creativity, aesthetics and values, materials technology, ergonomics, interpretation and expression. On the other hand, there are different media and methods depending on the subject and therefore a different approach and emphasis on the factors mentioned above. As a result, there is first a general discussion of arts and crafts, their educational values, main objectives and the common competence criteria at the completion of Grades 4, 7 and 10.

This is followed by a subdivision on arts. This part is concerned with the educational values and main objectives of these subjects and the main objectives and common competence criteria at the completion of Grades 4, 7 and 10 for each subject, that is, performing arts (dance, dramatic arts), visual arts and music. The next subdivision has the same features for crafts: that is, for home economics, design and craft, and textiles.

Next the competence criteria, teaching methods and assessment are discussed with regard to the emphases which appear in the competence criteria. Based on the competence criteria, teaching methods, as well as study materials and assessment methods, are selected and should be described in the curriculum guide of each school. Finally, there

are assessment criteria for arts, on the one hand, and crafts, on the other; these should be used, as appropriate, to describe the competence of pupils at the completion of compulsory school.

The reference timetable defines the total hours for arts and crafts for three age levels of compulsory school. Schools organise the teaching within this framework, for example how to divide the total hours between the subjects. Each compulsory school decides if subjects or subject areas should be taught separately or should be integrated. However, Chapter 8.5 stipulates that arts and crafts are to have equal weight within the total hours that are defined in the reference timetable of compulsory school. At the same time, it is affirmed that when allotting the time which is stipulated in the reference timetable for school options/electives at the lower secondary school level, crafts should not be detrimentally limited. This also applies to the organisation of electives. Therefore, half of the electives are intended to be allocated to arts and crafts. Within the electives of the lower secondary school level, there are opportunities to enhance the competence of the pupils in the various fields of arts and crafts, introduce vocational training and prepare pupils systematically for such studies (cf. Chapter 8.3).

## **21.1 Educational values and main objectives of arts and crafts**

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Arts and crafts are so intertwined with our everyday lives that we are often unaware of their existence and influence. The yield from arts and crafts is not limited to artistic events, exhibitions and workshops, for our whole environment and daily life are shaped by arts and crafts. At the completion of compulsory school, arts and crafts may assist pupils in recognising their scope of interest and the work and study opportunities that are available within vocational and artistic studies.

In arts and crafts pupils develop independent evaluation where the emphasis is on getting familiar with, and enjoying, the arts and technical skills. Participation and practice in critical discussion on arts and crafts also give pupils access to the cultural discourse of society. Through creative activity and problem solving, pupils are able to influence their environment and take part in forming culture.

It is natural for people to express themselves visually, in crafts, with movement, play and music. History has been shaped by the product of this activity. Individuals should be aware of this formative force within society and be able to enjoy it in a constructive and critical manner and, at the same time, use it and develop it for their own benefit and for future generations.

Everyone is creative. In arts and crafts there are circumstances and diverse opportunities for pupils to develop and enrich this talent and learn the means to materialise their



creation. In creative work pupils are able to use their imagination and learn to make decisions where they evaluate different possibilities and see the consequences of their choices. Pupils develop in cooperation with others, strengthen their independence and self-knowledge and discover an outlet for their talents.

In arts and crafts pupils learn about cultural literacy, processes, pictures, health, movement, the physical expression and feelings of others, gestures, nuances in language and intonation, techniques and man-made environment.

Arts and vocational knowledge generates a vast and profuse industry. Technical and scientific progress is based on knowledge and skills derived from occupational culture. Even though technology and machines have supplanted man in various fields, knowledge of work processes, semiology, organisation and division of labour is a necessary foundation for technological and artistic development. Work skills of this kind, together with artistic ability, are therefore a necessary basis for all development, aesthetics, designing of machines, houses, clothes and every object and art piece that we use and enjoy in everyday life. These skills and areas of knowledge can be used in a creative manner both at work and in leisure. It is important that pupils can link studies in arts and crafts with the diverse employment opportunities that they offer.

Pupils have a unique opportunity to study and preserve their culture and old work methods, nurture their cultural heritage and, at the same time, get acquainted with other cultures. This creates exceptional possibilities to study different cultures with regard to history, democracy and human rights and thus enhance tolerance and understanding of the diversity of the world.

Education in arts and crafts can further the pupils' ethical and social responsibility. This subject area offers education for sustainability where pupils work on collective responsibility, their feelings and those of others, relations with other cultures, nature and their own environment. This is the basis for their welfare and active participation in shaping society.

The main objective of arts and crafts in compulsory schools is for every pupil to get acquainted with a variety of work methods that involve craftsmanship, creativity, the integration of intellect and feelings and a number of different forms of expression. Here pupils have an opportunity to make objects with their own hands, work with symbols, sounds, food culture and the body in relation to time and space, and thus to link ideas, realisation and objects. All of this encourages development and enhances competence to link concrete and abstract thinking and the ability to come to grips with an ever-changing world in a personal, critical and creative manner. A balance between academic and vocational education advances the equal right of pupils to find an outlet for their talents.

## 21.2 Common competence criteria for arts and crafts

Cultural literacy		
At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>• carry out a simple process from an idea to a product,</li> <li>• use the skills that they have acquired in simple assignments,</li> <li>• carry out simple assignments in a group,</li> <li>• explain in a simple manner the effect of their work on the environment,</li> <li>• explain the concept of technology and how it is related to their work,</li> <li>• discuss in a simple manner cultural factors in relation to their assignments,</li> <li>• present their assignment in a simple manner,</li> <li>• tidy up after work,</li> <li>• evaluate their works.</li> </ul>	<ul style="list-style-type: none"> <li>• explain and show the work process that includes development from an idea to a product,</li> <li>• use the skills and knowledge that they have acquired in varied assignments,</li> <li>• show regard for others in group work and take initiative,</li> <li>• be guided by sustainability in their work,</li> <li>• apply the most common technology that the subject involves,</li> <li>• describe the cultural role of arts and crafts,</li> <li>• explain the main concepts that are related to their assignments,</li> <li>• show responsibility and orderliness when working and tidying up their work station,</li> <li>• evaluate their works and recognise work methods of good quality.</li> </ul>	<ul style="list-style-type: none"> <li>• independently carry out a work process from an idea to a final product and explain different approaches to the assignment,</li> <li>• use the specialised skills and knowledge that they have acquired in a creative manner and show initiative,</li> <li>• take part in cooperative work with the common goal of the group in mind,</li> <li>• organise their work with sustainability in mind,</li> <li>• in an independent manner, apply the technology that the subject involves,</li> <li>• put their assignments in cultural context,</li> <li>• present their assignments by using the concepts that the subject involves,</li> <li>• show initiative in orderliness and when tidying up their work station,</li> <li>• evaluate their work and that of others and support their opinions with the concepts that the subject involves.</li> </ul>

## 21.3 Arts

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Arts are divided into performing arts, that is, dance and dramatic arts, and then visual arts and music. As pointed out above, each school organises these subjects and decides if subjects and subject areas should be taught separately or be integrated; in separate short-term courses that are allocated more hours in the timetable for a certain period of time or continuously throughout the school year. Generally, performing arts, visual arts and music should be taught at every age level, as the reference timetable stipulates.

It should be kept in mind that Chapter 8.5 stipulates that arts and crafts are to have equal weight within the total hours that are defined in the reference timetable and that in planning the hours stipulated in the reference timetable for school options/electives at the lower secondary school level, crafts should not be detrimentally limited. This also applies to the organisation of electives. Half of the electives at the lower secondary school level are intended for arts and crafts.

The competence criteria of arts should be taken into account when these subjects are planned, in addition to the common competence criteria for arts. Competence criteria are based on competence in arts subjects as a whole.

## 21.4 Educational values of arts

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Through art people are able to express and enrich their feelings and acquire understanding and experience that cannot be expressed in words.

Creation of art opens up for the individuals various ways to work on ideas, ask questions, reflect and interpret their experience and that of others. Thus pupils develop their talent and ability to evaluate their actions and their environment in a critical manner. New points of view on ideas and objects are often discovered through the creation of art, restraint is loosened and the pupils' sense of humour flourishes in unusual and challenging assignments. In such circumstances hidden talent is often discovered and pupils bond together in a way that they do not in other subjects.

Arts in the widest sense, both past and present, are concerned with concepts, ideas and objects that are related to human beings and their environment. They affect us in various ways, enrich our imagination and our aesthetic sense.

Artistic experience opens up channels for examining and evaluating one's values and views, directly or indirectly, in various ways and through different media. Through art pupils are able to examine social values from different periods and cultures, and also personal values concerning, for example, individuals, family, society, work and play, nature and the environment, beauty, ugliness, violence and love.

Artistic education should make pupils more capable of:

- facing an unforeseen future in a creative manner,
- discovering new patterns and thinking in solutions,
- developing personal expression and taste.

## **21.5 Competence criteria for performing arts**

Competence criteria are stipulated for two forms of performing arts: that is, dance and dramatic arts.

### **21.5.1 Competence criteria for dance**

Dance has a complex meaning in our culture. It is an important part of the art scene of the country, plays a social and historical role, and, additionally, it is an inseparable part of the exercise culture. Although dance has numerous and diverse facets, they all encourage and develop the physical awareness, physical literacy and physical intelligence of the individual.

A good deal of the knowledge that children acquire in life, they do through physical movement. Dance is an important method to nourish and encourage physical and spatial intelligence and public spirit and thus give the individual a better opportunity for development and culture.

The body encompasses a knowledge and understanding of reality that in some cases can only be expressed through movement. Creative and artistic work in dance gives pupils an opportunity to present this silent knowledge and for some people physical expression is the most natural form of expression. In creative dance pupils face different tasks on their own terms, irrespective of their status and development.

It is important to contribute to the pupils' physical intelligence through dance and encourage them to exercise daily and at the same time to take responsibility for their health. In this sense, dance is closely related to sport but adds the knowledge of creativity and physical expression.

Dances that are danced for a social purpose, for example pair dances, round dances and group dances, have always been part of everyday life, although their importance and form have differed. Dance has historical and cultural value and is part of each pupil's heritage. Competence in social dance forms offers a possibility of fellowship within a certain framework where participants are able to interact according to a set of rules. The social value of the dance, additionally, consists of breaking down walls regarding languages, development and between the sexes. Dance as a defined and creative

form, is for the most part based on cooperation and is therefore an exercise in social competence.

The competence criteria for dance are an addition to the competence criteria for arts and crafts.

<b>Dance</b>		
<b>At the completion of Grade 4, pupils are able to:</b>	<b>At the completion of Grade 7, pupils are able to:</b>	<b>At the completion of Grade 10, pupils are able to:</b>
<ul style="list-style-type: none"> <li>• move freely and to music in line with the mobility of their body,</li> <li>• dance simple movement patterns and use them in pair dances, children's dances and simple folk dances,</li> <li>• take part in a creative dance process with their peers under the supervision of teachers,</li> <li>• link movement and music in a dance and respect rules of communication,</li> <li>• show consideration for peers in collaboration,</li> <li>• listen to their peers' ideas and present their own,</li> <li>• discuss movement in relation to music as a personal experience.</li> </ul>	<ul style="list-style-type: none"> <li>• use their body effectively in dance and movement for their own pleasure,</li> <li>• dance the basic steps in pair dances and simple folk dances,</li> <li>• put together a simple dance piece, perform it and select, under the supervision of a teacher, a suitable background (for example, music and space),</li> <li>• express themselves in dance, link movement, interpretation and music and use common conventions of politeness in dance,</li> <li>• work independently and with others on dance assignments, both give and accept constructive criticism and use it in dance,</li> <li>• discuss dance as a personal experience.</li> </ul>	<ul style="list-style-type: none"> <li>• coordinate music and movement with good physical awareness and physical exertion and dance different dance forms for their own pleasure,</li> <li>• show confidence and competence in dancing alone or as a member of a pair or group,</li> <li>• take part in a creative work process in dance, put together a simple dance piece and select a suitable background,</li> <li>• dance in front of audience with a feeling for factors such as interpretation, eye contact, space, physical exertion and conventions of politeness,</li> <li>• choose between different dance styles, experiment and make independent decisions in the interpretative and creative process based on their own knowledge and skill in dance,</li> <li>• express and interpret their ideas and discuss dance in a critical manner, use suitable vocabulary and put it in a cultural and historical context.</li> </ul>



### 21.5.2 Competence criteria for dramatic arts

Education in dramatic arts includes training pupils in the methods of the art form, but no less in dramatic literacy in the widest sense, enriching the pupils' understanding of themselves, human nature and society. In dramatic arts, pupils have an opportunity to put themselves in the position of others and experiment with different expression forms, behaviour and solutions in a secure school environment. Dramatic arts encourage pupils to express, form and present their ideas and feelings. In addition, dramatic arts constantly test cooperation, relationships, creativity, language, expression, critical thinking, physical exertion and voice projection. This is all done through play and creation. Pupils use spoken language both in improvisation and written dramatic text. Experiments with different narrative methods, usage, register and nuances of the language are an important part of the creative process in dramatics. In this art form the nonverbal is no less important than the spoken word and therefore emphasises expression in the widest sense.

Drama is the art of the moment. Drama teaching is able to take on issues that are relevant in society at any time and crucial for pupils. This enhances their social awareness and encourages democratic participation. Furthermore, drama is by nature an integrated art form where all art forms are combined. It is useful to enrich and enhance learning in subjects such as the mother tongue, sociology, history and foreign languages, and can play a leading role in the integration of subjects and subject areas. Drama also includes numerous games and exercises that may require a good deal of physical activity and release.

Although the creative process is no less important in dramatic arts than the final product, it is essential that on a regular basis there is an opportunity to celebrate the outcome of the work in presentations or performances. When the pupils come together and do their best in a production, the pillars of equality and democracy in school activities are strengthened and moreover such events have a positive influence on the pupils' fellow feeling and the school atmosphere, and this also creates a possibility of cooperation between the home and the school.

The competence criteria for dramatic arts are an addition to the competence criteria for arts and crafts.

## Dramatic arts

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>• take an active part in a dramatic process in a group and show consideration for their schoolmates,</li> <li>• in cooperation with their peers and teachers, put together simple acts with a clear beginning, middle and end,</li> <li>• use simple props and set to support their creation,</li> <li>• memorise a short text and deliver it in a clear manner in front of an audience,</li> <li>• put themselves in the position of others in a dramatic process/role play and take part in a conversation as a specific character,</li> <li>• use a simple form of dramatic art,</li> <li>• behave in an appropriate manner as a theatregoer or at a performance at school,</li> </ul>	<ul style="list-style-type: none"> <li>• use their peers' ideas, and contribute their own, in a dramatic process and in the preparation and creation of short plays,</li> <li>• use material of diverse origin as an inspiration in the original creation of dramatic material. Write acts in cooperation with others with clear characters, plot and development,</li> <li>• use props, costumes, simple sets and techniques to support their creation,</li> <li>• deliver the text of a character in a suitable manner in front of an audience,</li> <li>• create and sustain a clear character in a short act with suitable voice projection and physical exertion,</li> <li>• show that they have mastered more than one acting style in their creation, interpretation and analysis,</li> <li>• apply more than one form of dramatic art (such as shadow theatre, pantomime, still images),</li> </ul>	<ul style="list-style-type: none"> <li>• work in a group on diverse dramatic assignments,</li> <li>• both give and accept constructive criticism and make use of it in their dramatic process,</li> <li>• choose between different methods for a production, both with regard to narrative form and acting style, experiment with and make independent decisions during the creative process. Write a script of an act where the basic rules of script production are observed for stage or visual media,</li> <li>• use props, costumes, simple sets and techniques to support their creation in various manners,</li> <li>• experiment with and choose from interpretation methods for different types of dramatic texts,</li> <li>• interpret a character on stage in harmonious interplay with their fellow actors. Use space, voice projection and physical exertion in a conscious manner in order to support their interpretation,</li> <li>• choose between forms and styles in their own creation and support their choice,</li> </ul>

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| <ul style="list-style-type: none"> <li>• point out dramatic material and the different roles it has in different contexts,</li> <li>• describe a performance on stage and/or in visual media with regard to the plot, subject matter and characters of the work,</li> </ul> | <ul style="list-style-type: none"> <li>• describe the process of a production, the main tasks carried out backstage in a theatre and common props,</li> <li>• discuss dramatic material on stage and in visual media from more than one point of view and connect this in some way to their own life and society.</li> </ul> | <ul style="list-style-type: none"> <li>• record and support their work process in dramatic arts,</li> <li>• discuss dramatic material on stage and in visual media in a critical manner, use suitable vocabulary for this and to some extent put it into cultural and historical context.</li> </ul> |
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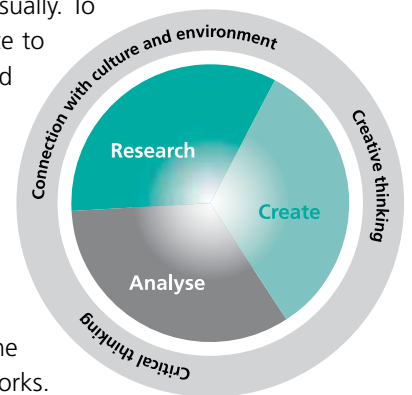
## 21.6 Competence criteria for visual arts

Every object and every task starts with an idea that does not materialise unless it is presented in some way. Visual arts as a subject channel ideas and use all the media of visual art. Since ancient times, visual arts have had a social, aesthetic and emotional influence. Observing works of art helps us to understand history, culture and society as a whole, and, at the same time, it enhances our personal growth.

Through visual arts pupils have an opportunity to learn and express themselves without words. They can alternatively work in a critical manner with everyday issues or imagination. This experience gives pupils a basis to learn to know themselves both in connection with nature and the material world. This understanding becomes both general and personal, based on examining reality and the wonders of the imagination.

Visual arts are by nature a creative process: an important process where pupils find their inner voice, form connections and develop skills to apply different approaches, such as drawing, painting, moulding, printing, paper cutting, and screen media. Taking part in creating, analysing and enjoying art makes pupils more capable of experiencing art, and at the same time develops empathy, tolerance and critical understanding of the world. With focused visual arts education it is possible to maintain the capability that children use from an early age for telling a story visually. To make this possible teachers have to give pupils a chance to take chances in order to encourage creative thinking and imagination.

When pupils create visual works, they base them either on their research and analysis or by using their imaginations, where they link their experience, culture and environment. In discussions on visual arts, there is an opportunity to practise the vocabulary of visual arts, empathy, and tolerance regarding critical discussion of the pupils' experiences of selected artworks and their own works.



By linking with their own experiences, pupils enhance their literacy of their environment. This connection is described visually here, to the right.

Everywhere in our environment there are visual stimuli that pupils should learn to read and analyse. One of the key roles of education is to learn to understand the world that we live in so that we can become active, critical citizens who can have a positive influence. Visual arts are well suited because this subject works systematically on perception, analysis and interpretation, which gives the pupil the possibility to see what they look at, hear what they listen to, feel what they touch, and create using their experience. By allowing pupils to choose the subject matter of their works, or the medium, in visual arts, it is possible to encourage their initiative. By developing critical and creative thinking through visual arts, pupils develop their ability to identify social problems and find solutions to them.

The competence criteria for visual arts are an addition to the competence criteria for arts and crafts.

### Visual arts

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>• use simple implementations based on competence in using chromatics, morphology and composition for their creation,</li> <li>• create works of visual art for different purposes using various methods,</li> <li>• express their feelings, opinions and ideas in a simple manner in a visual work,</li> <li>• explain and show the work process that includes development from an idea to a visual work,</li> <li>• work from inspiration when creating their works,</li> <li>• know and use concepts and terms that are linked to the laws and methods of each assignment,</li> </ul>	<ul style="list-style-type: none"> <li>• use the basic factors of visual arts for their own creation,</li> <li>• express their opinions and feelings in their own creation with relation to their experience,</li> <li>• develop an idea from a sketch to a final work, both two-dimensional and three-dimensional works,</li> <li>• base their creation of art on concept work linked with imagination, research and experience,</li> <li>• use concepts and terms that are linked with each assignment,</li> <li>• discuss their own works and those of others in an active conversation with other pupils,</li> </ul>	<ul style="list-style-type: none"> <li>• analyse and use a variety of methods and techniques,</li> <li>• express their opinions and feelings in their own creation with relation to their experience and social commentary,</li> <li>• show and explain the work process from an idea to a final work that includes, for example, research, experiment and conversation,</li> <li>• record and present ideas in diverse ways based on their own imagination and/or research, visually and/or as text,</li> <li>• use vocabulary and concepts to express their views on visual arts and design and support them based on their own values,</li> <li>• criticise with knowledge, fairness and respect their own works and those of others, both on their own and in cooperation with others,</li> </ul>

<ul style="list-style-type: none"> <li>• discuss their own works and those of others,</li> <li>• know and discuss the works of selected artists, describe them and analyse in a simple manner the subject matter and describe the methods that were used for creating the work,</li> <li>• to some extent distinguish between different methods used in visual arts,</li> <li>• describe in a simple manner the effect of imagery on their surroundings,</li> <li>• understand the different purposes of visual art and design.</li> </ul>	<ul style="list-style-type: none"> <li>• describe and discuss various movements in visual arts by comparing styles and periods of specific works and put them into their cultural context,</li> <li>• analyse, compare and evaluate methods for creating various works of art,</li> <li>• analyse and discuss the effect of imagery on the environment and society,</li> <li>• describe the various purposes of visual arts and design.</li> </ul>	<ul style="list-style-type: none"> <li>• analyse, compare and describe various styles and movements in visual arts and design, both in Iceland and abroad, and link these to the culture of their origin,</li> <li>• define how contemporary art deals with relevant issues of everyday life through a variety of approaches that often involve the integration of art forms,</li> <li>• interpret works of art and design with regard to their experience, surroundings, the present, ethics and aesthetics,</li> <li>• describe the various purposes of visual arts and design and put them in personal, cultural and historical context,</li> <li>• analyse how visual stimuli of everyday life affect our life and values.</li> </ul>
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## 21.7 Competence criteria for music

Music is an important factor in people's lives and work all over the world. It is a means for creation and communication, often without words, that individuals use to express their feelings, views and values. Musical activity includes listening, creation and performance. It is a process where individuals create a meaning by reacting to and working with tones, sounds, and silence, alone or in cooperation with others. Musical activity requires physical coordination, analytical thinking and emotional relationships. In addition, musical activity has a strong social reference and has through the ages been employed to unite and differentiate people.

Music can be part of defined culture or a defining part of culture, the latter where a certain musical movement influences, for example, clothes and behaviour that form a cultural whole. Musical culture, therefore, refers to how we connect to, use, produce, compose and think about music.

Music teaching in compulsory schools should enhance pupils' sensitivity and knowledge of the basic factors of music: pitch, length of note, timbre, volume, chords, interpretation and form, so that they can form an opinion on different musical styles, recognise the value of music in their culture and life and enjoy it in a constructive, purposeful and personal manner.

In view of the complex nature of music, it is important that music is integrated into other school activities, regardless of subject. In that way pupils get to know a variety of music and how it is connected to life and work through a diverse and vital approach.

The competence criteria for music are an addition to the competence criteria for arts and crafts.

<b>Music</b>		
<b>At the completion of Grade 4, pupils are able to:</b>	<b>At the completion of Grade 7, pupils are able to:</b>	<b>At the completion of Grade 10, pupils are able to:</b>
<ul style="list-style-type: none"> <li>• recognise musical instruments and timbre in composition and listening,</li> <li>• recognise different voices and use their voice as a musical instrument when singing with others and in improvisation,</li> <li>• play simple rhythms or repetitive themes on percussion instruments or other school instruments,</li> <li>• take part in creating and performing simple musical compositions/sound compositions and document them in a simple manner,</li> <li>• recognise simple musical styles (for example Icelandic folk songs),</li> <li>• discuss their own music and that of others with regard to taste and experience.</li> </ul>	<ul style="list-style-type: none"> <li>• recognise and select musical instruments and suitable timbre for composition and listening,</li> <li>• use their voice in a suitable manner in different vocal compositions and songs, both their own compositions and those of others,</li> <li>• use simple tools and computer programmes to record, document and compose their own sound or musical compositions,</li> <li>• take part in musical sessions or sing-alongs with others and perform and interpret their own works or those of others in a suitable manner in front of an audience and to document these events,</li> <li>• recognise different musical styles, form an opinion of them and support it,</li> <li>• analyse and explain the cohesion of music and different musical styles and link them to the culture of their origin,</li> <li>• analyse and to some extent fairly evaluate and revise their own compositions and those of their schoolmates.</li> </ul>	<ul style="list-style-type: none"> <li>• recognise, select and play suitable musical instruments and timbre for composition and listening,</li> <li>• take part in musical composition of some sort, such as a choir or session, for their own pleasure or that of others,</li> <li>• use common tools, musical instruments, voice and computer programmes to compose their own musical composition and/or sound composition,</li> <li>• take part in composing and performing their own compositions or those of others, criticise and support their views, with regard to their taste, musical styles and aesthetics,</li> <li>• uphold their musical compositions, their choice of music and support their choice,</li> <li>• analyse and explain different musical styles, instruments and sounders and put this into personal, historical and cultural context.</li> </ul>

## 21.8 Crafts

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Crafts consist of home economics, design and craft, and textiles. As detailed above, each school organises crafts classes and decides if subjects and subject areas should be taught separately or integrated, as separate short-term courses, so that they have more weight in the pupils' timetables for a certain time or are taught in an equal number of classes throughout the school year. As a rule, home economics, design and craft, and textiles should be taught at all age levels as the reference timetable stipulates.

It should be kept in mind that Chapter 8.5 stipulates that arts and crafts should have equal weight within the total number of hours that are specified in the reference timetable and that when organising the hours that are defined in the reference timetable for options/electives at the lower secondary school level, crafts should not be detrimentally limited. This also applies to the organisation of electives. Therefore, half of the electives are intended for arts and crafts.

The competence criteria for crafts should be taken into account when these subjects are planned, in addition to the common competence criteria for arts and crafts. Competence criteria are based on competence in crafts as a whole.

## 21.9 Educational values of crafts

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The common characteristics for crafts in compulsory school are that they encourage the general development of pupils and prepare them for daily life and further education in crafts. Crafts consist of home economics, design and craft, and textiles. Here pupils have an opportunity to use their imagination, creativity, knowledge and work skills to tackle their environment with a clear objective in mind. Pupils use their talent to find solutions, work independently and learn to examine their work and decisions in a critical manner. Vocational knowledge is based on traditions, technology and work methods that new generations should learn. Pupils work on assignments that are suitable for their development, make experiments and apply technology in their work. This encourages their self-confidence and job satisfaction, and, at the same time, it is a challenge for their creativity.

Vocational education has a long history within the school system. Its goal has been both to prepare pupils for vocational jobs and also to encourage their overall development. Our environment is to a great extent based on technology, which is one of the creative factors of culture and gives it form, content, meaning and purpose. The modern working environment makes increasing demands on technical knowledge and understanding. In crafts pupils obtain understanding of their environment and basic competences at the same time. Work skills and understanding based on the well-established traditions of handicraft are also the foundation for a vigorous occupational culture and for innovation. To understand and be able to read the environment is the prerequisite for influencing it.

Teaching crafts is one way to build respect and positive attitudes towards vocational work and is also preparation for further vocational studies. The role of the teacher is to assist pupils in becoming able to work independently, in acquiring the competence to solve problems, and in enhancing their sense of aesthetics and sensorimotor competence. Therefore, crafts are both good preparation for life in general and for further studies.

## **21.10 Competence criteria for home economics**

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Home economics focuses on people, their lives and living conditions, and their physical and mental requirements. The subject is intended to encourage good health, a healthy lifestyle and consumer habits, equality, thriftiness, economic literacy, consumer awareness and environmental conservation. Home economics gives an opportunity to influence pupils' lifestyles through systematic instruction in wholesomeness and healthy cooking. In order to know what wholesomeness and health consist of, it is necessary to recognise the information concerning health that is available. In this way, home economics enhances the capability of pupils to evaluate and analyse the validity of information and the competence to make independent decisions that encourage health and wellbeing. The forming of food customs begins in childhood and instruction that emphasises a healthy diet is considered the most effective. This should be the objective of home economics.

Knowledge and skill in housework are the core of home economics and all other elements of the studies are related to this, both academic and vocational. Basically home economics is a vocational subject, and is intrinsically linked to nutrition, cooking and hygiene. In order to strengthen the link between these factors, it is important to integrate instruction in nutrition and cooking. This makes it easier for pupils to realise the nutritional value of food and how it should be cooked to preserve the nutrients. A good knowledge of nutrition is a necessary preparation for future housekeeping and parenthood. Public recommendations of the Directorate of Health on diet and nutrition should be taken into consideration when teaching cooking and nutrition.

A good way to get to know the culture and customs of foreign countries is to learn about their culinary traditions. The social value of food is essential both in everyday life and on special occasions such as dinners and celebrations where food usually plays an important role.

Home economics should emphasise environmental concerns, give insight into ecology and encourage interest in the protection of the environment and sustainable ways of life. It is also important that pupils become informed consumers and learn to select food products and other consumer goods by reading information on packaging and being critical of advertisements and information that they get from their surroundings and mass media. It is important to encourage the pupils' cost consciousness in housekeeping,



not least in their own and their family's consumption, and that they learn to do their shopping economically.

In the competence criteria for home economics, intrinsically similar criteria are put in the same category. This is done to give teachers a better overview of the study aspects that are being worked on each time. They should be worked on simultaneously according to the nature and extent of each aspect. The competence criteria are open and give teachers an opportunity to implement them as they wish and choose how to approach them. This opens up possibilities for varied teaching methods.

The competence criteria for home economics are an addition to the competence criteria for arts and crafts.

<b>Food and lifestyle</b>		
<b>At the completion of Grade 4, pupils are able to:</b>	<b>At the completion of Grade 7, pupils are able to:</b>	<b>At the completion of Grade 10, pupils are able to:</b>
<ul style="list-style-type: none"> <li>• discuss healthy lifestyles in a simple manner,</li> <li>• choose healthy food and explain its effect on the body and how people feel,</li> <li>• follow simple instructions on hygiene and cleaning,</li> <li>• discuss the main cost items for housekeeping in general.</li> </ul>	<ul style="list-style-type: none"> <li>• discuss healthy lifestyles with regard to health,</li> <li>• discuss the main points of nutrition,</li> <li>• follow instructions on hygiene and cleaning with regard to housekeeping,</li> <li>• recognise the main cost items of housekeeping and be aware of consumer protection.</li> </ul>	<ul style="list-style-type: none"> <li>• discuss healthy lifestyles with regard to health and put this in context with the individual's responsibility for their health,</li> <li>• recognise the main points of nutrition and explain the relationship of nutrients, raw materials and cooking,</li> <li>• follow instructions on hygiene and cleaning with regard to housekeeping and cooking,</li> <li>• recognise the main items of expenditure for housekeeping and take responsibility for their own expenditure and commitments and know their rights and duties as consumers,</li> </ul>

## Food and methods of work

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>with assistance, prepare simple and healthy meals,</li> <li>follow simple recipes using simple measuring equipment and kitchen utensils,</li> <li>describe the most common dangers resulting from working in the kitchen,</li> <li>use different media to acquire information on simple recipes.</li> </ul>	<ul style="list-style-type: none"> <li>prepare simple and healthy meals using their ingredients effectively,</li> <li>independently follow recipes using the most common measuring equipment and kitchen utensils,</li> <li>describe the most common dangers for accidents in the home and how they can be prevented,</li> <li>use different media to acquire information concerning cooking, nutrition and the handling of food.</li> </ul>	<ul style="list-style-type: none"> <li>plan and prepare varied, healthy and well put together meals made from common and novel ingredients with emphasis on economy and efficiency,</li> <li>apply the most common cooking methods using the various measuring equipment and kitchen utensils,</li> <li>describe reactions to accidents in the home,</li> <li>in a critical manner, use different media to obtain information concerning nutrition, consumer issues, economic shopping, additives, preservation and cooking.</li> </ul>

## Food and the environment

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>put the subject matter of home economics in a simple context with sustainability,</li> <li>understand simple package labelling.</li> </ul>	<ul style="list-style-type: none"> <li>link the subject matter of home economics with equality and sustainability and recognise the origin of the most common foods,</li> <li>understand and discuss different package labelling, evaluate appearance and quality of foods and explain how to preserve them,</li> </ul>	<ul style="list-style-type: none"> <li>put the subject matter of home economics in a wider context with democracy and equality, purity and the qualities that improve people's health and encourage sustainable development,</li> <li>discuss the influence of advertisements and information on the labelling, price and quality of consumer goods in relation to consumer protection and also to discuss quality, preservation and additives in food.</li> </ul>

Food and culture		
At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>in a simple manner, discuss positive communication at the table, the most prominent holidays in Iceland, customs linked to them and typical Icelandic food.</li> </ul>	<ul style="list-style-type: none"> <li>discuss different customs and traditional Icelandic cooking.</li> </ul>	<ul style="list-style-type: none"> <li>describe Icelandic and foreign cuisine and prepare various national dishes.</li> </ul>

## 21.11 Competence criteria for design and craft

Design and craft as school subjects have a long history. The main objectives of the studies are to make pupils able to work independently, encourage their job satisfaction and respect for work, and train their concentration, diligence and work skills. In addition, there is emphasis on craftsmanship, culture and links with future vocational studies. The subject is based on the well-established traditions of craftsmanship and a general emphasis on upbringing and education.

Design and craft emphasises that pupils become capable of working independently and acquire the competence to make objects with a variety of materials, tools and technology. They obtain knowledge and competence that they can transfer to their field of work, to leisure and to housekeeping. The emphasis is on pupils being active in the design process and forming the appearance and structure of objects with regard to their use. In this, innovation is intertwined with the utilisation of knowledge. In this way pupils influence their environment and, at the same time, they are encouraged to show consideration and respect for the environment.

Furthermore, in design and craft, there is an integration of creation, literacy and sustainability and this helps the pupils to understand the meaning of these concepts. Teachers are encouraged to use materials from the school's neighbourhood and use Icelandic wood where possible. Pupils also get an insight into the world of technology, which encourages their understanding and their literacy of the man-made environment.

The competence criteria for design and craft are divided into three categories, which are the main fields of emphasis within the subject. These categories are, however, integrated. Handiwork includes objectives that aim at enhancing know-how, materials knowledge and competence in applying tools. There is emphasis on pupils realising when a finish is considered workmanlike. Design and technology include objectives related to design and enhancing the pupils' appreciation of organising work, the designing process and planning. At the same time, pupils' technological insight and understanding

is emphasised. Environment includes objectives that aim at enhancing the pupils' understanding of the connection between the environment and vocational occupations and that this is, for example, reflected in the selection of materials. There is an emphasis on the pupils learning the correct use of protective equipment and being familiar with the concept of health and safety in the workplace.

The competence criteria for design and craft are an addition to the competence criteria for arts and crafts.

### Handiwork

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>• in a safe manner, select and use several tools suitable for their assignment,</li> <li>• describe several materials that are used.</li> </ul>	<ul style="list-style-type: none"> <li>• select and use in a correct manner common tools and measuring equipment,</li> <li>• describe the origin and usefulness of the raw materials that are used in the workshop.</li> </ul>	<ul style="list-style-type: none"> <li>• select suitable methods, materials and tools and show correct and responsible use of tools,</li> <li>• describe the importance of know-how in modern society.</li> </ul>

### Design and technology

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>• draw a simple sketch and two-dimensional drawing to explain their ideas,</li> <li>• carry out an assignment from an idea to a completed object with emphasis on form and appearance,</li> <li>• carry out simple assemblies,</li> <li>• describe energisers that may be used in assignments and use activity factors in artefacts, such as leverage, coil springs and elastics,</li> <li>• point out various technical phenomena related to their daily life,</li> </ul>	<ul style="list-style-type: none"> <li>• explain their ideas by making a working drawing in scale,</li> <li>• read a simple drawing, work according to it and follow a design process from an idea to a final product,</li> <li>• select assembly and surface treatment suitable for each assignment,</li> <li>• design and make an assignment which uses an energiser and describe what activity factors are at work in various objects,</li> <li>• describe how technology appears in their surroundings and in society in general,</li> </ul>	<ul style="list-style-type: none"> <li>• explain their ideas in a free-hand drawing and ground plan,</li> <li>• work independently according to a project schedule, draw up a list of materials and calculate cost,</li> <li>• carry out more complicated assemblies, such as butt joints, dowel joints and joints with screws,</li> <li>• design an assignment with regard to materials, aesthetics, technology, environment, usage and durability,</li> <li>• discuss how technology is used in the economy,</li> </ul>

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|---|--|---|
| <ul style="list-style-type: none"> <li>analyse simple requirements in their environment and discuss several solutions.</li> </ul> | <ul style="list-style-type: none"> <li>analyse requirements in their surroundings and discuss possible solutions.</li> </ul> | <ul style="list-style-type: none"> <li>describe the influence of innovation on their surroundings and society.</li> </ul> |
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## Environment

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>select material with regard to environmental considerations and describe the advantages of using materials from their surroundings,</li> <li>show the economic utilisation of the materials used,</li> <li>show correct physical exertion at work and use protective equipment in a correct manner.</li> </ul>	<ul style="list-style-type: none"> <li>detail if materials are dangerous and how materials used in the carpentry workshop may be recycled and sorted,</li> <li>repair and recycle old objects and thus lengthen their service life,</li> <li>explain correct working positions and select suitable protective equipment.</li> </ul>	<ul style="list-style-type: none"> <li>distinguish environmentally friendly materials from those that are not and aim at sustainability in their work, for example when selecting materials,</li> <li>recognise if and how various objects may be recycled to lengthen their service life,</li> <li>use suitable working positions and protective equipment and discuss health and safety in the workplace and why rules concerning this are established.</li> </ul>

## 21.12 Competence criteria for textiles

Textiles are an extensive subject that includes both design and handicraft and, additionally, training and work skills in various fields. Textiles are deeply rooted in the culture of the nation, rooted in history, occupational culture and the arts. The subject is based on a long-standing handicraft tradition that has developed and expanded as times have changed and new emphases in upbringing and education have appeared.

Textile studies include, for example, obtaining knowledge, concept work and creation where pupils use the materials and tools of the subject in an independent manner. There is an emphasis on realisation and process that give pupils an opportunity to apply a variety of methods and understand the nature and characteristics of the subject. Textiles studies give pupils an opportunity for psychomotor development, experience and, at the same time, to express themselves.

Textiles are a significant factor in social reality where individuals create their own personal style in clothes and surroundings and simultaneously learn to produce objects that have personal value. In textiles studies it is important that pupils analyse, evaluate and put textiles in context with the environment, culture, art, innovation and utilisation of knowledge.



In textiles a variety of materials are used, this includes anything from environmentally safe materials to polluting industrial products. Therefore, it is important to keep environmental awareness and protection of the environment in mind and to encourage recycling and sustainability.

Creativity, literacy and sustainability are factors integrated in textile culture, and studies in this field give an opportunity to concretely engage with them and link them to other issues in order to encourage the pupils' understanding.

The competence criteria for textiles are divided into three categories that illustrate the principal emphasis of the subject. These categories are used to facilitate an overview of those study elements that are integrated and those that work together. The competence criteria are open and give teachers the opportunity to approach the subject with diverse implementation and teaching methods. *Handicraft, methods and technology* includes competence criteria that enhance the knowledge of the various materials and methods of the subject, in addition to improving work skills and encouraging the use of suitable tools. The category *Creation, design and realisation* includes factors that involve creation, design and concept work, understanding of work processes and the pupils' recognition of the value of handicraft. The third category, *Culture and environment*, includes competence criteria that aim at encouraging the pupils' understanding of culture and the environment with regard to the world of textiles. Here the emphasis is on environmental awareness and protection of the environment.

The competence criteria for textiles are an addition to the competence criteria for arts and crafts.

### Handicraft, methods and technology

<b>At the completion of Grade 4, pupils are able to:</b>	<b>At the completion of Grade 7, pupils are able to:</b>	<b>At the completion of Grade 10, pupils are able to:</b>
<ul style="list-style-type: none"><li>• apply simple methods of the subject and use suitable tools,</li><li>• use several textile materials,</li><li>• work according to simple instructions.</li></ul>	<ul style="list-style-type: none"><li>• apply the basic methods and tools of the subject,</li><li>• discuss materials technology and use a variety of textiles,</li><li>• work with simple patterns and instructions.</li></ul>	<ul style="list-style-type: none"><li>• apply various methods and tools of the subject for forming textiles,</li><li>• support their choice of textiles based on assignment and materials technology,</li><li>• use patterns and instructions, take measurements, estimate sizes and material use.</li></ul>

Creation, design and realisation		
At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>express their ideas in a simple sketch,</li> <li>decorate textile work in a simple manner,</li> <li>discuss different types of handicraft and use a few concepts linked to the subject,</li> <li>look up simple information using a few forms of media.</li> </ul>	<ul style="list-style-type: none"> <li>develop their ideas in textiles and work according to a process,</li> <li>use diverse methods to decorate textiles,</li> <li>explain the practical and aesthetic values of handicraft and discuss the aesthetics of their own works,</li> <li>use the most common media to acquire information on textiles and textile work.</li> </ul>	<ul style="list-style-type: none"> <li>use creative and critical thinking in design and textile work,</li> <li>decorate textiles in a creative and personal manner,</li> <li>evaluate their methods of work and describe good workmanship, form and design using suitable concepts to do so,</li> <li>in a critical manner, use various media to acquire information on diverse topics related to the history of textiles, design and industry.</li> </ul>

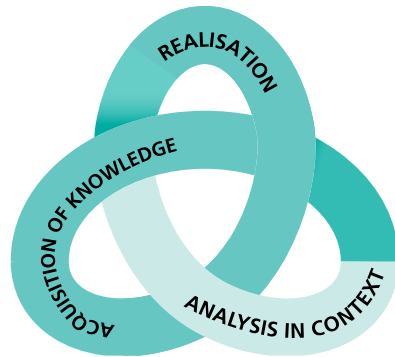
Culture and the environment		
At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>discuss Icelandic raw materials and use them in a simple manner,</li> <li>describe a few types of textile,</li> <li>discuss different clothes with regard to weather, activity and occasion,</li> <li>use new and recycled materials in textiles.</li> </ul>	<ul style="list-style-type: none"> <li>discuss Icelandic raw materials in connection with history and sustainability,</li> <li>describe the main characteristics of natural and synthetic materials,</li> <li>put textile work and textiles in context with history, society and the arts,</li> <li>describe recycling and content providers.</li> </ul>	<ul style="list-style-type: none"> <li>explain the expression and symbols of textiles and fashion as they appear in style, texture and materiality with regard to the characteristics of Icelandic textiles, handicraft, textile history and cultural heritage,</li> <li>discuss the textile industry and professions linked to clothing manufacture and textile design,</li> <li>discuss the production of textiles in different circumstances and put in context with sustainability and protection of the environment.</li> </ul>

## 21.13 Teaching methods and assessment for arts and crafts

In compulsory education, there are two categories of arts and crafts studies. First, there are studies in the subjects themselves and, secondly, arts and crafts are used as teaching methods and integrated into all general education. Whether it is a question of the first or second category, teaching methods in arts and crafts should be based on the work methods of the subject itself. Thus pupils are engaged in a methodology that is a challenge to both practical and aesthetic problem-solving studies.

Arts and crafts in compulsory school are divided into: arts, that is performing arts (dance and dramatic art), visual arts and music; and crafts, which is design and handicraft, home economics, and textiles. The emphasis and ideology of arts and crafts in schools are based on four factors that are inseparably intertwined at different levels.

- Acquisition of knowledge / concept work
- Realisation
- Analysis
- Context



*Acquisition of knowledge* and *concept work* consist of preparation and technical training. Pupils obtain information and materials, examine, try out, imagine, learn techniques, form, take chances that encourage daring and confidence both in the assignment and in their own ideas.

*Realisation* consists of pupils applying methods where they transform, interpret, move, show, examine, form and produce.

*Analysis* involves pupils enriching their understanding and experience through discussion, expression and evaluation. Pupils analyse, verbalise, evaluate, assess, criticise, compare, interpret, reflect and examine.

*Context* consists of putting the process into historical, cultural, personal and social context. Pupils verbalise, evaluate, reflect, organise/review, form theories, develop and change.

The competence criteria in each subject are based on these four inseparable factors as



they are intertwined at every level of the studies. As pupils get older, there is increased emphasis on context, where their development, experience and knowledge are tested.

Education in arts and crafts consists of the pupils' vocational and creative work, where mind, heart and hand are tested. The studies consist of systematic training in each subject based on the factors defined above and where the importance of these factors varies depending on the nature of the different assignments. In this way pupils are able to use all their senses and acquire knowledge through reading, listening, observing, movement, project-based learning, games, expression, smelling and tasting, and experimenting with their ideas. Under the supervision of a teacher they should have an opportunity to develop these ideas, based on knowledge, in different ways, and to practise materialising them and exhibiting on various occasions. In this process, there are numerous opportunities for reflection and analysis of work processes, relations and the content of the works in a personal, cultural and historical context. A final product is important, such as performing a piece of music, dance or drama, exhibiting works of handicraft, textiles or art pieces, or tasting and serving food, but all of this shows that the process is no less important than the final product and that in the process there are numerous opportunities to encourage the pupils' overall development, as well as their social development.

Education in arts and crafts should be fashioned by the nature of the subjects and therefore it is important that facilities and knowledge are available in the schools. This is the academic prerequisite for the pupils' vocational and artistic training, which is based on them working independently, their cooperation, varied work methods and data acquisition, in addition to the facilities to realise their ideas. Facilities and knowledge depend on the number of pupils in each class, where the tools and techniques of arts and crafts can come into their own, as well as on suitable tools and space.

The task of the arts and crafts teacher in each subject is to support the pupils in developing their ideas, teach them suitable work methods, give them training in creative, analytical and expressive procedures, and assist them in realising their ideas, both on their own and in group assignments. This is the prerequisite for pupils knowing their strengths, taking the initiative and developing their works according to their age and development.

Education in arts and crafts should be meaningful and develop with the pupils' increasing age and development. A number of compulsory school pupils study arts and crafts in one or more art forms in their spare time. In individual-oriented studies it is, therefore, natural and important to take the different requirements of pupils into consideration and link assignments within and outside the school.

As pointed out in the introduction, arts and crafts are effectively integrated with our everyday lives and affect it in various ways. Consequently, comprehensive education should intertwine arts with vocational and academic studies. Arts and crafts should have

a respected position in education and all school activities for the greater benefit of the pupils and the school community as a whole. To smaller schools competence criteria and study criteria in individual subjects may seem too specific, but if precise teaching methods are applied, all these criteria can be obtained, whether the subjects are taught in regular classes or in more compressed courses. For this to be successful, teaching methods have to be founded on activity and creativity where the pupils' assignments are a concrete product made according to the methods of each subject. This means that it is not enough to read about and listen to information on design, sewing, cooking, music, dance, dramatic or visual arts; the subject has to be put into practice. This may be obtained with, for example, integrated assignments where the methods of arts and crafts are applied. Such studies deepen the pupils' understanding, knowledge and experience in various subjects. This approach also gives pupils an opportunity to study various subjects in a concrete manner and gives the studies increased meaning and extends their content.

Teaching, learning and assessment are an integral process, but teaching and assessment methods differ. It is essential that the teacher's feedback is always instructive, regular and focused, to encourage the pupils' progress. Assessment is based on the competence criteria for each subject in addition to the key competences that are common for all the subjects of compulsory school. It should include all elements of the studies so that both teachers and pupils are aware of the study progress and whether objectives have been obtained. Assessment is to be further stipulated in the school curriculum guide.

Assessment methods in arts and crafts can be diverse, such as performance appraisal, self-evaluation, and peer assessment. The method selected each time depends on the nature of the assignment. Performance appraisal is expedient in arts and crafts. It involves both the learning process and the final product. Performance appraisal is a useful assessment method to examine the pupils' competence in applying their knowledge and skills. It assesses a variety of the pupils' assignments and is based on specific competence criteria. Frequently this involves assignments where more than one good solution is possible. When using performance appraisal, checklists and rating scales are important in evaluating the pupils' competence or the quality of their projects.

Self-evaluation, where the pupils themselves evaluate their study progress in general or specific aspects of their work, is a significant assessment method in arts and crafts. It helps pupils to obtain their goals, and to recognise their strengths and in what fields they should improve themselves. Peer assessment is a good choice for evaluating group work, for example in drama, dance and music. Here pupils have an opportunity to evaluate each other, and for cooperation, consideration, listening and activity. By continually using peer assessment, pupils get used to giving evaluations, to accepting those of their schoolmates and to using them in a constructive manner. As the final assessment in arts and crafts involves the learning outcome as a whole at the end of the study period,

it often involves a final product (musical composition, an object, dramatic or dance performance, artwork). Furthermore, pupils may select, collect and evaluate diverse data for a portfolio, such as development, realisation of ideas, etc., done during the study period.

## 21.14 Competence criteria for arts and crafts

The *National Curriculum Guide* stipulates the assessment criteria for subjects, subject areas and key competences. Assessment criteria are a description of to what extent a pupil has acquired a defined competence. The assessment criteria are only obligatory for Grade 10 where they support the assessment at the completion of compulsory school. Schools are expected to define assessment criteria for other grades and describe them in their school curriculum guide. The assessment criteria for Grade 10 describe competences on a scale that appears in the *National Curriculum Guide*: the scale A, B, C, D is used, where A stands for exceptional competence, B for good competence, C for passable competence, and D for competence that does not reach the standard described in C.

Assessment criteria in category B are based on competence criteria for Grade 10 and their presentation is such that most pupils are expected to acquire the competences that are described there. An A is for those who have acquired exceptional competence and C for those who do not quite meet the requirements that are set for the B criterion. No criterion is set for D as this assessment is used when the pupil does not meet the requirements that are set for the C criterion. In such cases the school explains the competence of the pupil in question. Each criterion is a general description of the pupil's competence.

In the final assessment it is of vital importance that teachers assess what the criteria stipulate, make sure that the assessment is based on reliable data and that they use a variety of methods to acquire data, to give pupils, their parents and the school as clear information as possible on their status. Thus teachers can gain better insight into the studies of each pupil. For an accurate conclusion, such as from conversations or on-site inspection, it may be relevant for teachers to cooperate when they consider the data that the assessment is based on and to use precise criteria.

The assessment scale is obligatory at pupils' graduation at the completion of Grade 10. In other respects, schools may decide how they conduct their assessment, grading or school reports for pupils in other grades. School reports at the completion of Grade 10 are taken into consideration when pupils enrol in upper secondary schools and select study programmes.



The following issues may be useful in securing the reliability and validity of the assessment.

- Set clear criteria or describe what is to be assessed.
- Select assessment factors that are suitable for assessment criteria, study materials and teaching methods.
- Prepare a description of what is to be assessed or show examples of assignments that are of good quality.
- Ascertain that assignments are in accordance with criteria.
- Be aware of issues that could distort the conclusion.
- Make clear instructions for assessment methods, processing and interpretation of data.

### 21.14.1 Competence criteria for arts

**A**

Pupils are able to show **initiative** and **daring**, make experiments in the creation of art and select and apply suitable methods and techniques **very well**. Apply various forms and styles to create in an **independent** manner a work based on their own ideas, explain and **support** the work process from an idea to a final product. Perform works with **good** feeling for rhythm and nuances. Describe, analyse and discuss the content of their works and those of others **very well**, put them into cultural, historical and social context and use arts vocabulary and concepts in a **systematic** manner. Explain the role of art in culture and the economy **very well**.

**B**

Pupils are able to show **initiative** and **daring**, make experiments in the creation of art and select and apply suitable methods and techniques. Apply various forms and styles to create a work based on their own ideas, explain the work process from an idea to a final product. Perform works with **some** feeling for rhythm and nuances. Describe, analyse and discuss the content of their works and those of others, put them into cultural, historical and social context and use arts vocabulary and concepts. Explain the role of art in culture and the economy.

Pupils are able to show **some** initiative and daring, make experiments in the creation of art and select and apply suitable methods and techniques to some extent. Apply **quite** a variety of forms and styles to create a work based on their own ideas, explain the work process from an idea to a final product. Perform **to some extent** rhythm and nuances. Describe the content of their works and those of others, put them **to some extent** into cultural, historical and social context and arts vocabulary and concepts. Explain **to some extent** the role of art in culture and economy.

C

### 21.14.2 Competence criteria for crafts

Pupils are able to organise their work **very well** and apply a variety of methods and techniques in independent and creative work. Express themselves in an **independent** manner with a working drawing, carry out their ideas and work **confidently** according to a design process. Analyse and discuss their tasks in a **critical** manner, using suitable concepts for **supporting** their views. Select materials with confidence and independence and with regard to environmental concerns, link their work to sustainable development and put this into practice. Describe **precisely** the different materials and tools that they use, **confidently** use correct working positions and orderliness. Analyse and **support** utilisation and innovation in their assignments and discuss with intuition and **independence** possible solutions. Describe **precisely** the characteristics of Icelandic and foreign culture with regard to vocational occupations and what influence these have on everyday life. Explain **precisely of** what a healthy way of life consists, its relation to health, and put into context people's responsibility for their own health. **Analyse** and **discuss** with precision the subject matter of nutrition, the relationship of nutrients, ingredients, cooking and health and support why these factors influence health.

A

Pupils are able to organise their work **well** and apply **several** methods and techniques in **independent** and creative work. Express themselves with a working drawing, carry out their ideas and work according to a design process. Analyse and discuss their tasks, using common concepts. Independently select materials with regard to environmental concerns, link their work to sustainable development and put this into practice. Describe the different materials and tools that they use, **confidently** use correct working positions and orderliness. Analyse

B



utilisation and innovation in their assignments and discuss possible solutions in an **independent** manner. Describe the characteristics of Icelandic and foreign culture with regard to vocational occupations and what influence these have on everyday life. Explain **of** what a healthy way of life consists, its relation to health and put into context people's responsibility for their own health. Analyse and discuss the subject matter of nutrition, the relationship of nutrients, ingredients, cooking and health and support why these factors influence health.

**C** Pupils are able to organise their work **fairly well** and apply simple methods and techniques in **independent** and creative work. Express themselves in a simple manner with a working drawing, carry out their ideas and work under **supervision** according to a design process. Analyse and discuss their tasks to a certain extent, using common concepts. **Under supervision**, select materials with regard to environmental concerns, link their work to sustainable development and put this into practice. Describe **to a certain extent** the different materials and tools that they use and generally use correct working positions and a certain orderliness. **Under supervision**, analyse utilisation and innovation in their assignments and discuss possible solutions. Describe **several** characteristics of Icelandic and foreign culture with regard to vocational occupations and what influence these have on everyday life. Explain **to a certain extent** of what a healthy way of life consists, its relation to health, and put into context people's responsibility for their own health. Analyse and discuss **to a certain extent** the subject matter of nutrition and the relationship between cooking and health.

## NATURAL SCIENCES

# 22

The educational values and main objectives of teaching natural sciences are discussed in this chapter. The discussion is based on the six fundamental pillars described in Chapter 2, the emphases in education from Chapter 6 and key competences as defined in Chapters 9.4 and 18. Competence criteria are defined at the completion of Grades 4, 7 and 10. This is followed by a discussion of teaching methods and assessment based on the emphases that are illustrated in the competence criteria. Based on the competence criteria, teaching methods, as well as study materials and assessment methods, are to be selected and described in the curriculum guide of each school. The assessment criteria stipulated at the end of the chapter should be used, as appropriate, to describe the pupils' competence at the completion of compulsory school.

### 22.1 Educational values and main objectives of the natural sciences

Icelanders, as part of the international community, have to be aware that technology, human activity and decision-making have an effect on all mankind, now and in the future. Everyone should be able to take an active part in society where discussions and everyday decisions are based on informed and critical views. In the natural sciences, knowledge, skill and competence are necessary in order to do this.

The natural sciences in compulsory school include, among other things, natural history, physics and chemistry, geology, biology and environmental education. The studies integrate various topics of the natural sciences with criteria that involve encouraging responsibility towards the environment, the methods and values of natural sciences,

innovation and utilisation of knowledge, and capability for action. The natural sciences should support the pupils' knowledge, respect, responsibility and personal experience. When organising studies in the natural sciences, all the competence criteria should be kept in mind, as well as the framework for the subject area stipulated in the reference timetable in the General Section of the *National Curriculum Guide*.

Competence in the natural sciences consists of knowledge and skills, but also attitudes towards nature, technology, society and the environment. At the same time, pupils are encouraged to analyse their own situation and competence, develop their literacy, moral strength, feelings and creativity. Studies in the natural science assist pupils in knowing what they know and are able to do, and in knowing how best to apply what they have learnt, their knowledge and their skills to have an influence on their environment and to improve it. It is important to strengthen their practical and social competence, increase initiative and responsibility through active participation, for example by having a choice of tasks and work methods. On the one hand, pupils need to realise that knowledge is not only acquired through direct observation but also through experience, imagination and creativity, and on the other hand that scientific knowledge is never absolute, final or irrefutable. For this to succeed, pupils should have opportunities to experience and examine nature and the environment and should learn to pay attention, to acquire, process and communicate information from sources and observations, and simultaneously to trust their own curiosity.

It is important to encourage positive attitudes and the interests of the pupils, and this applies to both boys and girls. The uniqueness of Icelandic nature offers a variety of learning options for pupils. Solid understanding in the natural sciences and their role within modern society is an essential factor in the development and education of children and adolescents. This involves maintaining and encouraging their curiosity and interest in themselves, their surroundings and natural phenomena.

The emphasis should be on pupils becoming scientifically literate. This involves pupils being able to read and understand texts on the natural sciences, to use concepts from the natural sciences in their everyday life and to understand natural and man-made phenomena. In addition, they should be aware of the interplay of mankind and nature and man's technological power. This competence will enrich their understanding of modern society and assist them in making sensible decisions on issues concerning man and nature. Pupils should have an opportunity to form an opinion on conservation, the use of natural resources and sustainable development. Furthermore, they can debate matters of opinion concerning man's relationship with nature, technology and the latest scientific innovations. In this way, pupils' knowledge and understanding of the basic objectives of sustainable development will develop, as will their willingness to work in the spirit of sustainability.



Studying the natural sciences should be characterised by democratic working methods. Pupils should be able to take part in forming their surroundings in various ways. They should have an opportunity to explore, design and carry out ideas for the benefit of society and explore means to gather information and processing. They should discover that they are able to explore the unknown, enhance their own knowledge base, analyse the interplay of society and the environment and develop action competence. Studies in the natural sciences are well suited for meeting the criteria for key competences that are common for all subject areas (cf. Chapter 18).

## 22.2 Competence criteria for the natural sciences

In the natural sciences there are two categories of competence criteria and it is essential that these are related to each other and integrated. On the one hand, there are five competence criteria which guide procedural knowledge and, on the other hand, criteria for selected topics and themes. Competence criteria for procedural knowledge are divided into:

- Action competence.
- Innovation and practical use of knowledge.
- Value and role of science and technology.
- Methods and skills in natural sciences.
- Enhancing responsibility for the environment.

### Competence criteria for topics are grouped into themes:

- Living on Earth.
- Living conditions for mankind.
- Icelandic nature.
- A healthy environment.
- The interplay of science, technology and development in society.

### Competence criteria for procedural knowledge

Action competence		
At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>• explain how technology influences the quality of human life and the environment,</li> </ul>	<ul style="list-style-type: none"> <li>• analyse and describe how the use of technology and automation may increase or decrease the quality of life of people and the environment,</li> </ul>	<ul style="list-style-type: none"> <li>• analyse how factors, such as technological levels, knowledge, cost and societal infrastructure affect every solution to a problem,</li> </ul>



<ul style="list-style-type: none"> <li>• take the initiative in acquiring information to examine a selected issue from different perspectives,</li> <li>• demonstrate activity and show concern for their immediate surroundings and the living conditions of organisms,</li> <li>• distinguish between different opinions concerning everyday life.</li> </ul>	<ul style="list-style-type: none"> <li>• analyse people's needs in their immediate surroundings and present their ideas for solutions,</li> <li>• discuss the importance of cooperation in coordinated actions concerning their own environment,</li> <li>• form an opinion on issues that concern their local community by evaluating different possibilities.</li> </ul>	<ul style="list-style-type: none"> <li>• analyse the state of their own surroundings and preceding events, and then organise participation in actions that lead to improvements,</li> <li>• take part in and explain their experience and the outcome of participation in activities concerning nature and society,</li> <li>• adopt a well-founded stance toward issues and make proposals on how to react to changes, but, at the same time, take into consideration that in the future many things are uncertain and complicated.</li> </ul>
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### Innovation and practical use of knowledge

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>• recognise needs and problems in their surroundings,</li> <li>• work according to the innovation process; that is, search for needs in people's daily surroundings, find a solution, design a product,</li> <li>• identify occupations that require specialised knowledge.</li> </ul>	<ul style="list-style-type: none"> <li>• describe familiar technological innovations and scientific discoveries and their effect on working practices and the way of life in their local community, environment and nature,</li> <li>• work in groups under supervision according to a schedule in order to design an environment, object or system,</li> <li>• discuss how different competences are useful in modern occupations.</li> </ul>	<ul style="list-style-type: none"> <li>• describe how the findings of research have affected technology and the economy in their immediate surroundings and in society as a whole, and how they have not had an effect,</li> <li>• take part in organising and working according to a group schedule for designing an environment, object or system,</li> <li>• demonstrate an understanding of how education, training, choice of employment and plans for one's own life are related to changes in technology and the environment.</li> </ul>

## Value and role of science and technology

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>present, verbally and visually, ideas related to natural sciences,</li> <li>use simple concepts from natural sciences in writing texts,</li> <li>explain how technology is used in their daily life,</li> <li>perceive how people are a part of nature and how their livelihood is based on an interaction with nature.</li> </ul>	<ul style="list-style-type: none"> <li>perceive the importance of data and models in explaining objects and phenomena,</li> <li>read and write about concepts in the natural sciences,</li> <li>explain the effect of science and technology on people's lives,</li> <li>link knowledge and application of methods in the natural sciences to solutions of other tasks and explain the possible effect of new science and technology on scientific knowledge.</li> </ul>	<ul style="list-style-type: none"> <li>recognise the value of presenting information on science and technology development in a clear manner,</li> <li>use the most common concepts and terms in the natural sciences at the lower secondary school level,</li> <li>use examples to explain how the natural sciences, technology, culture, view of the world and nature interact,</li> <li>work on integrated assignments, using the methods of natural sciences, and take a critical stance towards ethical issues concerning nature, the environment, society and technology.</li> </ul>

## Methods and skills

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>describe and carry out, with the aid of everyday objects, simple observations, both indoors and outside,</li> <li>take part in selecting tasks in the natural sciences and presenting the findings,</li> <li>obtain information concerning nature,</li> <li>record events and observations, for example with photographs, drawings or in writing, and report on these orally,</li> </ul>	<ul style="list-style-type: none"> <li>carry out and explain simple observations, both indoors and outside,</li> <li>explain and use texts on the natural sciences and carry out simple oral and written instructions,</li> <li>obtain information concerning the natural sciences from sources in a language other than Icelandic,</li> <li>apply scientific methods for obtaining simple information within the natural sciences and explain the process,</li> </ul>	<ul style="list-style-type: none"> <li>carry out and explain specially designed, or their own, observations, both indoors and outside,</li> <li>read texts on the natural sciences for their own use, rephrase them and interpret visual material linked to them,</li> <li>obtain information concerning the natural sciences in Icelandic and foreign languages,</li> <li>apply scientific methods, such as experiments and observations, in a critical manner, for obtaining information within the natural sciences,</li> </ul>



<ul style="list-style-type: none"> <li>• use different sources for obtaining information,</li> <li>• explain selected events and ideas in diverse ways,</li> <li>• listen to and discuss the ideas of others.</li> </ul>	<ul style="list-style-type: none"> <li>• ascertain the validity of their sources by using books, the Internet and other sources of information,</li> <li>• present and discuss the findings of observations in a clear and orderly manner,</li> <li>• listen to, evaluate and discuss the ideas of others.</li> </ul>	<ul style="list-style-type: none"> <li>• ascertain the validity of source material by using manuals and technical books, the Internet and other sources of information,</li> <li>• explain and debate information selected from observations and source material,</li> <li>• draw conclusions from data and give different explanations by using different perspectives,</li> </ul>
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### Responsibility for the environment

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>• notice and discuss elements in their surroundings, show consideration for their schoolmates and nature,</li> <li>• observe and record examples of the effects of human activities on nature and the man-made environment in their local community,</li> <li>• use experience and competence in their studies and their daily life, on their own and with others,</li> <li>• discuss their view of life and values, and take note of the relationship of man and nature,</li> <li>• take part in studying, analysing and improving their own environment and nature.</li> </ul>	<ul style="list-style-type: none"> <li>• notice and discuss elements in their surroundings, describe their effect on the quality of life of the inhabitants,</li> <li>• describe examples of the effects of human activities on nature and the man-made environment in their local community and in Iceland, and describe possible future developments,</li> <li>• take part in and show competence in cooperation that concerns improvements in their local community,</li> <li>• understand their own view of life and understanding of the interaction of nature, man and their own physical health,</li> <li>• take part in studying, analysing and improving their surroundings and nature.</li> </ul>	<ul style="list-style-type: none"> <li>• notice and discuss elements in their surroundings, discuss their effect on the quality of life and nature, show consideration for nature and discuss their own view on this,</li> <li>• study and record events and phenomena concerning the interaction of man and nature, and to take an active part in critical discussion of the issue and propose actions for improvements,</li> <li>• show their capability to work towards improvements in their own municipality or with non-governmental organisations,</li> <li>• discuss with understanding their view of life and responsibility in society, taking examples from their own life,</li> <li>• take part in studying and analysing the status of environmental affairs in the world and discuss the objectives of improvements.</li> </ul>

## Competence criteria for topics and themes

Living on Earth		
At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>take part in and describe simple observations of soil, weathering and erosion,</li> <li>describe how Iceland was formed and how it changes,</li> <li>describe land use in their local community,</li> <li>observe and record information on weather in their local community,</li> <li>describe seasonal changes in Icelandic nature and the effect this has on people's living conditions,</li> <li>use satellite and aerial photographs of the surface of the Earth to describe their local community.</li> </ul>	<ul style="list-style-type: none"> <li>carry out and describe their observations of soil, weathering, erosion and space,</li> <li>explain how Iceland develops, how its landscape and soil changes,</li> <li>discuss how arable land is used and various issues concerning land use and protection of vegetation,</li> <li>describe weather in their local community and climate in Iceland,</li> <li>explain the mutual position of the Sun and the Earth and how their orbits are related to seasonal changes, diurnal variations and the passing of time,</li> <li>use satellite and aerial photographs of the surface of the Earth to describe their local community, Iceland as a whole and selected parts of the world.</li> </ul>	<ul style="list-style-type: none"> <li>organise, carry out and describe observations of their own choice from their curriculum concerning man's life on Earth,</li> <li>explain and discuss the reasons for nature conservation,</li> <li>explain changes in land use and their relationship with soil erosion and energy production,</li> <li>explain seasonal weather conditions, climate change, their causes and consequences,</li> <li>perceive the Earth's position in space and its effect on life on Earth,</li> <li>discuss the use of satellites in communication and research and controversial issues related to this.</li> </ul>

Living conditions for mankind		
At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>explain in a simple manner the structure and functions of the human body,</li> <li>explain the importance of exercise, hygiene, healthy food and sleep,</li> </ul>	<ul style="list-style-type: none"> <li>describe in general terms the main organs of the human body and their functions,</li> <li>explain the connection between health and the food one eats,</li> </ul>	<ul style="list-style-type: none"> <li>explain the function of the main organs and organ systems of the human body, cell types, cell organs and their functions,</li> <li>explain how individuals can enhance their welfare through responsible consumption and behaviour,</li> </ul>



<ul style="list-style-type: none"> <li>• point out harmful materials and how various diseases and pathogens are contagious,</li> <li>• explain in a simple manner how babies are made and know the body's private parts,</li> <li>• discuss the diverse use of water in the home and in the environment,</li> <li>• describe their perception and experience of changes in sound, light and temperature and the effect sunlight has on the environment, temperature and the body and link temperature to everyday life.</li> </ul>	<ul style="list-style-type: none"> <li>• explain people's living conditions and the main hazards in the environment,</li> <li>• describe changes during puberty and the importance of mutual respect in gender relationships,</li> <li>• explain the difference between clean and polluted water and what can be done to mitigate water pollution,</li> <li>• describe the interaction of living beings and inanimate objects and link this to people's ideas about the origin and evolution of life on Earth.</li> </ul>	<ul style="list-style-type: none"> <li>• explain what characterises human living conditions and what it means to be responsible for one's own health,</li> <li>• explain how a foetus comes into being and develops, what responsible sexual behaviour involves and discuss their own responsibility for physical and mental health, both their own and that of others,</li> <li>• discuss environmental issues from different perspectives with regard to water, water consumption and the oceans,</li> <li>• describe the cycle of substances and the flow of energy in nature, explain photosynthesis and metabolism and their function.</li> </ul>
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### Icelandic nature

<b>At the completion of Grade 4, pupils are able to:</b>	<b>At the completion of Grade 7, pupils are able to:</b>	<b>At the completion of Grade 10, pupils are able to:</b>
<ul style="list-style-type: none"> <li>• describe their experience of nature and observations of a living being in its natural habitat,</li> <li>• explain the characteristics of living beings, explain with examples their living conditions and their relationship with their surroundings,</li> <li>• describe the most common living beings in their immediate surroundings,</li> <li>• explain food chains and trace food to its primary producer,</li> </ul>	<ul style="list-style-type: none"> <li>• describe their experience, observation and perceptions of living beings in their natural habitat,</li> <li>• describe the characteristics of plants and animals, their niche, their mutual relationship and their relationship with their environment,</li> <li>• describe different ecosystems in their local community or around Iceland,</li> <li>• explain how the adaptation of living beings to their environment makes them more capable of surviving and propagating,</li> </ul>	<ul style="list-style-type: none"> <li>• describe their observations of living beings, their behaviour and habitats,</li> <li>• explain the classification of living beings, monocellular or multicellular organisms, how heredity is transmitted by genes and how living beings in Iceland have adapted to their environment,</li> <li>• explain the needs of different living beings in different ecosystems,</li> <li>• explain ideas about natural selection, fitness, adaptation and genetic diversity,</li> </ul>

<ul style="list-style-type: none"> <li>• identify the most common energy sources in Iceland,</li> <li>• describe the natural disasters that are to be expected in Iceland and in what part of the country they are most likely to occur.</li> </ul>	<ul style="list-style-type: none"> <li>• describe and explain how energy in Icelandic nature can change forms,</li> <li>• explain where and why the most common natural disasters that are to be expected in Iceland take place and how responses to them are organised.</li> </ul>	<ul style="list-style-type: none"> <li>• describe different means of producing, dispersing and using energy in Iceland,</li> <li>• identify examples and explain preventive measures that are organised with regard to natural disasters.</li> </ul>
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## A healthy environment

<b>At the completion of Grade 4, pupils are able to:</b>	<b>At the completion of Grade 7, pupils are able to:</b>	<b>At the completion of Grade 10, pupils are able to:</b>
<ul style="list-style-type: none"> <li>• discuss the relationship of man and nature,</li> <li>• sort waste,</li> <li>• describe the service that natural processes supply,</li> <li>• put into context the different states of matter and their qualities,</li> <li>• discuss the forces that are part of everyday life.</li> </ul>	<ul style="list-style-type: none"> <li>• describe man's use of natural resources,</li> <li>• draw conclusions about the purpose of sorting waste,</li> <li>• explain the services that natural processes supply,</li> <li>• explain and give examples of chemical reactions and states of matter,</li> <li>• describe the forces that are a part of everyday life.</li> </ul>	<ul style="list-style-type: none"> <li>• discuss protection and use of natural resources in relation to sustainable development,</li> <li>• discuss in a critical manner the production, transport and disposal of chemicals,</li> <li>• explain the services that natural processes supply,</li> <li>• use the atomic theory and periodic table to explain the qualities of matter, chemical reactions and states of matter,</li> <li>• explain the physical forces in everyday life.</li> </ul>

## The interaction of science, technology and development in society

<b>At the completion of Grade 4, pupils are able to:</b>	<b>At the completion of Grade 7, pupils are able to:</b>	<b>At the completion of Grade 10, pupils are able to:</b>
<ul style="list-style-type: none"> <li>• sort synthetic and natural materials according to their origin,</li> <li>• discuss how innovations may make people's lives easier or more difficult, in the home and in different occupations,</li> <li>• describe the characteristics of sound, light and various phenomena with regard to noise and colours,</li> </ul>	<ul style="list-style-type: none"> <li>• point out common chemicals in the home and in society, their use and effect on the health of people and the environment,</li> <li>• describe the effect of technology on Icelandic industrial sectors,</li> <li>• describe waves and discuss the use of sound and light in technology and the economy,</li> </ul>	<ul style="list-style-type: none"> <li>• discuss in a critical manner additives in food and methods to increase the shelf life of foods,</li> <li>• explain the prerequisites for eco-friendly design,</li> <li>• explain different types of radiation and how they are used in telecommunications and medicine,</li> </ul>



- describe the development of common electrical appliances and magnetic effects,
- explain the composition of healthy foods and the importance of storage methods for different kinds of food.
- describe how electricity is created, the quality of magnets and their use,
- describe the nutritional value of different foods and what kind of food is produced in Iceland,
- explain simple electric circuits and the relationship between electricity and magnetism,
- explain the connection between population development and food production and distribution and the part that biotechnology plays in this.

## 22.3 Teaching methods and assessment in the natural sciences

In their studies, pupils should be able experience procedures and topics as an integrated whole and form positive attitudes toward the natural sciences. Furthermore, it is important that they have an opportunity to shape and take part in activities that encourage them to treat their surroundings with responsibility and respect.

The role of teachers is to introduce their pupils to the world of the natural sciences by becoming familiar with their ideas and competences, thus discovering their real understanding. The role of teachers, therefore, consists of assisting pupils, on the one hand, to develop their concepts and ideas on life and the material world, and, on the other, to acquire competence with regard to their own welfare, that of others, and that of the environment, both near and far. This is done through diverse teaching methods and assessment that supports pupils in evaluating their own understanding and taking responsibility for their education. Thus, pupils, through teaching and assessment, have an opportunity to become conscious of their own competence and to demonstrate it in action.

The main objectives of the assessment are to obtain guidance and information on the competence of pupils with regard to the criteria set forth. The assessment is used to monitor how far pupils have managed to acquire the competence criteria that are stipulated in the natural sciences and it is essential that both pupils and teachers regularly receive information on progress and whether the teaching is successful. The assessment should be in harmony with the emphases in the work of the school and apply to as many areas as possible. It is important that the assessment is based on diverse methods and consists of reliable data on the pupils' competence and skills, in addition to evaluating progress.

Assessment methods may be practical, oral or written, consist of self-evaluation or peer assessment. It is important that pupils have an opportunity to use previous experience,



for example, in project work, discussions, group work, observations indoors or outdoors, or by observing the phenomena in nature. The emphasis should be on formative assessment where pupils regularly examine their learning, they should be aware of the criteria on which the assessment is based and what objectives have been set.

Challenges in studying the natural sciences are many and varied and the competence necessary to meet them requires organisation and, also, creative imagination. Pupils need to acquire the competence to pay attention, obtain data, measure and evaluate what they are doing and also to communicate their experience, work methods and findings. Findings may be presented and communicated in various ways, either orally, through dramatic expression, written, with numbers and words, with electronic media or visually.

Diverse teaching methods are important in the natural sciences, where the teacher makes use of the equipment and facilities at hand. The organised use of equipment and the use of school buildings, school grounds and the school's immediate surroundings provide opportunities for pupils to observe the interaction of man and nature. A choice of topics makes it possible for pupils to deal with what they are interested in and curious about and also to reflect on their own experience. It is, therefore, essential to use the children's and teenagers' experiences and surroundings and link the topics to their daily lives. Pupils' competence in the natural sciences may be enhanced by giving them an opportunity to take part in research and development work and to cover topics in diverse contexts and societal settings. Teachers and pupils should take the initiative in such cooperation, whether with associations, institutions, businesses or individuals.

Pupils in the natural sciences should have an opportunity to build their vocabulary in this new field; to practise using it and applying it. To enhance their literacy, it is important that pupils have an opportunity to collect information and use it. Teachers should consider using multimedia materials, databases, search websites and social networks in order to encourage scientific literacy. Technology and various computer programs open up new possibilities, for example to record the findings of research and to monitor and observe events that have taken or are taking place. In learning the natural sciences, pupils are trained in methods, searching for explanations and solutions, in carrying out studies and in evaluating findings. It is important that pupils are assigned simple observations and have an opportunity to have different experiences and draw conclusions from them. These observations may take place in the schoolroom, in the immediate surroundings of the school or at museums.

Nature is sensitive and has to be treated with consideration and respect. Studies in natural sciences at the compulsory school level have to take this into consideration. Iceland is part of the international community and children have to become aware of the fact that the decisions that people make and actions that they take affect the common resources of everybody on Earth. The objectives of environmental education are to make



people pay attention to their surroundings and show them consideration. There is a need to enhance pupils' perceptions of the environment and train them to analyse their own circumstances.

## 22.4 Assessment criteria for the natural sciences at the completion of compulsory school

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The *National Curriculum Guide* stipulates the assessment criteria for subjects, subject areas and key competences. Assessment criteria are a description of to what extent a pupil has acquired defined competence. The assessment criteria are only obligatory for Grade 10 where they support assessment at the completion of compulsory school. Schools are expected to define assessment criteria for other grades and describe them in the school curriculum guide. The assessment criteria for Grade 10 describe competence on a scale that appears in the *National Curriculum Guide*: the scale A, B, C, D is used, where A stands for exceptional competence, B for good competence, C for passable competence, and D for competence that does not reach the standard described in C.

Assessment criteria in category B are based on the competence criteria for Grade 10 and their presentation is such that generally pupils are expected to acquire the competences that are described there. A is for those who have acquired exceptional competence and C for those who do not quite meet the requirements that are set for the B criterion. No criterion is set for D as this assessment is used when the pupil does not meet the requirements that are set for the C criterion. In such cases the school explains the competence of the pupil in question. Each criterion is a general description of the pupil's competence.

In the final assessment it is of vital importance that teachers assess what the criteria stipulate, make sure that the assessment is based on reliable data and that they use varied methods to acquire data, to give pupils, their parents and the school as clear information as possible on their status. Thus teachers can gain better insight into the studies of each pupil. For an accurate conclusion, such as from conversations or on-site inspection, it may be relevant for teachers to cooperate when they consider the data that the assessment is based on and use precise criteria.

The assessment scale is obligatory at pupils' graduation at the completion of Grade 10. In other respects, schools may decide how they conduct their assessment, grading or school reports for pupils in other grades. School reports at the completion of Grade 10 are taken into consideration when pupils enrol in upper secondary schools and select study programmes.

The following issues may be useful in securing the reliability and validity of the assessment.

- Set clear criteria or describe what is to be assessed.
- Select assessment factors that are suitable for assessment criteria, study materials and teaching methods.
- Prepare a description of what is to be assessed or show examples of assignments that are of good quality.
- Ascertain that assignments are in accordance with criteria.
- Be aware of issues that could distort the conclusion.
- Make clear instructions for assessment methods, processing and interpretation of data.

### Assessment criteria

Pupils are able to analyse and explain in an independent and **informative** manner how factors such as technological level, knowledge, cost and infrastructure affect solutions to each problem. Explain and discuss in a **critical** manner their attitude and the results of actions concerning nature and society.



In an **orderly** and **effortless** manner, work according to an innovation process, that is, looking for needs in people's surroundings, finding solutions and designing a product, on their own or with others.

Evaluate and analyse in a **clear** and **independent** manner information concerning scientific and technological development and explain in an **informative** manner its effect on people's daily lives, take a **critical** stance towards ethical factors related to themselves, individuals, society, nature and technology. In an **informative** manner, apply concepts and terms in the natural sciences in a different context.

Carry out and explain **very well** indoor and outdoor studies. Give **informative** explanations and debate selected material from studies and sources. In an **orderly** and **clear** manner, draw conclusions from data and give different explanations by using different perspectives. Analyse and **explain**, in a **clear** manner, a text on the natural sciences, rephrase it, give an opinion and interpret visual material related to it in an **independent** manner.

Analyse and discuss examples from their surroundings and describe their effect on the quality of life and nature. **Discuss** with **clear** understanding, their view of life and responsibility in society and **explain** examples from their own lives.



**B** Pupils are able to analyse and explain **well** how factors such as technological level, knowledge, cost and infrastructure affect which solution to a project is selected each time. Explain and **discuss** their attitude and findings of activities concerning nature and society.

In an **orderly** manner, work according to an innovation process, that is, looking for needs in people's surroundings, finding solutions and designing a product, on their own or with others.

Evaluate and **analyse** in a **clear** manner, information concerning scientific and technological development and explain its effect on people's daily lives, take a **critical** stance towards ethical factors related to themselves, individuals, society, nature and technology. In a **clear** manner, apply concepts and terms in natural sciences in a different context.

Carry out and explain **well** indoor and outdoor studies. Give **good** explanations and discuss selected material from their studies and data. In a **clear** manner, draw conclusions from other sources and give different explanations by using different perspectives. Analyse and **explain** a text on the natural sciences, rephrase it, give an opinion and interpret in a **clear** manner visual material related to it.

Analyse and discuss examples from their surroundings and describe their effect on the quality of life and nature. **Discuss** with **clear** understanding, their view of life and responsibility in society. **Analyse** and **discuss** examples from their surroundings and explain examples from their own lives.

**B** Pupils are able to analyse **to a certain extent** how factors such as technological level, knowledge, cost and infrastructure affect which solution to a project is selected each time. Explain **to a certain extent** their attitude and findings of activities concerning nature and society.

Work **fairly well under supervision** according to an innovation process, looking for needs in people's surroundings, finding solutions and designing a product.

Evaluate information concerning scientific and technological development and explain their effect on people's daily lives, take a stance toward ethical factors related to themselves, individuals, society, nature and technology. Apply **common** concepts and terms in natural sciences in a different context.

Carry out and explain **fairly well** indoor and outdoor studies. Give explanations and discuss selected material from studies and data, draw conclusions from data.

Analyse and discuss a text on the natural sciences, rephrase it, give their view and interpret **fairly well** visual material related to it.

Analyse examples from their surroundings and describe **fairly well** their effect on the quality of life and nature. **Describe** their view of life and responsibility in society, using examples from their own lives.

## PHYSICAL EDUCATION

# 23

The educational values and main objectives of physical education are discussed in this chapter. The discussion is based on the six fundamental pillars described in Chapter 2, the emphases in education from Chapter 6 and key competences as defined in Chapters 9.4 and 18. Competence criteria are defined at the completion of Grades 4, 7 and 10. This is followed by a discussion of teaching methods and assessment based on the emphases that are illustrated in the competence criteria. Based on the competence criteria, teaching methods, as well as study materials and assessment methods, are to be selected and described in the curriculum guide of each school. The assessment criteria stipulated at the end of the chapter should be used, as appropriate, to describe the pupils' competence at the completion of compulsory school.

### 23.1 Educational values and main objectives of physical education

The *National Curriculum Guide* for compulsory school describes health and welfare as one of the fundamental pillars of school activities. Health involves mental, physical and social wellness that is dependent on the complex interaction of the individual, circumstances and the environment. As children and teenagers spend most of the day at school, school activities should be organised to enhance health and systematically encourage the welfare and wellness of the pupils. As a subject, physical education plays a significant role in the pupils' health education and fitness programmes all through compulsory school. When organising sport, all competence criteria should be kept in mind, in addition to the framework for the subject area stipulated in the reference timetable in the General Section of the *National Curriculum Guide*.

Methodical exercise and application of the body in physical education is an important part of the fitness programme and health promotion that pupils need at compulsory school. Exercise is defined as physical activity leading to energy consumption beyond basic metabolism. In order to affect the fitness of children and adolescents, this energy consumption has to reach at least six-fold the basic metabolism and to last at least thirty minutes each time. This is called average intensity. Exercise intensity is a concept for the rate of the exercise each minute. Another scale for intensity is the individual's heart rate as proportion of the individual's maximum heart rate, and this is called exercise heart rate.

By integrating study elements from physical education in other school subjects and all school activities new possibilities open up for a positive school atmosphere and the health-promoting environment that is necessary. This encourages the overall development and health of each individual. The health factors that should be emphasised are: exercise, positive self-image, nutrition, rest, mental wellbeing, creative thinking, positive communication, security, hygiene, sexual health and understanding of one's own feelings and those of others.

With emphasis on daily exercise and methodical training, the foundation is laid for the lifelong welfare of the pupils. Pupils should be instructed in exercise, their mobility enhanced and a secure environment created that encourages exercise. This should be the focal point of physical education and all other school activities. Additionally, the school environment should encourage healthy food through education and balanced food supply. The pedagogical and social values of meals should be emphasised.

Methodical exercise and a good physical condition have a positive effect on the educational performance of schoolchildren. By activating more sense organs, the function of the brain regions increases as intensified exercise escalates the oxygen saturation of the blood and blood flow to the brain. Thus exercise is intrinsically vital for all children. It is important to give pupils assignments that enhance physical factors, such as stamina to withstand prolonged pressure, physical strength to tackle maximal physical effort and static load, and flexibility that includes mobility and joint ranges. By teaching sport and competitive games, numerous goals are obtained at the same time, both physical, social and mental. Most important, however, is the joy and the wish to take part and exercise more; improved physical condition and self-confidence. By taking on a challenge, pupils learn that exercise and effort lead to success both in sport and in other studies.

In physical education pupils learn to know their own body and experience its possibilities for expression and creativity. This can encourage the self-confidence and self-image of the individual. Games involving singing and dancing, dramatic expression and creativity should be part of physical education, whether this takes place in special classes for physical education, in other subjects, or if it is organised as an integration of two or



more subjects. Sport is suitable for encouraging pupils' social, emotional and moral development. Games and cooperative projects demand that pupils show self-discipline and consideration. They also learn to collaborate and encourage their schoolmates. Furthermore, a number of games and projects are unthinkable without cooperation and coordination.

Physical education is an important subject for creating the circumstances for a healthy way of life for children and adolescents, to improve their competence in communication, increase stamina, build self-esteem, strengthen determination, and teach the setting of goals and stress management. Increased swimming competence strengthens self-image and the individual's self-confidence. Swimming is an effective health promotion as good swimming pools are generally readily available in Iceland. Hygiene, personal care, discussions on gender identities and stereotypes, on bullying and other forms of violence can easily be included in this subject.

In order to facilitate making decisions concerning their health, it is necessary that pupils understand the effect that culture, mass media and technology can have on their health and wellbeing. This is an essential element in their becoming critical and conscious consumers. In this context, information and communication technology is useful in physical education, as pupils have a means to obtain information, evaluate it and use it in their assignments.

Concurrently with mobility training, outdoor teaching offers possibilities for using all the sense organs by linking tasks to various aspects of subject areas and subjects. Therefore, outdoor teaching is an effective addition to regular physical education and, at the same time, through integration with other subject areas. A variety of mobility training is involved in outdoor activities, especially in natural surroundings. Outdoor teaching is a feasible link between health education and sustainability in everyday life. Pupils should know, understand and respect nature and their immediate surroundings, man-made or natural. Pupils learn to dress according to the weather and bring food and safety equipment on their trips. Sense of direction and management are important factors and relevant in outdoor tours.

Equal opportunities to study should be kept in mind in physical education and individual requirements should be taken into consideration. All pupils have to use their strengths to build a positive self-image. In this context, various hobbies and interests that pupils have may be used to promote exercise and health. This also offers an opportunity to consider the status of various groups regarding equality and meet different individual requirements. In addition, physical education offers various tasks where democratic work methods are applied so that pupils learn democracy by learning about democracy in a democracy. Everyone is entitled to consideration and respect. Physical education should counteract bullying through preventive measures, supervision and follow-up according to



the plans of each school. Physical education offers numerous opportunities for parental participation, both in preparation, realisation and evaluation. A sound relationship between home and school is relevant for physical education to obtain its goals of overall exercise and health promotion.

## 23.2 Competence criteria for physical education

The following competence criteria for physical education define the competences that the vast majority of pupils are intended to obtain. The criteria are stipulated in four categories: the first consists of body consciousness, skill and capacity; then social factors; next knowledge regarding health; and finally safety factors. Together these categories form the competences that each individual should have obtained at the completion of Grades 4, 7 and 10.

Body consciousness, skill and capacity		
At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>do exercises that test stamina,</li> <li>do exercises that test static balance and dynamic balance,</li> <li>show simple exercises that test flexibility and coordination,</li> <li>show some ball skills and take part in several ball games,</li> <li>take part in standardised tests,</li> <li>dive, roll over from prostrate to supine and back and take part in games in the water. Swim short distances using dolphin kicks, breaststroke, school backstroke, backstroke and crawl with or without aids.</li> </ul>	<ul style="list-style-type: none"> <li>do exercises that test aerobic stamina,</li> <li>do exercises that test strength and firmness of torso and limbs,</li> <li>do a complicated set of exercises that test flexibility and coordination,</li> <li>show skill in several different sports,</li> <li>take part in standardised tests to assess stamina and fitness, flexibility and coordination,</li> <li>without stopping, swim eight metres backstroke, crawl and underwater swimming, dive from the pool bank.</li> </ul>	<ul style="list-style-type: none"> <li>do exercises that test aerobic and anaerobic stamina,</li> <li>show and do strength training exercises that test maximal capacity and stamina, both stationary and dynamic,</li> <li>do flexibility exercises that test range of motion and mobility, show a set of complex motions that form a continuous whole, do rhythmic exercises and keep time,</li> <li>take part in team sports, individual sports and fitness programmes in school or elsewhere,</li> <li>make use of standardised tests to assess strength and fitness, flexibility and coordination,</li> <li>show skill in, and swim without stopping, breaststroke, backstroke, crawl, butterfly stroke and underwater swimming, and tread water.</li> </ul>

## Social factors

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>deal with the feelings that result from winning or losing a game,</li> <li>understand planning concepts in school sports and abide by rules,</li> <li>realise their body consciousness and the private parts of the body.</li> </ul>	<ul style="list-style-type: none"> <li>show respect and good behaviour whether they win or lose a game, and maintain positive and effective relations to enhance team spirit,</li> <li>explain the importance of having rules in games, abide by them both in team and individual sports,</li> <li>discuss body consciousness, sexual health, stereotypes in sport coverage and take an active stand against violence.</li> </ul>	<ul style="list-style-type: none"> <li>understand the importance of respect and good behaviour to enhance team spirit and understand the importance of effort, self-discipline, independent work methods, cooperation and consideration with regard to success in sports,</li> <li>know different types of rules, abide by them and show tact when playing, both in team and individual sports,</li> <li>discuss sexual health, stereotypes, effects of bullying and take an active stance against violence.</li> </ul>

## Health and increased knowledge

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>explain the importance of hygiene in sport and swimming,</li> <li>explain the physical difference between the sexes,</li> <li>use simple concepts regarding swimming, sport and physical exertion,</li> <li>know the names of the main body parts, quantity, proportion and motion concepts,</li> </ul>	<ul style="list-style-type: none"> <li>realise the value of health for the function of the body and importance of hygiene regarding sport and swimming,</li> <li>explain the different physical development of individuals and the sexes,</li> <li>use concepts related to swimming and sport,</li> <li>link the role of the nervous system, heart, blood circulation and lungs to physical exertion,</li> </ul>	<ul style="list-style-type: none"> <li>explain the main effects of exercise on physical and mental wellbeing and the importance of good nutrition for body growth and maintenance,</li> <li>discuss their responsibility for physical and mental health, both their own and that of others,</li> <li>explain training methods and use concepts regarding swimming and various sports,</li> <li>know the role that the main muscle groups of the body have regarding physical training,</li> </ul>

<ul style="list-style-type: none"> <li>• set themselves simple exercise goals in sports and fitness programmes and work towards them,</li> <li>• obtain and utilise simple information regarding sports,</li> <li>• make simple measurements and count during games,</li> <li>• take part in traditional Icelandic games and exercises,</li> <li>• take part in outdoor activities and prepare for them with regard to the weather. Know their way around their school district and know where to walk and cycle in their immediate neighbourhood.</li> </ul>	<ul style="list-style-type: none"> <li>• use the results of tests to set themselves short-time and long-time goals in sport and fitness programmes and work towards them,</li> <li>• obtain diverse information for preparation and carrying out assignments in physical education and outdoor activities,</li> <li>• use measurements with diverse measuring accuracy for assessing capacity,</li> <li>• take part in Icelandic wrestling and various games,</li> <li>• take part in outdoor activities in a responsible manner with regard to circumstances and find their way using a map.</li> </ul>	<ul style="list-style-type: none"> <li>• set themselves short-term and long-term goals in sport and fitness programmes, plan and carry out their own training programme on the basis of test results,</li> <li>• obtain and utilise information for overall fitness programmes and assessments of their own health,</li> <li>• use measurements and different measurement accuracy for assessing capacity,</li> <li>• take part in various games,</li> <li>• show responsibility in outdoor activities. Explain map symbols, use a compass for orientation and find their way using a map.</li> </ul>
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### Safety and organisation rules

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>• abide by rules on safety, organisation and conduct in swimming pools, sports facilities and react to accidents.</li> </ul>	<ul style="list-style-type: none"> <li>• realise the importance of rules on safety, organisation and conduct and make decisions based on this. Apply the main measures of first aid and resuscitation and save a peer by swimming a short distance.</li> </ul>	<ul style="list-style-type: none"> <li>• make decisions based on rules on safety and conduct and react to unexpected circumstances. Explain and carry out the main measures of first aid, resuscitation and saving from water and the use of rescue equipment. Use rescue swimming for saving peer.</li> </ul>

## 23.3 Teaching methods and assessments in physical education

Teaching methods in physical education, including swimming, focus on meeting the requirements of pupils who are growing up and are at a sensitive age when they are changing rapidly. For this to be successful, special attention should be paid to the physical activity of each pupil during classes, although other elements, such as academic input, are part of the teaching. Practical classes should be organised so that each pupil takes an active part in suitable assignments.

When planning the timetable, pupils should have enough time to get to and from the sports facilities and change clothes without this being subtracted from active time in class. Adequate time and a suitable number of pupils decreases stress and noise and thus increases mental wellbeing and health. Too much time may, however, cause inactivity and lack of concentration in class. Physical education should, therefore, be divided into classes throughout the week.

For swimming, pupils are expected to get a least one class on the timetable throughout the school year. Where this organisation is not possible, swimming is to be taught in annual courses. In such courses, each pupil is to have at least twenty classes. The hours that are not used for swimming should be transferred to physical education.

In accordance with the *Regulation on swimming pools and bathing places (No. 814/2010)*, swimming instruction should be organised so that on average there are fifteen pupils present in each class. To guard the safety of pupils in classes and ensure that the objectives of the instruction are met, there should not be more than fifteen pupils when they are ten years old and not able to swim. In organising swimming instruction, attention has also to be paid to the facilities that are used, such as changing rooms and the size of the pool. Cancellation of classes in swimming because of low temperature depends on circumstances at the swimming pool. Teachers evaluate the circumstances at the pool each time, such as visibility and temperature. In calm weather the standard is – 6°C. Additionally, the regulation addresses safety in swimming classes. Accordingly, the swimming instructor, in cooperation with the personnel of the swimming pool, annually, or at the beginning of each swimming course, surveys the main rules valid for the swimming pool and the procedures concerning swimming instruction in order to maximise the safety of pupils. The swimming instructor should also inform pupils about the risks that may be involved in swimming.

In view of how important swimming is in accident prevention and health promotion for citizens, an emphasis is put on all pupils becoming able to swim during their compulsory school years. In the later years of compulsory school, varied water exercises, where skill, strength and stamina are emphasised, increase the likelihood of pupils using water for exercising during their adolescent years and later in life.

In physical education, more than in other school subjects, pupils are prone to injuries or accidents. Sports instructors should, therefore, assiduously guard the safety of their pupils and make sure there is adequate space for them with regard to their age and development and the tasks set for each lesson. Furthermore, care should be taken that the equipment used each time is in order and used in a suitable manner. When organising exercises and games, circumstances also have to be taken into account in order to prevent accidents as far as possible. It often depends on the sports instructors and the personnel of sports and swimming facilities whether accidents are prevented or not. There are gyms where mattresses or goals are not securely fastened, objects are stacked so that they may fall, equipment is out of order and pupils allowed to do what may harm them or others. This also applies to swimming pools, where pupils jump from a high poolside on to floating equipment that may turn over and they then crash into the wall, pupils run on wet slippery surfaces, the temperature of tubs is too high, or overly frequent or long underwater swimming is tolerated in games. Underwater racing should be refrained from completely as this may lead to hyperventilation and drowning. Through careful planning and by reminding pupils to abide by the rules that are valid each time, it is possible to prevent most accidents and injuries.

Playing is fundamental to education at the youngest level, but it is also a dominant factor at later levels. The tasks are primarily, on the one hand, free activities in work and games, and, on the other, tasks that are either done freestyle or according to instructions. The originality and independence of pupils should be encouraged and they should get positive reassurance from their teacher. The pupils' initiative in fitness programmes and participation in sport outside of school hours should be encouraged.

The school ground and its surroundings are convenient for various projects in physical education. Games and various mobility exercises should not only play a significant role in physical education but also in all school activities throughout the school day, in other school subjects and during breaks.

Playing is a means to encourage the pupils' interest. Integration of physical education with other school subjects is, therefore, expedient in interdisciplinary cooperation. An example of this is linking sustainability and outdoor activities, or academic education in the natural sciences regarding heart function, lungs and blood circulation with exercises that test endurance and capacity. Measuring distances, counting, timing, rhythm, etc., in physical education may form a link with other subjects, such as mathematics and music. Project work where pupils are to use information and communication technology in preparing for physical education classes is also a method that encourages interdisciplinary school work. This can be done at all age levels.

Competition comes up in games during lessons; this should be deliberately controlled so that the pupils' participation encourages their development. The enthusiasm of pupils



varies and therefore equality should be kept in mind when teams are picked; pupils should be taught politeness and to follow rules. When games are chosen, the different interests of the pupils should be taken into consideration and equal opportunities guaranteed for both sexes. Although the emphasis is on health promotion, and not the importance of competition in physical education, pupils should, all the same, be taught the core of competition, that is, to do one's best and be able to accept both losing and winning.

There is always a chance that some pupils do not feel at home in physical education and are unable to join the crowd. There can be various reasons for this, but it should be kept in mind that these are the individuals that most need encouragement and exercise. Teachers should find suitable assignments for these pupils in class or in special support classes. For the pupils who are ill at ease in general classes in physical education, it has proved useful to create special exercise classes for smaller groups where their individual capacity and status is taken into consideration. Exercise prescriptions, in cooperation with school healthcare and parents, are an example of successful methods for these pupils. Pupils who excel in sports also need suitable tasks within physical education. They could, for example, be engaged in peer tutoring in their class and present their sport to other schoolmates. Agreements made with sports clubs about participation in sport, academies, extra classes in fitness programmes, outdoor activities or presentations of sports are examples of electives that add motion classes to physical education.

### Age-specific emphases

During their first school years, children usually have a strong need for physical activity, they enjoy every game and possess a natural curiosity that encourages them to explore their surroundings. These requirements should be met when organising teaching and to maintain the pupils' motivation. For the first few years, sensorimotor games, role-play, games focusing on running, and systematic exercises that encourage the sensory organs of the body and improve gross and fine motor skills should play a leading role in physical education, but the emphasis should be on respect and tolerance. The above-mentioned elements should be linked to systematic enhancement of general fitness and stamina. Physical education in the first four grades should focus on running, jumping, throwing, catching, kicking and stationary and dynamic balance. Somersaults, rolling, grip strength, torso strength and firmness, coordination of eyes and hands/feet with and without a ball, and stamina when running.

For the first two years, the main objective of school swimming should be for the child to adapt to water through games and exercises that encourage the child's sensory organs in water. Swimming styles should be introduced, especially swimming kicks, for example crawl and backstroke where the strokes are simpler than kicks in breaststroke. It is important that the pupils' experience during lessons is positive and that they enjoy swimming classes. As children who begin learning to swim in Grade 1 of compulsory

school have highly diverse experiences of water, it is important that they get suitable tasks with well-structured planning in water adaptation, mobility exercises and gradual swimming instruction. Children should experience water as a pleasant environment and be aware of relevant safety measures. Children who do not feel secure in water find it difficult to learn the strokes and therefore it is important to organise the motor exercises through games, even games that they know, for example from sport. It is effective to begin swimming instruction with crawl and backstroke, with and without aids. In Grades 3 and 4 there is a gradual emphasis on the basic strokes in crawl, breaststroke, school backstroke and backstroke. For security reasons it is important to teach pupils to turn over from prone to supine. At the completion of Grade 4, pupils should have learnt the swimming styles to some extent and be able to manage in water as they are to have access to swimming pools unescorted from 1 June that year.

In Grades 5 to 7 there is an increased emphasis on health education, body consciousness and the pupils' experience of their environment through outdoor teaching and outdoor activities. In addition to practical classes, the pupils' knowledge of the values of exercise and fitness and their own evaluation of their status should be systematically increased. There should also be increased emphasis on safety measures in case of accidents in sport or swimming. With regard to the development of the nervous system of this age group, pupils are highly receptive to all motor exercises and are generally interested in learning. Therefore, emphasis should also be on various flexibility-oriented objectives, such as gymnastics, ball skills, throwing and jumping. Strengthening and limbering exercises that form the basis for the pupils' energy and posture should also be emphasised. Rope climbing is a good example of an exercise that is both strengthening and enhances coordination. Various sports and games are feasible for reaching these goals. In school swimming the main emphasis should be on skills and on teaching all the swimming styles, continuing what has already been achieved and to make pupils able to swim fairly well. There should also be an increased emphasis on using water for health promotion through various exercises, both while swimming and in a variety of strengthening exercises where water is used as resistance. Projects that encourage social, emotional and moral development should be specially favoured, as they can be used as the basis for discussions on sexual health, stereotypes in sport media coverage and prevention of bullying and other forms of violence.

At the lower secondary level it is necessary to link physical education to a greater extent with academic instruction in systematic fitness training, a healthy lifestyle, and to teach pupils to take responsibility for their health. Their knowledge of the structure and function of the body becomes the basis for pupils to build on. They should have access to varied training, for example general fitness training and various sports and public sports, and they should become, as far as possible, independent in their training. At this age, training in social skills, collective responsibility and consideration becomes a special



emphasis in group games and in discussions on social and ethical issues, stereotypes and gender identity. An emphasis on self-discipline is, among other things, linked to the capability of pupils to set their own objectives, explain training methods and measure their capacity. In school swimming, the emphasis should be on the pupils' experience. The objective of such an approach is to encourage the pupils' interests and prevent drop-out and poor study effort that is often characteristic at this age. Pupils are to be offered a variety of swimming lessons where water is used for general fitness training in addition to diverse games, such as water polo or other ball and apparatus games. Furthermore, pupils should learn the methods of swim training and other public water sports. At the lower upper secondary level, the importance of rescue measures should be increased, such as treading water and rescuing a schoolmate on to a life buoy or belt. Additionally, there should be training in rescue swimming with a schoolmate. At this age it is important to prepare pupils for choosing their own sport and fitness training outside of school. Pupils should have an opportunity for further training in what they are interested in and where they want to increase their skills and capacity.

Competence is more than knowledge and skills; it also involves attitudes and moral maturity, feelings and creativity, social skills and initiative. These features can hardly be assessed, except subjectively. The role of teachers of physical education, therefore, is to assist children and teenagers towards their own realistic self-evaluation, to make the criteria of the studies clear to them and how far they are achieving them.

The main objective of assessment is to obtain information that assists the pupils in their studies, encourages them and spurs them on. Assessment should also be kept in mind when studies are planned. As assessment serves different purposes, it is important that teachers apply diverse methods. Generally the role of assessment is defined as following:

Analysing assessment is primarily a means to define study problems. An example of this is motor skill testing. These tests are used during the first years of compulsory school to define the requirements of pupils for special assistance in additional motor skill training.

Status analysis is a means to examine the pupils' status at the beginning of their studies. Varied methods should be used, such as checklists or assessment scales for the pupils' self-evaluation or the evaluation of parents and teachers. The findings of the evaluation may show what capacity the pupils have mastered and what they have yet to obtain. This gives the teacher an opportunity to meet the requirements of the pupils in their studies. The basis of the evaluation is formative assessment where pupils regularly reflect on their studies, they should be aware of what criteria the assessment is based on and what the objectives are.

Formative assessment aims at monitoring the situation as the studies progress. It is a process to obtain information on the pupils' status in their studies and interpret it. The objective



of formative assessment is to use the findings to make necessary adjustments in studies and teaching. It is important to use varied assessment methods and assessment data in formative assessment, such as surveys, on-site inspections, conversations, questions, self-evaluation, peer assessment, portfolios, etc. Actually, this includes everything that contributes to the pupils' reflection on their studies. Formative assessment must be integrated in the studies, it should be regularly executed throughout the study period, and there should be clear performance criteria and precise and descriptive feedback for each pupil.

Final assessment is an assessment of the outcome of studies and teaching at the completion of the study period. This may include skills assessment, capacity assessment or showing some kind of a final product from what the pupils have been doing.

## 23.4 Assessment criteria for physical education at the completion of compulsory school

The *National Curriculum Guide* stipulates the assessment criteria for subjects, subject areas and key competences. Assessment criteria are a description of to what extent a pupil has acquired defined competence. The assessment criteria are only obligatory for Grade 10 where they support the assessment at the completion of compulsory school. Schools are expected to define assessment criteria for other grades and describe them in the school curriculum guide. The assessment criteria for Grade 10 describe competences on a scale that appears in the *National Curriculum Guide*: the scale A, B, C, D is used, where A stands for exceptional competence, B for good competence, C for passable competence, and D for competence that does not reach the standard described in C.

Assessment criteria in category B are based on the competence criteria for Grade 10 and their presentation is such that most pupils are expected to acquire the competences that are described there. An A is for those who have acquired exceptional competence and C for those who do not quite meet the requirements that are set for the B criterion. No criterion is set for D as this assessment is used when the pupil does not meet the requirements that are set for the C criterion. In such cases, the school explains the competence of the pupil in question. Each criterion is a general description of the pupil's competence.

In the final assessment it is of vital importance that teachers assess what the criteria stipulate, make sure that the assessment is based on reliable data and that they use a variety of methods to acquire data, to give pupils, their parents and the school as clear information as possible on their status. Thus teachers can gain better insight into the studies of each pupil. For an accurate conclusion, such as from conversations or on-site inspection, it may be relevant for teachers to cooperate when they consider the data that the assessment is based on and use precise criteria.



The assessment scale is obligatory at pupils' graduation at the completion of Grade 10. In other respects, schools may decide how they conduct their assessment, grading or school reports for pupils in other grades. School reports at the completion of Grade 10 are taken into consideration when pupils enrol in upper secondary schools and select study programmes.

The following issues may be useful in securing the reliability and validity of the assessment.

- Set clear criteria or describe what is to be assessed.
- Select assessment factors that are suitable for assessment criteria, study materials and teaching methods.
- Prepare a description of what is to be assessed or show examples of assignments that are of good quality.
- Ascertain that assignments are in accordance with criteria.
- Be aware of issues that could distort the conclusion.
- Make clear instructions for assessment methods, processing and interpretation of data.

## Assessment criteria

# A

Pupils are able to perform all swimming styles **very well** and have **very good** stamina in both swimming and running. Show **very good** strength and firmness in different muscle groups and **very good** coordination, flexibility, skill and endurance in exercises. Explain **with confidence** and **clear understanding** the rules for a team sport and individual sport and abide by them. Describe **in a clear manner** the values of a healthy lifestyle with regard to the function of the body. Explain and evaluate **very well** the concepts of the basic factors of training, explain different training methods and show suitable exercises. Name the main muscle groups of the body and explain **very well** and **clearly** their role. Explain and adapt **very well** to the safety and organisational rules of swimming pools. Carry out, explain and apply most measures in first aid, resuscitation and rescuing from water and use rescue equipment **with confidence**. Swim **with confidence** a 25-metre rescue swim with a peer.

Pupils are able to perform **well** all swimming styles and have good stamina in both swimming and running. Show **good** strength and firmness in different muscle groups and **good** coordination, flexibility, skill and endurance in exercises. Explain **with clear understanding** the rules for a team sport and individual sport and abide by them. Describe **in a clear manner** the values of a healthy lifestyle with regard to the function of the body. Explain and evaluate **well** the concepts of the basic factors of training, explain different training methods and show suitable exercises. Name the main muscle groups of the body and explain their role **well**. Explain and adapt to the safety and organisational rules of swimming pools. Carry out, explain and apply most measures in first aid, resuscitation and rescuing from water and use rescue equipment. Swim a 25 metre rescue swim with a peer.

**B**

Pupils are able to perform all swimming styles **fairly well** and have **fairly good** stamina in both swimming and running. Show **reasonably good** strength and firmness in different muscle groups and **fairly good** coordination, flexibility, skill and endurance in exercises. Explain **most of** the rules for a team sport and individual sport and abide by them and show tact when playing. Describe the values of a healthy lifestyle with regard to the function of the body. Explain and evaluate **fairly well** the concepts of the basic factors of training, explain different training methods and show suitable exercises. Name the main muscle groups of the body and explain **reasonably well** their role. Explain and adapt **fairly well** to the safety and organisational rules of swimming pools. Carry out, explain and apply most measures in first aid, resuscitation and rescuing from water and use rescue equipment. Swim a 25 metre rescue swim with a peer.

**C**

## SOCIAL STUDIES

# 24

The educational values and main objectives of social studies are discussed in this chapter. This discussion is based on the six fundamental pillars described in Chapter 2, the emphases in education from Chapter 6 and key competences as defined in Chapters 9.4 and 18. Competence criteria are defined at the completion of Grades 4, 7 and 10. This is followed by a discussion of teaching methods and assessment based on the emphases that are illustrated in the competence criteria. Based on the competence criteria, teaching methods, as well as study materials and assessment methods, are to be selected and described in the curriculum guide of each school. The assessment criteria stipulated at the end of the chapter are to be used, as appropriate, to describe the pupils' competence at the completion of compulsory school.

### 24.1 Educational values and main objectives of social studies

In this *National Curriculum Guide for Compulsory School* social studies include a wider sphere, and more subjects and categories, than in previous guides. Social studies now consist, for example, of subjects that have been taught in Icelandic schools under the common heading of social studies, sociology, as specific study categories or subject areas. These are mainly history, geography, sociology, religious studies, life skills and philosophy, and ethics. These studies are also based on knowledge and elements from other subjects within the social and humanistic sciences. These subjects and categories are not separated in this curriculum guide, it is left for the schools to decide how to organise the division of subjects in the most reasonable, convenient and effective way in each case. When organising social studies, all competence criteria should be kept in mind, in addition to the framework for the subject area stipulated in the reference timetable in the General Section of the *National Curriculum Guide*.

Social studies are those subjects that pertain to society and culture in an informative and critical manner. They are founded on the duty of each society to educate pupils about values such as equality, democracy, concern and respect, and the importance of these values for a happy life. Naturally, young people also obtain this education in other subject areas and elsewhere within the school system, as children have various role models. Social studies are intended to assist pupils in responding to the challenges of their environment and immediate surroundings in a sensible manner and to define for them their responsibility for the means that individuals choose in order to find their way among people anywhere. Social studies are intended to enhance pupils' understanding of certain basic qualities of human life and their division, by explaining how they entail various duties, rights and values as an inseparable part of social and ethical reality. Examples of such qualities are justice, knowledge, freedom, friendship, respect and responsibility.

The educational values of social studies consist of developing the competence of pupils to have meaningful relations with other people. This competence has three origins: 1) in relations with others that have already been formed, for example within the family; 2) in relations with oneself; 3) in forming new relations with others under various circumstances in social life in general. These origins and educational values of social studies may be explained further in the following way:

1. Pupils' competence to understand the reality (the environment, society, history and culture) into which they are born, based on their own experience. *Social studies are intended to enhance this competence by widening and deepening the pupils' experience.*
2. Pupils' competence to understand themselves is based on the image that they form of themselves (and others) in their minds. *Social studies are intended to enhance this competence by widening and deepening the pupils' inner world.*
3. Pupils' competence to form and develop their relations with others is based on the social life that they have already taken part in. *Social studies are intended to enhance this competence by encouraging the pupils' participation in their social world, in the values and rules that are valid there.*

The objective of social studies is to encourage the pupils' understanding of the numerous ideas and ideals on which our attitudes towards the environment, natural resources, culture and history are based. They are intended to enable pupils to approach social and ethical issues through discussion and form their attitude by reasoning. The objectives of social studies should be to enable pupils to play their role as participants in the complex interaction of the formative areas of life in a creative manner. Pupils should be given guidance in democratic work methods as they may appear in all these areas, whether it is the family, friends, school, local community or society in the wider sense. Social studies aim at pupils learning fairness, evaluation and responsibility, which are based

on, among other things, putting themselves in the position of others, and, furthermore, the competence to anticipate the consequences of their actions for their own interests, the environment and society as a whole. It is, for example, important that pupils accept responsibility for their financial affairs and, at the same time, become critical consumers and able to understand offers that are presented in various ways.

Social studies share their subject matter, values and objectives with various other school subjects and subject areas. Their unique position is to give pupils valuable tools to develop their understanding of themselves, of other people and of the environment and society that they live in. Pupils are trained in analysing various data, interpreting different references and evaluating narratives of people's diverse living conditions and the development of society and culture. Pupils learn about their rights and duties, about responsibility and social institutions. Social studies encourage both critical and creative thinking; they encourage pupils to support their ideas and to appreciate consistency in opinions. By making use of disciplined discussions and good quality teaching materials, pupils have an opportunity to deal with crucial and controversial questions on possible living conditions, and the success of individuals and societies in the past, present and future.

Each discipline within social studies has a specific purpose so that the overall values and objectives of the studies can be obtained. History is based on comprehensive and varied examination of data on past societies and individuals up to the present time. Geography deals with variable living conditions of the inhabitants of the Earth with regard to the interaction of man and nature. Religious studies are intended to enhance the understanding of prevailing religions and different religious traditions based on tolerance and broadmindedness. Ethics teaches how moral values may be examined, enhances moral sense and discusses controversial ethical issues. Discussions on the main challenges of modern life refer to knowledge that has been obtained in the subjects mentioned above and rely on the traditions and methods that pupils have been trained in within these subjects. Subjects, such as life skills and sociology, are also important for fostering, in a creative manner, the pupils' daring, initiative, role, responsibility and self-image as they face important questions regarding both their external and inner world and their social world.

## 24.2 Competence criteria for social sciences

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The competence criteria for social sciences are linked to the fundamental pillars of education and divided into three categories; that is, their external world, the inner world and the social world. Furthermore, they try to achieve the emphases of the *Compulsory School Act* and the *National Curriculum Guide for Compulsory School*. Each competence criterion is based on at least one category and some of them are repeated several times. The components of the competence criteria are the following:

## EXTERNAL WORLD

Environment, society, history, culture: Pupils' competence to understand reality

- Daily life
- Sustainability
- Morality
- The status and history of Iceland
- Local community
- The Earth
- World history
- Religions
- Natural conditions
- Natural resources
- Values
- Natural processes
- Democracy
- Causation
- Multiculturalism
- Interpretation
- Family forms
- Administration
- The welfare state
- Politics
- Information literacy
- Critical thinking
- Map literacy
- Media literacy
- Source criticism
- Historical literacy
- Gender studies
- Search for meaning
- Cultural literacy
- Financial literacy

## INNER WORLD

Self-image: Pupils' competence to understand themselves and others

- Self-conscience
- Personality formation
- Evaluation
- Moral sense
- Education
- Health and welfare
- Stereotypes
- Fairness
- Responsibility
- Freedom
- Human values
- Solidarity
- Equality
- View of life
- Critical thinking
- Role models
- Sensitivity
- Creativity
- Expression
- Vision
- Reflection

## SOCIAL WORLD

Relations: Pupils' competence to form and develop relations with others

- Social consciousness
- Civil consciousness
- Tolerance
- Social conventions
- Civil duty
- Freedom and duties
- Social skills
- Sexual health
- Equality
- Justice
- Respect
- Human rights
- Concern and welfare
- Forgiveness
- Friendship
- Democracy
- Violence
- Conversation
- Critical thinking
- Expression
- Communication
- Creativity
- Play

## EXTERNAL WORLD

Environment, society, history, culture: Pupils' competence to understand reality

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>• recognise values, such as respect for themselves and others, concern and forgiveness,</li> <li>• point out the relationship of selected features in society, nature, religion and view of life, especially in the local community,</li> <li>• describe the connection of words, actions and effects,</li> <li>• find examples of the characteristics and status of Iceland in the international community with regard to its location, history and culture,</li> <li>• describe the characteristics and history of their local community and its relation to other regions in Iceland,</li> <li>• obtain and use knowledge of social issues from their study material and the media,</li> <li>• discuss society and use selected concepts in this context,</li> <li>• recognise several characteristics of changes in natural conditions because of exterior influence,</li> </ul>	<ul style="list-style-type: none"> <li>• show their understanding of important values, such as love, human sanctity, social justice, concern for others and all life,</li> <li>• explain the connection between society, nature, religion and views of life, past and present,</li> <li>• follow the process of cause and effect in people's conduct and point out positive solutions,</li> <li>• describe the characteristics and status of Iceland in the international community with regard to its location, variable culture, religion and views of life,</li> <li>• recognise the connection between their local community and the environment, history, culture and social activity,</li> <li>• obtain, evaluate and use information on cultural and social affairs from different data and media,</li> <li>• apply important concepts regarding cultural and social affairs,</li> <li>• describe natural processes that influence land and vegetation,</li> </ul>	<ul style="list-style-type: none"> <li>• show their understanding of the importance of respect for themselves and others, for human rights, social justice, equality and human sanctity,</li> <li>• reflect on the interaction of society, politics, nature, religion and views of life through the ages with regard to the local community and globalisation,</li> <li>• show their understanding of the nature of sustainable development and its importance for the environment, society and the economy,</li> <li>• discuss in an informed manner the characteristics and status of Iceland in the international community with regard to its location, history, variable culture, religion and views of life and polity,</li> <li>• show their understanding of their local community, explain its surroundings, history, culture, arts, social activity and economy,</li> <li>• obtain, use, reflect on and evaluate information on cultural and social affairs from oral presentation, conversation, text and visual presentation,</li> <li>• discuss important concepts used in cultural and social affairs,</li> <li>• describe natural processes that create and form land and influence climate and vegetation,</li> </ul>



<ul style="list-style-type: none"> <li>• describe examples of how climate and vegetation influence peoples' lives,</li> <li>• point out examples of the influence that technology and development projects on daily life and the environment,</li> <li>• recognise the values of nature and the environment and the importance of orderliness,</li> <li>• understand the role of maps and their usefulness,</li> <li>• describe events and people from selected periods related to their local community,</li> <li>• reflect on information and its value and validity,</li> <li>• point out a few factors that have influenced daily life through the ages, such as the environment and social structure,</li> <li>• describe the structure and formation of Icelandic society, past and present,</li> <li>• describe selected factors and periods in the history of their family and local community,</li> <li>• point out examples of how history appears in objects and memories,</li> </ul>	<ul style="list-style-type: none"> <li>• recognise how climate and vegetation influence residence and living conditions,</li> <li>• describe with examples the influence of technology and human activities on society and the environment,</li> <li>• recognise the utilisation and preservation of natural resources and the environment, how all individuals can take part in preservation,</li> <li>• use maps and graphs to obtain information,</li> <li>• discuss in an informed manner periods, events and people referred to in social discourse,</li> <li>• evaluate information and different points of view in coverage of history and the present,</li> <li>• reflect on various factors that have had historical influence, such as the environment, social structure and social movements,</li> <li>• describe the characteristics and development of Icelandic society and take examples of influential factors,</li> <li>• describe vividly specific elements of local and national history, near and far,</li> <li>• recognise how history appears in texts and objects, traditions and memories,</li> </ul>	<ul style="list-style-type: none"> <li>• explain the main characteristics of vegetation, climate, winds and ocean currents and how these factors influence different living conditions,</li> <li>• recognise the patterns of human activities that form and change the environment and living conditions,</li> <li>• understand the use of natural resources and the environment, and the value of the preservation of both with regard to sustainable development,</li> <li>• analyse and discuss information on maps and graphs and other forms of picture,</li> <li>• show their knowledge and critical view of periods, events, people, cultural bonds and courses of development during various periods that are referred to in social discourse,</li> <li>• understand the role of source material, perspectives and evaluation in history and shared memories,</li> <li>• realise how history has been formed by environmental factors, social structure, social movements and ideologies, voluntary actions and accidents,</li> <li>• explain and discuss the development of Icelandic society with regard to national and international influencing factors,</li> <li>• analyse defined factors within local and national history, near and far,</li> <li>• explain with examples how history appears in texts, objects, traditions and memories,</li> </ul>
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<ul style="list-style-type: none"> <li>• realise that people's religious and ethical opinions appear in different views, customs and traditions,</li> <li>• reflect on well-known questions regarding religion, view of life and conduct,</li> <li>• briefly describe several narratives, main holidays and traditions of the Christian church and other religions, especially in their local community,</li> <li>• distinguish between selected aspects of religion and views of life,</li> <li>• point out examples of biblical influence on society,</li> <li>• point out religious references in arts and literature,</li> <li>• recognise the importance of the family and the diversity of families in society,</li> <li>• point out examples of democratic factors in their local community,</li> <li>• point out several important social institutions,</li> <li>• recognise the value of interdependency in society,</li> <li>• recognise that they are part of a larger society,</li> </ul>	<ul style="list-style-type: none"> <li>• describe the diversity of the main religions and views of life and their influence on people's lives,</li> <li>• discuss topics regarding religion, views of life, morality and put them into context with events of daily life,</li> <li>• describe selected narratives, traditions, holy days, customs and symbols of the Christian church and other religions of the world,</li> <li>• compare selected religious and secular views of life,</li> <li>• point out examples of the influence of the scriptures of the main religions on culture and societies,</li> <li>• recognise religious references and expression in arts and literature,</li> <li>• explain the diversity of the family and different roles within it,</li> <li>• describe some characteristics of democratic societies,</li> <li>• describe the role of several social institutions,</li> <li>• describe ideas on interdependency and welfare and their realisation in society,</li> <li>• describe with examples how society is connected to the life of the individual,</li> </ul>	<ul style="list-style-type: none"> <li>• explain the diversity of religions and views of life and realise their influence on the life of individuals, groups and communities,</li> <li>• discuss and analyse topics related to religion, views of life and ethics regarding questions of the meaning and purpose of life,</li> <li>• show they are literate in narratives, traditions, theories, holy days, customs and symbols of the Christian church and the other main religions of the world,</li> <li>• discuss and compare different religions and views of life and recognise what they have in common and what is special for each,</li> <li>• analyse the influence of the Bible and the scriptures of the other main religions on culture and societies,</li> <li>• explain religious references and expression in arts and literature,</li> <li>• understand the role and diversity of the family and reciprocal influences within it in different periods and cultures,</li> <li>• explain different ideas of the structure and realisation of democracy</li> <li>• explain the role of the main social institutions and the structure of the administration and the formal relations of Iceland within the international community,</li> <li>• explain and discuss ideas on the welfare society and its connection with politics, the economy and ideologies,</li> <li>• describe the connection of politics and social structure with the life of the individual,</li> </ul>
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<ul style="list-style-type: none"> <li>describe the cost of their consumption and offers that encourage expenses and consumption,</li> <li>avoid risks in their home and neighbourhood.</li> </ul>	<ul style="list-style-type: none"> <li>show that they understand the cost of their consumption and that they understand the influence that various offers and advertisements have on their consumption and on society,</li> <li>see the value of reactions to accidents in the home, local community and nature.</li> </ul>	<ul style="list-style-type: none"> <li>take responsibility for their attitude towards their finances and consumption, be critical consumers, and set objectives based on their knowledge of the financial environment of individuals and society and the offers that are available,</li> <li>point out, prevent and react to various risks and accident traps in their surroundings and in nature.</li> </ul>
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## INNER WORLD

### Self-image: Pupils' competence to understand themselves and others

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>talk about themselves with regard to residence, origin, family, customs and traditions,</li> <li>point out the value of positive attitudes and values for themselves,</li> <li>point out examples of traditional gender roles and changes in them,</li> <li>describe what their strengths involve,</li> <li>point out role models that have influenced them,</li> </ul>	<ul style="list-style-type: none"> <li>describe themselves and take examples of factors that have influence on their self-image, such as the local community, environment and culture,</li> <li>describe with examples the values of positive attitudes, virtues and evaluation for their own self-consciousness,</li> <li>understand different gender roles in different fields and how they are formed and change,</li> <li>recognise their strengths and weaknesses,</li> <li>evaluate the influence of role models and stereotypes, how to deal with them in an independent and constructive manner,</li> </ul>	<ul style="list-style-type: none"> <li>reflect on and express who they are to themselves and others, explain how their self-image is formed by their surroundings, residence, politics and social conditions, history and culture, religious and secular views of life,</li> <li>support with arguments the values of a positive view of life, virtues and evaluation as an important factor in a healthy self-image,</li> <li>apply the concepts of sex, sexual orientation and gender roles and explain their role in the gender of individuals and their self-image,</li> <li>understand their own strengths and weaknesses and make decisions on the basis of this self-knowledge,</li> <li>evaluate the influence of role models and stereotypes in the formation of self-image and be brave enough to form their own image, lifestyle and view of life in an independent and responsible manner,</li> </ul>



<ul style="list-style-type: none"> <li>• understand and describe various feelings, such as joy, sorrow and anger,</li> <li>• describe their need for nutrition, rest, exercise and hygiene,</li> <li>• recognise that there are various stimuli, positive and negative, that influence them,</li> <li>• understand their equivalence with others,</li> <li>• put themselves in the position of their contemporaries,</li> <li>• set objectives for themselves and make plans for finishing specific tasks.</li> </ul>	<ul style="list-style-type: none"> <li>• describe various feelings and understand their influence on thinking and conduct,</li> <li>• adopt a healthy lifestyle,</li> <li>• evaluate the positive and negative effects of various stimuli in their surroundings on their lives and take a critical stance towards them,</li> <li>• understand their equivalence with others and discuss its meaning,</li> <li>• put themselves in the position of other people with different backgrounds in certain places and periods,</li> <li>• set objectives for themselves and make plans for a variety of tasks.</li> </ul>	<ul style="list-style-type: none"> <li>• describe the diversity of feelings and point out the interaction of feelings, thinking, behaviour and relations,</li> <li>• show their strength by taking responsibility for their own life, lifestyle and health,</li> <li>• analyse positive and negative stimuli and withstand pressure that puts their health and welfare in danger,</li> <li>• describe their equivalence with others and explain to others its importance,</li> <li>• put themselves in the position of other people with different backgrounds and attitudes, in various places and periods,</li> <li>• set objectives for themselves and plans for the future to aim for, in accordance with their strengths and interests.</li> </ul>
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## SOCIAL WORLD

Relations: Pupils' competence to form and develop relations with others

<b>At the completion of Grade 4, pupils are able to:</b>	<b>At the completion of Grade 7, pupils are able to:</b>	<b>At the completion of Grade 10, pupils are able to:</b>
<ul style="list-style-type: none"> <li>• take part in cooperation and conversation in a group of peers,</li> <li>• understand that people live in different family forms, have different backgrounds, and show respect for different views of life and lifestyles,</li> <li>• listen to and analyse different views,</li> <li>• discuss selected social and ethical issues,</li> </ul>	<ul style="list-style-type: none"> <li>• take part in democratic cooperation and conversation,</li> <li>• identify people's different backgrounds and respect their freedom to different religions, life values, views and ways of life,</li> <li>• evaluate and react to different views and information in a tolerant manner,</li> <li>• discuss different issues of a social and moral nature,</li> </ul>	<ul style="list-style-type: none"> <li>• take part, in an independent manner, in democratic cooperation and conversation,</li> <li>• explain with examples the diversity of human life and people's different origins, respect people's freedom to different religions, life values, opinions and ways of life,</li> <li>• evaluate information and opinions, react to them in a tolerant and fair manner,</li> <li>• examine social and ethical issues from different points of view,</li> </ul>

<ul style="list-style-type: none"> <li>• discuss their rights and duties in the local community and show responsibility in relations with others and be familiar with the United Nations Convention on the Rights of the Child,</li> <li>• express their knowledge and attitudes in various ways,</li> <li>• understand the value of equality in everyday life,</li> <li>• show consideration and respect in relations and cooperation with others,</li> <li>• understand the various effects of their actions,</li> <li>• show that they respect rules, both written and unwritten, in their relations with people, and give examples of such rules,</li> <li>• familiarise themselves with the affairs of the local community,</li> <li>• show consideration and concern in play and at work.</li> </ul>	<ul style="list-style-type: none"> <li>• take part in conversations on their position as participants in society, their rights and duties, show responsibility in their relations and understand their rights according to international conventions,</li> <li>• express their knowledge and attitudes in various ways, on their own or in cooperation with others,</li> <li>• point out examples of the values of equality and human rights in society and discuss the influence of stereotypes,</li> <li>• show fairness, self-confidence and respect in relations and cooperation with others,</li> <li>• talk about their own actions and their consequences,</li> <li>• discuss rules in people's relations and take part in forming common rules in cooperation with others,</li> <li>• take part in social affairs in a responsible manner,</li> <li>• show people around them consideration and concern.</li> </ul>	<ul style="list-style-type: none"> <li>• discuss their position as participants in society, rights, duties and values; show responsibility in relations, conduct and lifestyle, for example with regard to rights according to international conventions,</li> <li>• present their knowledge and opinions in a varied and effective manner, alone or in cooperation with others,</li> <li>• discuss the values of equality and human rights in all areas of society and know general provisions on human rights,</li> <li>• reflect on their own capability for action and realise the effects of their actions or inactivity,</li> <li>• explain the values of rules for people's relations within the family, group of friends or society as a whole and take part in forming such rules,</li> <li>• take part in social affairs in a responsible manner and be active in issues that concern the public good,</li> <li>• work for the welfare and benefit of their fellow citizens.</li> </ul>
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### 24.3 Teaching methods and assessment in social studies

The role of teachers in social studies is to give pupils an opportunity to develop their competence, to have meaningful relations with others, to guide them in democratic work methods and to give them the opportunity to develop their understanding of themselves, other people, the environment and the society in which they live. Teachers should assist pupils in understanding ideas and ideals that are the basis for attitudes toward the environment, natural resources and history. They should enable them to understand social and ethical matters or opinions. It is important that pupils have an opportunity to enrich their vocabulary and are trained in using it in different situations.



The teaching methods that can contribute to increased competence in social studies are, for example, discussions and questioning techniques that train conversation and critical thinking. Conversation is the forum for the enrichment of critical thinking. It is where pupils have an opportunity to deal with, reflect on and discuss as a group, and with their teacher, specific fields within the study material in a systematic, demanding and creative manner. Group work may create empathy, conversation, expression and deeper understanding, and also increase the understanding of the attitudes and views of others. It heightens self-understanding and increases self-confidence and the collective responsibility of the pupils. The goal may, for example, be to get pupils to reflect, exchange ideas and discuss, view a certain subject from different points of view, teach them to express themselves and show consideration for others. Pupils should always get an opportunity to talk about the subject that is under consideration each time and they should work as much as possible in small groups or pairs at solving problems. Comparison may also be organised around, for example, events, periods, ideas or methods. Such work methods call for integration of school subjects and subject areas. There are different implementations for group work, for example the story-telling method, theme studies and the settlement method.

Search methods are a constructive way to teach pupils scientific work methods and train them in obtaining information and using it in an orderly manner. Examples of such methods are the documentation method, field trips and interviews. Work on source material is, therefore, a significant part of teaching social studies and the emphasis should be on pupils' information literacy. Information literacy is defined as the individual being able to find, locate, evaluate, organise and use information in an effective manner to address the issues and tasks at hand each time. It is important that pupils learn to use the school library and the Internet for research. It is necessary to train pupils in evaluating, in a critical manner, the value and validity of different sources and what methods are most effective in searching for information and processing of sources. Interviews give pupils an opportunity to use oral sources. They find interviewees within the family or their immediate surroundings, people who are linked to the subject that they are researching; they can prepare questions and then elaborate the sources that they have obtained. Pupils should have an opportunity to link their local community with the subjects that they are working on each time. Field trips are defined as a teaching method where pupils go to the scene and thus try to connect learning to reality outside the classroom. It is, for example, important that pupils have an opportunity to take part in what is happening in society and to actually show that they are concerned about their fellow beings and environment, for example through volunteer work that the society benefits from. It is important to make use of the opportunities that the subject matter of social studies offers to pupils for becoming responsible and critical citizens and consumers, who recognise the stereotypes and the offers that are made in various ways for consumption and lifestyle.

Class meetings are an example of a method that tests democratic organisation, tolerance and mutual respect for the opinions of others. At such meetings all the pupils have to have a chance to express themselves and learn to show consideration for others according to fixed rules. At these meetings it is possible to discuss current affairs, matters of opinion or activities at school or in life in general and try to find a common ground. Dramatic expression and role play are also teaching methods where pupils practise putting themselves in the position of others and confront imaginary situations, social issues and matters of opinion.

Teaching, learning and assessment constitute a whole. Assessment is part of the teaching and learning process and organised as far as possible in accordance with the curriculum guide, the competence criteria and the pupils' assignments. The assessment should be varied and give a comprehensive picture of the pupil's competence. It should be fair and give the pupils an opportunity to show their knowledge, skills and talents. The main objective of the assessment is to examine the pupils' status and to use the outcome to guide them in their studies and how they can achieve its objectives. The assessment of the pupils' competence and progress should be a regular factor in school activities and be organised in such a way that its outcome is as useful as possible for the pupils, teachers, parents and school authorities.

There should be an emphasis on formative assessment that is based on pupils regularly reflecting on their studies with their teachers in order to approach their objectives and decide where to head. Through such assessments both teachers and pupils regularly obtain information concerning study progress and whether the teaching is effective. It is important that pupils know the prerequisites of the assessment; what is expected of them and how it will be assessed, and that they get descriptive feedback on where they should improve. Social studies emphasise, for example, theme studies, documentation and field trips, which require that the teacher's assessments of the pupils' assignments are carried out in close cooperation with other teachers.

In social studies it is important that teachers apply varied assessment methods and assessment data, both individual and group assignments. These can be oral, practical and written assessments, such as performance assessments, written examinations, assessment of written material, assessment of pupils' conversations, assessment scales, etc. Furthermore, it is important that pupils are active participants in their assessment. Self-evaluation and peer assessment give teachers and pupils information that could not be obtained in another way, but require pupils having a responsible attitude and an understanding of themselves and others. Pupils should have an opportunity to keep a variety of assignments that show their knowledge, skill and competence, something that could be done in portfolios, either actual or electronic.

Education in social studies should be linked to the pupils' previous experience and



they should have an opportunity to have a say in what they learn and how. Selecting assignments enables pupils to work on what they are interested in or are curious about and to reflect on their experience. It is important to make use of their experience and immediate surroundings and link their tasks to their everyday life and society. Social studies offer numerous opportunities which schools should by all means use to further the collaboration of home and school. Parents should, indeed, be encouraged to participate in various ways in their children's education.

## 24.4 Assessment criteria for social studies at the completion of compulsory education

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The *National Curriculum Guide* stipulates the assessment criteria for subjects, subject areas and key competences. Assessment criteria are a description of to what extent a pupil has acquired a defined competence. The assessment criteria are only obligatory for Grade 10 where they support assessment at the completion of compulsory school. Schools are expected to define assessment criteria for other grades and describe them in the school curriculum guide. The assessment criteria for Grade 10 describe competences on a scale that appears in the *National Curriculum Guide*: the scale A, B, C, D is used, where A stands for exceptional competence, B for good competence, C for passable competence, and D for competence that does not reach the standard described in C.

Assessment criteria in category B are based on the competence criteria for Grade 10 and their presentation is such that most pupils are expected to acquire the competences that are described there. An A is for those who have acquired exceptional competence and C for those who do not quite meet the requirements that are set for the B criterion. No criterion is set for D as this assessment is used when the pupil does not meet the requirements that are set for the C criterion. In such cases the school explains the competence of the pupil in question. Each criterion is a general description of the pupil's competence.

In the final assessment it is of vital importance that teachers assess what the criteria stipulate, make sure that the assessment is based on reliable data and that they use a variety of methods to acquire data, to give pupils, their parents and the school as clear information as possible on their status. Thus teachers can gain better insight into the studies of each pupil. For an accurate conclusion, such as from conversations or on-site inspection, it may be relevant for teachers to cooperate when they consider the data that the assessment is based on and use precise criteria.

The assessment scale is obligatory at pupils' graduation at the completion of Grade 10. In other respects, schools may decide how they conduct their assessment, grading or school reports for pupils in other grades. School reports at the completion of Grade 10



are taken into consideration when pupils enrol in upper secondary schools and select study programmes.

The following issues may be useful in securing the reliability and validity of the assessment.

- Set clear criteria or describe what is to be assessed.
- Select assessment factors that are suitable for assessment criteria, study materials and teaching methods.
- Prepare a description of what is to be assessed or show examples of assignments that are of good quality.
- Ascertain that assignments are in accordance with criteria.
- Be aware of issues that could distort the conclusion.
- Make clear instructions for assessment methods, processing and interpretation of data.

## Assessment criteria

Pupils are able to show **very good** understanding of the nature of sustainable development and its value for the environment, society and the economy. In an **orderly, independent** and **critical** manner obtain, use and evaluate information on cultural and social issues whether it is oral or appears in conversation, texts or various media. **Analyse** and **in a clear manner** explain different ideas on democracy, in an independent and critical manner **support** the value of positive views of life, virtues and evaluation for a healthy self-image and responsibility as a citizen and consumer. In an **independent** and **critical** manner, analyse and **precisely** describe the influence of role models and stereotypes on the formation of self-image and in an **orderly** and **critical** manner discuss social and ethical issues from different points of view. Finally, **discuss** and **analyse** in a **critical** and **orderly** manner their status as participants in society, their rights, duties and values.





## B

Pupils are able to show understanding of the nature of sustainable development and its value for the environment, society and the economy. In an **orderly** and **independent** manner obtain, **use** and evaluate information on cultural and social issues whether they are oral, appear in conversation, texts or various media. Explain different ideas on democracy; **support** the value of positive views of life, virtues and evaluation for a healthy self-image and responsibility as a citizen and consumer. In an **independent** manner **analyse** and describe the influence of role models and stereotypes on the formation of self-image. In an **orderly** manner discuss social and ethical issues from different points of view. Finally, **discuss** and **analyse** their status as participants in society, their rights, duties and values.

## C

Pupils are able to show **fairly good** understanding of the nature of sustainable development and its value for the environment, society and the economy. **To a certain extent** obtain, **analyse** and evaluate information on cultural and social issues whether they are oral, appear in conversation, texts or various media. **Describe** different ideas on democracy, **to a certain extent support** the value of positive views of life, virtues and evaluation for a healthy self-image and responsibility as a citizen and consumer. **Describe** the influence of role models and stereotypes on the formation of self-image. Discuss social and ethical issues from different points of view. Finally, **analyse** their status as participants in society, their rights, duties and values.

# MATHEMATICS

# 25

The educational values and main objectives of mathematics are discussed in this chapter. This discussion is based on the six fundamental pillars described in Chapter 2, the emphases in education from Chapter 6 and key competences as defined in Chapters 9.4 and 18. Competence criteria are defined at the completion of Grades 4, 7 and 10. This is followed by a discussion of teaching methods and assessment based on the emphases that are illustrated in the competence criteria. Based on the competence criteria, teaching methods, as well as study materials and assessment methods, are to be selected and described in the curriculum guide of each school. The assessment criteria stipulated at the end of the chapter are to be used, as appropriate, to describe the pupils' competence at the completion of compulsory school.

## 25.1 Educational values and main objectives of mathematics

Since time immemorial, mathematics has been a significant part of culture. The objectives of mathematics are to discover, create, express and explain any form of regularity, law, system or pattern. It is, therefore, an important means for mankind to create meaning and understand nature and society. It is also a tool to influence both. Throughout history, the concepts and symbolic language of size, space and rules have developed with humanity's endeavour to gain control of the environment and increase its ability for action. Numbers and algorithms are, for example, used to communicate, organise, draw conclusions and make sensible decisions concerning production and consumption. Thus sustainability is encouraged. In mathematics we also research the nature of numbers, arithmetic operations, shapes, changes and laws, without reference to the material

world. When organising the teaching of mathematics, all competence criteria should be kept in mind, in addition to the framework set for the subject area in the reference timetable of the General Section of the *National Curriculum Guide*.

Mathematics helps us to describe circumstances precisely and to explain causation within them, interpret data, and to predict and influence development. Our society and the innovation within it is characterised by systems that are based on the utilisation of mathematics. This can be, for example, electoral systems, coding of information on the Internet, positioning systems, mobile phones, weather forecasts, computer games, animated films, databases and any statistical processing of information. Science and various other fields of study extensively use the concepts, findings and methods of mathematics. Mathematical competence is, therefore, the prerequisite of literacy and creation in most fields of technology, the humanities and occupational culture. In addition, it helps people to make sensible decisions in everyday life, decisions that affect health and welfare, and to participate in a constantly developing democratic society.

Mathematics is an abstract field of study where all findings are substantiated. It has through age-old studies become an international language and a tool to convey information and ideas and process them. Mathematics also has its own aesthetics, which pupils should have an opportunity to become familiar with by working on mathematical patterns, shapes, connections and reasoning from different points of view.

The main objective of studying mathematics is for pupils to acquire the overall competence to use mathematics as a living tool for a range of purposes and in a variety of circumstances. In their mathematical studies, pupils should develop the ability to propose and solve assignments, to reflect on different methods and models that may be useful in solving them and to evaluate their findings.

Teaching mathematics at school should encourage pupils to:

- adopt the view that it is useful to have mastered mathematical competence and that by making an effort they can do so,
- acquire the competence to propose and solve problems by using mathematics and evaluate their own solution methods and those of others,
- acquire the competence to use mathematical concepts and analyse their connections,
- acquire the competence to use the language of mathematics to discuss, support and explain their own hypotheses and those of others, calculations and findings,
- acquire the competence to use mathematics as a tool to solve problems and analyse what methods are most suitable each time.

Mathematical competence involves having a clear understanding of mathematics, being able to use it to question and answer, and being able to use its language and tools. To acquire this competence, pupils need to develop a positive view of mathematics, self-confidence and the view that mathematics is sensible and useful. This involves being able to seek solutions and propose mathematical problems in various ways by applying creative thinking, reflection, arguments and the presentation of mathematical models. Furthermore, pupils should develop an understanding of mathematical concepts, operations and relationships. They should have mastered flexible, effective, precise and suitable methods to solve any kind of problems. They need the ability to propose, code and solve mathematical problems and to use aides for mathematical assignments, including information technology. Mathematical competence involves being able to express themselves with mathematics, explain their thinking about it to others, discuss solution methods and verify their solutions and those of others.

In a democratic society informed public discussion on matters of opinion is based on people being able to discuss and refer to statistical data and theoretical laws, which are often presented in the language of mathematics. Mathematical studies should aim at pupils developing the competence to support and evaluate the rationale of others by using mathematical means.

The teaching of mathematics based on cultural diversity takes into consideration that mathematics has developed according to the needs of people to solve the problems of different societies. Pupils should become familiar with the history of mathematics, and how important concepts and methods have developed through the ages. They should have an opportunity to reflect on the importance, usefulness and limitations of mathematics in everyday life, in other subjects and in historical context to understand its value and influence on our culture, technology and social structure. Teaching should be organised so that pupils develop and maintain an interest in mathematics, and gain confidence in their ability to apply it in different circumstances and in solving various problems. Teaching should be based on respect for pupils' ideas and diversity and strive to make mathematics a source of meaning. In this way, mathematics may become a tool that they can use to examine their surroundings and society in a critical manner and to enhance equality. Mathematics may also encourage critical thinking and the pupils' increased sense of responsibility in everyday life, for example in making decisions about their personal finance and consumption.

## **25.2 Competence criteria for mathematics**

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The competence criteria for mathematics are detailed in seven different categories. The first three categories are general criteria for mathematical competence and the remaining four categories consist of competence in various fields of mathematics. Although the

criteria are categorised in this way, it is important to think of them as a whole. When one criterion is considered, it should be kept in mind that learning is a continuous process and creative activity, rather than obtaining limited knowledge and training in a specific skill.

### Being able to ask and answer in and with mathematics

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<p><i>express themselves about mathematics, explain to others their thoughts about it, seek solutions and present them in various ways by applying creative thinking, reflection and reasoning and to follow the reasoning of others,</i></p> <ul style="list-style-type: none"> <li>• take part in conversation on questions and answers that are characteristic for mathematics,</li> <li>• solve mathematical problems that offer opportunities to apply insight, use concrete objects and their own diagrams,</li> <li>• propose, process and interpret simple mathematical models, number lines, diagrams and graphs related to their surroundings and everyday life,</li> <li>• discuss with insight mathematical problems concerning their own experience, support their findings and choice of algorithms, and follow the reasoning of others.</li> </ul>	<p><i>express themselves about mathematics, explain to others their thoughts about it, seek solutions and present mathematical problems in various ways by applying creative thinking, reflection, informal and simple, formal reasoning, and to follow and evaluate the reasoning of others,</i></p> <ul style="list-style-type: none"> <li>• ask, express themselves, orally and in writing, on questions and answers that are characteristic for mathematics, and to have insight into what kind of answers to expect,</li> <li>• solve mathematical problems that offer opportunities to apply insight, their own interpretation and presentation based on previous experience and knowledge,</li> <li>• propose, process, interpret and analyse simple mathematical models, drawings and graphs related to their surroundings and everyday life,</li> <li>• propose informal and simple, formal mathematical arguments, understand and evaluate oral and written arguments that are proposed by others.</li> </ul>	<p><i>express themselves about mathematical topics and reality by using the language of mathematics, verbally explain to others their thoughts about it, seek solutions and present mathematical problems in various mathematical forms by applying creative thinking, reflection and reasoning, present, analyse, interpret and evaluate mathematical models,</i></p> <ul style="list-style-type: none"> <li>• distinguish between definitions and theorems, between single instances and generalisations; use this knowledge to present and discuss mathematical concepts, their purpose and limitations,</li> <li>• find, propose and define mathematical problems, both related to everyday life and mathematical issues, evaluate solutions, for example with the aim of forming generalisations from them,</li> <li>• set up, interpret and critically scrutinise a mathematical model of real conditions; this may include calculation, drawings, graphs, equations and functions,</li> <li>• find arguments for and discuss statements concerning mathematics, understand and evaluate arguments that are proposed by others and work with simple proofs.</li> </ul>

**Being able to use the language and tools of mathematics**

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<p><i>apply concepts and mathematical notations and suitable tools, including manipulatives, algorithms, number lines, calculators and computers for research and conversation on mathematical problems,</i></p> <ul style="list-style-type: none"> <li>• use imagery, narrative and texts, along with the mathematical notations, and work with their interconnections,</li> <li>• interpret and use simple mathematical symbols, including numbers and operation symbols and link them to daily life,</li> <li>• take part in conversations on mathematical problems,</li> <li>• use suitable tools, including concrete data, algorithms, number lines, calculators and computers, for research and conversation on mathematical problems,</li> </ul>	<p><i>apply concepts and mathematical notations and suitable tools, including manipulatives, algorithms, number lines, calculators and computers, for research on mathematical problems and express themselves, both orally and in writing, on mathematical solutions,</i></p> <ul style="list-style-type: none"> <li>• on the one hand, use informal mathematical presentation, and, on the other, mathematical notations, and show that they understand their interconnections,</li> <li>• interpret and use simple mathematical symbols, including variables and simple formulae; interpret between mathematical notations and everyday speech,</li> <li>• orally and in writing, familiarise themselves with and express themselves on different ways to solve mathematical tasks,</li> <li>• select and use suitable tools, including concrete data, algorithms, number lines, calculators and computers, for research on mathematical problems.</li> </ul>	<p><i>apply concepts and mathematical notations to propose, code and solve everyday and theoretical problems, discuss solutions and make use of various aids for mathematical tasks, including information technology,</i></p> <ul style="list-style-type: none"> <li>• propose and use different presentations of the same phenomenon, whether it is concrete, visual, oral or algebraic presentation, or by using a table or graph,</li> <li>• decode mathematical notations, apply them in a meaningful manner, for example translate a text from everyday language into mathematical notations and understand the rules that apply for their use,</li> <li>• express themselves precisely on mathematical topics in speech, writing and visually, and interpret the presentation of others on mathematical tasks,</li> <li>• select and use various tools, including information technology, recognise their possibilities and limitations; use them effectively for researching mathematical problems and presenting their findings.</li> </ul>

## Work methods and application of mathematics

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<p><i>work alone and in cooperation with others on researching, analysing, interpreting and proposing hypotheses and find solutions to tasks related to everyday life using various methods and present their findings; read and evaluate a simple mathematical text,</i></p> <ul style="list-style-type: none"> <li>• take part in developing diverse solution strategies by, for example, using concrete data and drawings,</li> <li>• explore and research by proposing hypotheses and making experiments with concrete data,</li> <li>• read and discuss simple information where mathematical concepts are applied,</li> <li>• prepare and deliver short presentations of their own mathematical work,</li> <li>• cooperate with others on solving mathematical problems based on pupils' ideas,</li> </ul>	<p><i>work alone or in cooperation with others on researching, analysing, interpreting and proposing hypotheses and finding solutions to tasks related to society and the environment, using various methods and present their findings; read and evaluate a simple mathematical text,</i></p> <ul style="list-style-type: none"> <li>• take part in developing diverse solution strategies by, for example, using recording with numbers, texts and drawings,</li> <li>• explore, represent systematically and reason mathematically by, for example, using concrete data, recording and information and communication technology,</li> <li>• read a simple academic text and use information where mathematical concepts appear,</li> <li>• prepare and deliver short presentations of their own mathematical work,</li> <li>• cooperate with others on solving mathematical tasks based on diverse premises and pupils' ideas,</li> </ul>	<p><i>work in an organised manner, alone or in cooperation with others, on researching, analysing, interpreting and proposing hypotheses, and finding solutions, generalising about different tasks by using mathematical methods; read and evaluate mathematical texts, use suitable tools, such as computers and represent their findings,</i></p> <ul style="list-style-type: none"> <li>• take part in the orderly developing of diverse solution strategies, for example by using information and communication technology,</li> <li>• research, propose in an orderly manner, and discuss with the aim of generalising about mathematical topics,</li> <li>• prepare and deliver oral presentations and write a text about their mathematical work, for example by using information and communication technology,</li> <li>• cooperate with others on finding solutions to large and small mathematical tasks and react to others, for example by applying systematic inquiry,</li> <li>• work on authentic assignments concerning their surroundings where they gather and evaluate information and find solutions, for example related to their own financial affairs, consumption and social development,</li> </ul>



<ul style="list-style-type: none"> <li>• use mathematics to solve tasks of everyday life and recognise the value of money,</li> <li>• have a sense of the possibilities and limitations that exist to describe reality with mathematics.</li> </ul>	<ul style="list-style-type: none"> <li>• know the main concepts concerning financial affairs and work on social or environmental problems where information is gathered, processed and solutions found,</li> <li>• realise what the possibilities and limitations are in describing reality with mathematics.</li> </ul>	<ul style="list-style-type: none"> <li>• use what mathematics has to offer to describe reality and imitate real phenomena, for example by applying information technology, and recognise when it is effective and suitable to do so,</li> <li>• read mathematical texts, understand and appraise information put forward with mathematical notations.</li> </ul>
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## Numbers and calculation

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<p><i>record amounts and calculate with the natural numbers, take part in developing solution strategies when calculating and record their solutions according to the decimal numeral system,</i></p> <ul style="list-style-type: none"> <li>• use natural numbers, order them and compare,</li> <li>• write numbers according to the decimal system,</li> <li>• calculate with natural numbers, using concrete objects and abstract methods,</li> <li>• take part in developing effective methods based on their own understanding of solving addition, subtraction, multiplication and division problems,</li> </ul>	<p><i>express quantities and proportions, calculate with rational numbers, take part in developing solution strategies, write their solutions according to the decimal numeral system, make use of the coherence and connection in the arithmetic operations,</i></p> <ul style="list-style-type: none"> <li>• use rational numbers, order them and compare,</li> <li>• use base-ten notation and show that they understand the decimal number system,</li> <li>• note proportions and fractions in different ways and show that they understand the relation between fractions, decimals and percentages,</li> <li>• calculate with rational numbers, using modelling strategies and mental calculation,</li> </ul>	<p><i>use real numbers and calculate with rational numbers, analyse the coherence between numbers in different number sets, take part in developing algorithms, make use of coherence and connection in operations for calculations and use this knowledge in algorithms and the evaluation of them,</i></p> <ul style="list-style-type: none"> <li>• use real numbers and analyse the coherence between numbers in different number sets,</li> <li>• use place value notation and show that they understand its rules,</li> <li>• show examples of different presentations of proportions and fractions, explain the relationship between fractions, decimals and percentages,</li> <li>• solve problems based on everyday life and surroundings using mental arithmetic, calculators, computer programmes and written calculations,</li> </ul>



<ul style="list-style-type: none"><li>• solve problems based on everyday life and their surroundings, using mental arithmetic, calculators, computer programmes and written calculations,</li><li>• give an example of and show how simple fractions and proportions are used in everyday life.</li></ul>	<ul style="list-style-type: none"><li>• take part in developing effective algorithms with rational numbers based on their own understanding,</li><li>• solve problems based on everyday life and surroundings using mental arithmetic, calculators, computer programmes and written calculations,</li><li>• use fractions, decimals and percentages in their everyday tasks,</li><li>• make use of coherence and connection in arithmetic operations and use properties, such as the commutative property, associative property and distributive property.</li></ul>	<ul style="list-style-type: none"><li>• take part in developing effective algorithms with rational numbers based on their own understanding, use calculators and computers for this purpose,</li><li>• calculate with rational numbers, for example solving equations and other algebraic tasks,</li><li>• use fractions, decimals and percentages in calculating their everyday tasks,</li><li>• make use of coherence and connections in the arithmetic operations and use this knowledge in their calculations and evaluation of them.</li></ul>
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## Algebra

<b>At the completion of Grade 4, pupils are able to:</b>	<b>At the completion of Grade 7, pupils are able to:</b>	<b>At the completion of Grade 10, pupils are able to:</b>
<p><i>use diverse approaches to examine and represent patterns, express themselves on their regularities and solve simple equations,</i></p> <ul style="list-style-type: none"><li>• use diverse approaches to examine and represent number patterns and other patterns, express themselves on their regularities and predict their progression of patterns, for example by using models or other objects,</li><li>• use mathematical notations to evaluate truth values and express connections such as equality and order,</li></ul>	<p><i>examine patterns, use variables for unknown quantities, solve equations using informal methods and by applying algebraic rules for calculation,</i></p> <ul style="list-style-type: none"><li>• examine and represent numeric patterns in an orderly manner and work with geometric regularity, describe patterns and relatedness using numbers, diagrams, words and algebraic notations,</li><li>• use letters as variables for unknown quantities in simple expressions and equations,</li></ul>	<p><i>examine patterns and generalise on them, solve equations, use variables and describe their connection using expressions and functions,</i></p> <ul style="list-style-type: none"><li>• work with number sequences and geometric patterns to examine, organise and generalise about them by using algebraic expressions and write expressions with variables,</li><li>• solve equations and simple inequalities, solve together equalities with more than one unknown variable,</li></ul>

<ul style="list-style-type: none"> <li>• solve equations using informal methods and support their solutions, for example with models and other objects,</li> </ul>	<ul style="list-style-type: none"> <li>• find solutions for equations and inequalities using informal methods, that is using properties such as commutative, associative and distributive properties, both in mental arithmetic and written calculations.</li> </ul>	<ul style="list-style-type: none"> <li>• decide solutions for equalities and simultaneous equations using graphs and describe the connections between variables and functions.</li> </ul>
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## Geometry and measurement

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<p><i>use and research geometric concepts, work with geometric transformations, make models and draw diagrams, estimate and measure different metrological qualities using standardised and non-standardised measuring units,</i></p> <ul style="list-style-type: none"> <li>• use geometric concepts, such as shape, size and location to talk about objects and phenomena in everyday life and in their surroundings,</li> <li>• research informally two- and three-dimensional shapes, draw graphs of them and of objects in their surroundings,</li> </ul>	<p><i>use basic geometric concepts and work with geometric transformations, similarities and scales, make models and draw diagrams, estimate and measure angles, weight, space, temperature by using suitable scales, estimate and measure length, area and volume, and use the coordinate system, manipulatives and computers for this purpose,</i></p> <ul style="list-style-type: none"> <li>• use geometric concepts and methods to explain common and theoretical phenomena,</li> <li>• research and analyse two- and three-dimensional shapes, draw simple planar and three-dimensional graphs, reflect, rotate and translate planar graphs to research patterns that cover the plane,</li> </ul>	<p><i>use basic geometric concepts, use similarities, rules of angles and the coordinate system to draw and analyse geometric objects, propose simple geometric arguments, measure and calculate length, area and volume, and use computers for this purpose,</i></p> <ul style="list-style-type: none"> <li>• use the basic geometric concepts, including the concepts of scale, mutual configuration of lines, geometric transformations and the theoretical qualities of two- and three-dimensional forms,</li> <li>• draw diagrams and work with the drawings of others based on given premises, research, describe and estimate the connection between an object and a drawing of it,</li> </ul>



<ul style="list-style-type: none"> <li>• work with scales and shapes,</li> </ul>	<ul style="list-style-type: none"> <li>• use scales and similarities in relation with drawings, estimate perimeter, area and volume in real circumstances, research methods to measure this,</li> </ul>	<ul style="list-style-type: none"> <li>• use scales and work with similar shapes, explain the Pythagorean Theorem and the sum of angles in a polygon and apply it in various contexts. Also research rectangular triangles and calculate the lines of triangles and angles according to known qualities,</li> </ul>
<ul style="list-style-type: none"> <li>• estimate and measure different metrological qualities, such as length, area, volume, weight, time and temperature by using standardised and non-standardised measuring equipment and suitable scales,</li> </ul>	<ul style="list-style-type: none"> <li>• estimate and measure angles, weight, time and temperature using suitable scales and draw conclusions from their measurements,</li> </ul>	<ul style="list-style-type: none"> <li>• calculate perimeter, area and volume from their own measurements and explain what the measurement concept involves,</li> </ul>
<ul style="list-style-type: none"> <li>• carry out simple geometric research and experiments by using computers and manipulatives,</li> </ul>	<ul style="list-style-type: none"> <li>• carry out geometric research and experiments by using computers and concrete data,</li> </ul>	<ul style="list-style-type: none"> <li>• use computers to draw, research and propose arguments on geometric drawings,</li> </ul>
<ul style="list-style-type: none"> <li>• reflect and translate planar graphs to research patterns that cover the plane,</li> </ul>	<ul style="list-style-type: none"> <li>• use the coordinate system to express and solve geometric problems,</li> </ul>	<ul style="list-style-type: none"> <li>• propose simple geometric arguments and proofs and interpret the algebraic notations by using geometry,</li> </ul>
<ul style="list-style-type: none"> <li>• compare outcomes of different measurements and interpret their findings.</li> </ul>	<ul style="list-style-type: none"> <li>• link numbers and calculations to planar graphs and three-dimensional objects.</li> </ul>	<ul style="list-style-type: none"> <li>• interpret equations in the coordinate system and use drawings in the coordinate system to solve them.</li> </ul>

## Statistics and probability

<b>At the completion of Grade 4, pupils are able to:</b>	<b>At the completion of Grade 7, pupils are able to:</b>	<b>At the completion of Grade 10, pupils are able to:</b>
<p><i>examine their environment, process and interpret their findings, draw simple diagrams, take part in discussions on data acquisition, chances and probabilities and carry out simple experiments on probabilities,</i></p>	<p><i>carry out simple statistical experiments, process and interpret their findings, draw simple diagrams, take part in discussions on data and information, draw conclusions on probabilities and calculate probabilities in simple incidents,</i></p>	<p><i>use statistical concepts to organise, carry out and interpret statistical research, carry out and draw conclusions from experiments that involve probabilities and chance, use simple probability concepts and counting to calculate and interpret the probabilities of events,</i></p>

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| <ul style="list-style-type: none"><li>• gather data in their surroundings and on their interests,</li><li>• count, categorise and notate; interpret their findings and represent them in simple diagrams,</li><li>• take part in discussions on data acquisition and diagrams, both their own and those of others,</li><li>• take part in discussions on chance and probabilities, such as what is likely to happen and what is based on chance,</li><li>• carry out simple experiments on chance and recognise its influence in card games.</li></ul> | <ul style="list-style-type: none"><li>• gather and process data, communicate information about them, for example using tables and graphs,</li><li>• carry out simple statistical experiments and draw simple conclusions from them,</li><li>• fetch data from databases, read, explain and interpret data and information that are put forward in tables and graphs,</li><li>• draw conclusions about empirical probabilities based on their own experiments and compare to theoretical probabilities,</li><li>• calculate probabilities in simple incidents.</li></ul> | <ul style="list-style-type: none"><li>• use statistical concepts to put forward, describe, explain and interpret data,</li><li>• organise and carry out simple statistical experiments and draw conclusions from them,</li><li>• read, understand and evaluate information concerning probabilities represented in a statistical form, for example in the media,</li><li>• carry out experiments involving probabilities and chance and interpret their findings,</li><li>• use concepts such as conditional probabilities and independent events, use simple counting to calculate and interpret the probabilities of events.</li></ul> |
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## 25.3 Teaching methods and assessment in mathematics

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The role of the teacher is to encourage pupils to acquire competence in mathematics and offer them conditions for meaningful mathematical studies where pupils are active participants in researching, proposing and verifying hypotheses. The mathematics teacher should take an active part in pupils' work, discuss their assignments with them and be a role model for them in using mathematical language and arguments.

Teachers should select problems where pupils can use the knowledge that they have acquired to solve them. Problems should be meaningful and interesting to pupils. Teachers should create a desire to build, develop or become acquainted with the mathematics that it is important to have mastered and with problems that have a meaning and value for pupils while they are solving them. Pupils should have an opportunity for reflection and communication by reacting to the ideas of their schoolmates and teachers on the assignments. It is no less important that teachers try to ensure that their pupils' solutions fulfil the mathematical demands for clarity and precision in the use of concepts and arguments.

It is the mathematics teacher's responsibility to create conditions that encourage studies where the pupils' ideas are deservedly valued. In a classroom where the aim is that pupils acquire an understanding of mathematics, they cooperate, analyse, evaluate and build on each other's contributions. The teacher's reaction to pupils' ideas and different solution strategies has a decisive effect on the culture in the classroom and the pupils' respect for everyone's contribution towards creating a successful learning community. Pupils' mistakes create an opportunity to learn from them, analyse what went wrong and thus enhance their understanding of mathematics.

In mathematical studies, pupils should be allowed to use diverse tools to acquire an understanding of the work methods, concepts and laws of mathematics. Handling and using physical tools and various models to solve mathematical problems, facilitates pupils' understanding of mathematics. Reading of mathematical texts and the pupils' narratives, both oral and written, are their tools to promote understanding and acquire the competence to use mathematics as a tool to solve problems.

In a classroom where pupils have different preconditions for studying, the teacher indicates that everyone is to be shown respect by listening carefully to the ideas that each and every one has to offer. This is an effective way to encourage equality. In this way teachers and pupils have an opportunity to become acquainted with the ideas of different individuals and these ideas should be respected.

It is challenging to predict what kind of knowledge the children who are beginning school now should necessarily have learnt when they grow up. We know that those who

have mastered mathematics can apply it for implementation, influence and innovation under different conditions and can use it successfully in everyday life, for example to take responsibility for their own financial affairs and consumption. Compulsory school pupils should learn mathematics to encourage their understanding and for it to become meaningful to them. Teaching methods should take into consideration that mathematics is a creative subject and an effective tool for reasoning and critical thinking. Pupils should be active participants in creating meaning, sharing ideas with others and, in a constructive manner, learn from their own contributions and those of others.

The main objective of assessment in mathematics is to guide pupils through their studies and show them how they can achieve set goals. How far pupils obtain the competence criteria that are set for mathematics is recorded and their progress encouraged. Assessment of competence and progress is a regular feature of school activities and an inseparable part of learning and teaching. Assessment gives information about the pupils' progress of study, their competence, work methods and advancement and, additionally, it gives teachers valuable information on the planning of teaching and the organisation of learning.

When education is assessed it is essential to understand what the pupils are capable of doing and assessment assignments should aim at giving the pupils an opportunity to show their knowledge. Teachers should assist pupils to attain realistic self-evaluation, explain to them the objectives of mathematical education and how far they have progressed. There should be an emphasis on formative assessment, which is based on pupils periodically reflecting on their studies with their teachers in order to obtain their own objectives and decide on what to do. Formative assessment does not aim at judging achievement, but at assisting pupils in improving their achievement, using positive feedback and guidance. Formative assessment assists teachers in monitoring their pupils' development and study progress.

The prerequisites of the assessment should be clear to the pupils; they should correspond to the competence criteria and the emphases that are prevalent in the teaching. The study objectives and importance of study elements should be defined at the beginning of the study period so that the pupils are fully aware of the objectives, what is to be assessed and how that will be done.

Diverse aspects of the pupils' competence should be assessed and specific study elements should not gain too much weight. The form of assessment assignments should be varied and in coherence with teaching methods. Therefore, oral, practical and written assignments should be assessed, in addition to short specific tasks and more in-depth assignments, and individual and group work. Furthermore, assignments done at home or at school should be assessed. Homework should preferably use the possibilities of cooperation with pupils' homes on assignments concerning, for example, financial affairs and consumption.



To show their mathematical abilities, pupils should work on comprehensive assignments where they gather information, research, process their data and interpret their findings. Pupils may turn in their assignments by presenting or exhibiting their findings, in lectures or reports where : computer, information and communication technology is used as a medium. Assignments should be assessed on their own terms and be of reasonable importance in the final assessment.

Self-evaluation, both of individuals and groups, and peer assessment are an indisputable part of assessment. Teachers' interviews with pupils are an advantageous way to gather information about their knowledge and understanding of mathematics. A portfolio, for example electronic or a workbook where pupils gather their assignments and findings, can be well-suited for gaining an overview of their progress. Assessment should take into consideration pupils' special needs and specific learning difficulties, for example more time should be given to solving problems and special aids, assistance and oral assessment should be provided.

Pupils' attitudes may be examined through interviews and questionnaires on mathematical competence, specific study elements, work methods and their attitudes towards their studies in general. Furthermore, an organised survey with checklists may indicate pupils' views and progress. A portfolio where pupils put their best assignments may lead to positive self-evaluation and increased self-esteem and can demonstrate the pupils' attitudes. It is important to encourage the participation of parents in mathematical studies; that they support their children's studies as best they can and regularly receive information on both teaching and assessment.

## 25.4 Assessment criteria for mathematics at the completion of compulsory school

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The *National Curriculum Guide* stipulates the assessment criteria for subjects, subject areas and key competences. Assessment criteria are a description of to what extent a pupil has acquired defined competence. The assessment criteria are only obligatory for Grade 10 where they support assessment at the completion of compulsory school. Schools are expected to define assessment criteria for other grades and describe them in the school curriculum guide. The assessment criteria for Grade 10 describe competences on a scale that appears in the *National Curriculum Guide*: the scale A, B, C, D is used, where A stands for exceptional competence, B for good competence, C for passable competence, and D for competence that does not reach the standard described in C.

Assessment criteria in category B are based on the competence criteria for Grade 10 and their presentation is such that most pupils are expected to acquire the competences that are described there. An A is for those who have acquired exceptional competence



and C for those who do not quite meet the requirements that are set for the B criterion. No criterion is set for D as this assessment is used when the pupil does not meet the requirements that are set for the C criterion. In such cases the school explains the competence of the pupil in question. Each criterion is a general description of the pupil's competence.

In the final assessment it is of vital importance that teachers assess what the criteria stipulate, make sure that the assessment is based on reliable data and that they use a variety of methods to acquire data, to give pupils, their parents and the school as clear information as possible on their status. Thus teachers can gain better insight into the studies of each pupil. For an accurate conclusion, such as from conversations or on-site inspection, it may be relevant for teachers to cooperate when they consider the data that the assessment is based on and use precise criteria.

The assessment scale is obligatory at pupils' graduation at the completion of Grade 10. In other respects, schools may decide how they conduct their assessment, grading or school reports for pupils in other grades. School reports at the completion of Grade 10 are taken into consideration when pupils enrol in upper secondary schools and select study programmes.

The following issues may be useful in securing the reliability and validity of the assessment.

- Set clear criteria or describe what is to be assessed.
- Select assessment factors that are suitable for assessment criteria, study materials and teaching methods.
- Prepare a description of what is to be assessed or show examples of assignments that are of good quality.
- Ascertain that assignments are in accordance with criteria.
- Be aware of issues that could distort the conclusion.
- Make clear instructions for assessment methods, processing and interpretation of data.

## Assessment criteria

# A

Pupils are able to express themselves in a **clear** and **varied manner** about mathematical tasks and reality with mathematical notations. Explain their thoughts to others in an **informative** manner, find solutions and propose problems in a **varied** and **precise** mathematical manner by applying creative thinking, reflection and reasoning. Propose, analyse, interpret and evaluate mathematical models with confidence in a **critical** and **clear** manner.

Use **with confidence** mathematical concepts and notations to propose, code and solve every-day and abstract problems and discuss solutions **in a critical manner**, select and use different aids for mathematical purposes, including information technology.

In an **independent** and **orderly** manner research, analyse, interpret, propose hypotheses, find solutions and generalise about any assignments with the assistance of mathematics. Read and **critically** evaluate mathematical texts. Select and use suitable tools, such as computers, and present their findings in a **clear** and **informative** manner.

Use real numbers and calculate **with confidence** with rational numbers, analyse **with confidence** the correlation between numbers in different sets of numbers. Be a **leader** in developing solution strategies, use correlations and connections of the arithmetic operations and use this knowledge **flexibly** in calculations and evaluations of them.

**Systematically** research patterns and **generalise** about them, solve equations **with confidence**, use variables in a flexible manner and describe their connection by algebraic expressions.

Use the basic concepts of geometry **with confidence** and **in a varied manner**. Use similarity, rules of angles and the coordinate system to draw, analyse and create geometric objects. Propose **precise** geometric reasoning, measure and calculate length, area and volume **with confidence** and use computers for this purpose.

Use statistical concepts **with confidence** to organise, carry out and interpret statistical research. Carry out and draw conclusions **in an independent and critical manner** from research involving probability and chance. Use probability concepts and counting **with confidence** to calculate and interpret the probability of events.

## B

Pupils are able to express themselves **in a clear manner** on mathematical tasks and about reality with mathematical notations. Explain their thoughts to others, find solutions and propose problems in a **varied** mathematical manner by applying creative thinking, reflection and reasoning. Propose, analyse, interpret and evaluate mathematical models **in a clear** manner.

Use mathematical concepts and notations to propose, code and solve common and academic problems and discuss solutions and use different aids for mathematical purposes, including information technology.

**In an orderly manner** research, analyse, interpret, propose hypotheses, find solutions and generalise about any assignments with the assistance of mathematics. Read and evaluate mathematical texts. Use suitable tools, such as computers, and present their findings in a **clear manner**.

Use real numbers and calculate with rational numbers, analyse the correlation between numbers in different sets of numbers. Take part in developing solution strategies, use correlations and connections of the arithmetic operations and use this knowledge in calculation and evaluation of them.

Research patterns and generalise on them, solve equations, use variables and describe their connection with algebraic expressions and functions.

Use the basic concepts of geometry in a **varied manner**. Use similarity, rules of angles and the coordinate system to draw, analyse and create geometric objects. Propose **simple** geometric reasoning, measure and calculate length, area and volume, and use computers for this purpose.

Use statistical concepts for organising, carrying out and interpreting statistical research. Carry out and draw conclusions from research involving probability and coincidence. Use probability concepts and counting to calculate and interpret the probability of events.



C

Pupils are able to express themselves **fairly well** about mathematical tasks and reality with mathematical notations. Explain their thoughts to others, find solutions and propose mathematical problems by applying creative thinking, reflection and simple reasoning. Follow and propose, analyse, interpret and evaluate mathematical models **in a simple** manner.

**To a certain extent**, use mathematical concepts and notations to propose, code and solve common problems and discuss solutions and use different aids for mathematical purposes, including information technology.

**To a certain extent** research, analyse, interpret, propose hypotheses and find solutions with the assistance of mathematics. Read and **to a certain extent** evaluate mathematical texts. Use suitable tools, such as computers, and present their findings **in a suitable manner**.

Use real numbers and calculate with rational numbers, note their findings according to the decimal numeral system and take part in developing solution strategies. Use correlations and connections of the arithmetic operations and use common arithmetic rules.

Research patterns, solve **simple** equations, use variables and use algebraic rules for calculation.

Use the basic concepts of geometry **to a certain extent**. Use similarity, rules of angles and the coordinate system to draw, analyse and create geometric objects. Put forward **simple** geometric reasoning **under supervision**, measure and calculate length, area and volume and use numbers for this purpose.

Use statistical concepts for organising, carrying out and interpreting statistical research **under supervision**. Carry out and draw conclusions from research involving probability and chance. Use **simple** probability concepts and counting to calculate and interpret the probability of events.

# INFORMATION AND COMMUNICATION TECHNOLOGY

# 26

The educational values and main objectives of information and communication technology are discussed in this chapter. This discussion is based on the six fundamental pillars described in Chapter 2, the emphases in education from Chapter 6 and key competences as defined in Chapters 9.4 and 18. Competence criteria are defined at the completion of Grades 4, 7 and 10. This is followed by a discussion of teaching methods and assessment, which is based on the emphases that are illustrated in the competence criteria. Based on the competence criteria, teaching methods, as well as study materials and assessment methods, are to be selected and described in the curriculum guide of each school. The assessment criteria stipulated at the end of the chapter are to be used, as appropriate, to describe the pupils' competence at the completion of compulsory school.

## 26.1 Educational values and main objectives of information and communication technology

The subject area of information and communication technology includes media studies, computer use and information and communication technology. The concept 'information and media literacy' may be defined as the ability to analyse what information is necessary, search for it, evaluate it critically and in this way increase one's knowledge and use it through various media to accomplish a certain goal. Information and media literacy also involves the ability to find and use information in accordance with ethical criteria for copyright. In this way, pupils can acquire the competence to adopt, rewrite and create knowledge, and communicate it in various ways in accordance with the nature of technology and the digital environment. It is important to take into consideration



the fundamental pillars of education that are stipulated in the General Section of the *National Curriculum Guide* and their relationship with information and communication technology. When organising teaching, all competence criteria should be kept in mind and also the framework set for the subject area in the reference timetable of the General Section of the *National Curriculum Guide*. It is important that pupils understand that information and media literacy is a lifelong process that they should enhance both in their studies and at work.

The main objective of education in information and communication technology is to encourage the information and media literacy of pupils and to assist them in obtaining sound general technology skill and literacy. Technological skill involves, among other things, the ability to make use of various tools, technological equipment and varied processes; technology literacy consists of using equipment to acquire knowledge and communicate it; information literacy involves the ability to gather, categorise and process information in a critical and creative manner; and media literacy is the ability to analyse, obtain, evaluate and create media messages. Pupils acquire literacy of texts, pictures and statistical data, obtain good technological skills, fingering and competence in the field of information and media literacy. At the completion of compulsory school, pupils are expected to have acquired extensive competence in the field of information and media literacy. They should be responsible for their study progress and show competence in their work methods, both independent work and in cooperation with others. Information studies are important for active citizens in a democratic society and encourage them to defend human rights and present their views concerning these rights in various ways. Information and communication technology enhances flexibility, educational equality and offers opportunities for creativity in various fields.

Pupils should be systematically trained in information and media literacy throughout compulsory school. In addition to using information and communication technology on the Internet, it is important that they know the general rules for secure communications in digital media and for copyright. They should also respect ethical rules concerning information and source material and show extensive competence in using technology and communication.

Pupils should prepare for active participation both in their local community as well as internationally, where communications, cooperation and international relations are of vital importance. Pupils should know common channels for secure web communication and defend ethical conduct in all their studies. By giving pupils comprehensive insight and training in work methods concerning most areas of society, such as science, arts and studies, their competence to react to an ever-changing environment increases.

*The Compulsory School Act* defines school libraries as information centres that should enhance every pupil's education in close cooperation with the school community.

The school library, which is also called an information centre, should be the focus for cooperation between subjects and subject areas where pupils can make use of a variety of equipment and data for their studies. It should be a forum for encouraging the pupils' literacy in the widest sense and train them in information and communication technology. Furthermore, an emphasis is put on using various data, such as books, equipment, computers, and a variety of software, for knowledge acquisition, creation and communication.

## 26.2 Competence criteria for information and communication technology

The competence criteria for information and communication technology are detailed in five different categories. Although the criteria are categorised in this way, it is important to see them as a whole. When one criterion is considered, it should be kept in mind that education is a continuous process and creative activity, rather than obtaining limited knowledge and training in a specific skill. The definition of the criteria is as follows:

Methods of work		
At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>• use information for their benefit and pleasure, such as for reading, listening and guided discovery learning,</li> <li>• use electronic study material in a simple form to support work techniques and work methods,</li> <li>• show initiative and take part in cooperative assignments under supervision,</li> <li>• recognise the different methods of using various technical devices,</li> <li>• apply basic fingering.</li> </ul>	<ul style="list-style-type: none"> <li>• use information centres for their benefit, both in directed learning and on their own,</li> <li>• use various forms of electronic study material in relation to work techniques, work methods and other studies,</li> <li>• show independence in work methods under supervision and in cooperation with others,</li> <li>• use different technical devices in an effective and varied manner,</li> <li>• apply correct fingering.</li> </ul>	<ul style="list-style-type: none"> <li>• use information centres in various ways for knowledge acquisition and communication,</li> <li>• work independently and take responsibility for their study progress,</li> <li>• work in a creative and critical manner, independently and with others,</li> <li>• use to a full extent the possibilities of various technical devices in an effective and systematic manner,</li> <li>• apply correct fingering.</li> </ul>

## Information acquisition and processing

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>• search for information and use it in assignment work,</li> <li>• use electronic and interactive study material,</li> <li>• work with source material,</li> <li>• use information and communication technology and programmes for structuring simple assignments,</li> <li>• use software/computer programmes for presenting simple statistical data.</li> </ul>	<ul style="list-style-type: none"> <li>• use various means and search engines for suitable systematic information acquisition,</li> <li>• use electronic and interactive study material in various ways,</li> <li>• be critical of the validity of certain information,</li> <li>• work with source material and create a simple bibliography,</li> <li>• use software and computer programmes for simple structuring and presentation of written material,</li> <li>• use software/computer programmes for simple presentation of statistical data.</li> </ul>	<ul style="list-style-type: none"> <li>• use software/computer programs and other data for information acquisition,</li> <li>• use material in various forms and electronic support, such as further reading, mass media, printed and online dictionaries, spelling and grammar checkers, language programmes, search programmes, and use them critically,</li> <li>• apply critical thinking to evaluate information with regard to their quality and approach,</li> <li>• work with source material, respect ethical rules in reference work and create a bibliography according to accepted methods,</li> <li>• use software and computer programmes when writing papers and other written material according to standards for structure and layout,</li> <li>• use software/computer programmes for presenting statistical data.</li> </ul>



## Technology and equipment

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>• use software/computer programmes for simple written assignments and presentation of statistical data,</li> <li>• use simple software/computer programmes for image processing,</li> <li>• use software for simple web design.</li> </ul>	<ul style="list-style-type: none"> <li>• use software/computer programmes for written assignments and presentation of statistical data,</li> <li>• use software/computer programmes for web design, making short films and sound and music processing,</li> <li>• use software/computer programmes for web design.</li> </ul>	<ul style="list-style-type: none"> <li>• use software/computer programmes for complex processing of written assignments and statistical data,</li> <li>• use software/computer programmes for image processing, sound processing and videotape production,</li> <li>• use software/computer programmes for a variety of web design.</li> </ul>

## Creation and communication

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>• describe in a simple manner their information and media literacy,</li> <li>• use software/computer programmes for communication of knowledge in a simple manner.</li> </ul>	<ul style="list-style-type: none"> <li>• discuss and explain in a critical manner their information and media literacy,</li> <li>• use software/computer programmes for communication of knowledge in a creative and clear manner.</li> </ul>	<ul style="list-style-type: none"> <li>• explain simple software and the nature and structure of a computer,</li> <li>• use software for programming and communication in a creative manner.</li> </ul>

## Ethics and security

At the completion of Grade 4, pupils are able to:	At the completion of Grade 7, pupils are able to:	At the completion of Grade 10, pupils are able to:
<ul style="list-style-type: none"> <li>• show responsibility in handling information,</li> <li>• follow simple rules for responsible web usage and be aware of their moral value.</li> </ul>	<ul style="list-style-type: none"> <li>• show responsibility in handling information and reference work,</li> <li>• follow rules on responsible web usage, be aware of their moral value and take responsibility for their communication and data on the Internet and in web media.</li> </ul>	<ul style="list-style-type: none"> <li>• show responsibility in handling and distribution of information, whether for personal use or reference and assignment work,</li> <li>• show responsibility in use of electronic means and social media, work in accordance with rules on responsible web usage and be aware of their moral responsibility.</li> </ul>

## 26.3 Teaching methods and assessment in information and communication technology

Information and media literacy is the focus of information and communication technology and this is an interdisciplinary subject area. The assignments are concrete and can be integrated with most subjects and subject areas. The emphasis is on introducing pupils to technology and methods for acquiring, processing, creating and communicating information in relation with other studies.

An information centre supports these elements and therefore has a leading role in enhancing information and technology literacy, encouraging diversity in teaching methods and increasing accessibility for all appropriate education. In such centres, pupils are trained in independent work methods; they learn to acquire knowledge, evaluate it, create new knowledge, transform it and communicate in various ways. The concept 'information centre' is known in the school system although sometimes other words are used, such as knowledge or data centres, school library, etc. In an information centre, teachers and other professionals are expected to work together on information and communication technology and literacy. For pupils to acquire competence in information and media technology, it is important that they have access to the interdisciplinary cooperation of teachers and professionals in information and technology studies.

Pupils should learn to use technology, realise its nature and structure and increase their understanding of it, for example by designing and developing software. Thus they improve and use their knowledge in this field. Pupils need training to obtain information in various forms and become data literate, for example at reading tables and graphs. They need to learn to use information and communication technology for structuring and putting finishing touches to their written assignments and have mastered fingering. Pupils should learn to use various presentation and communication software that enables them to communicate knowledge in various ways, such as through oral, written or digital communication with audio and visual effects.

With interdisciplinary cooperation between various subjects and subject areas in the information centre, and diverse study materials and technology, the pupils' requirements can be met with regard to their interest and capabilities. This cooperation should have already begun in the first grades to encourage the gradually increasing information and media literacy of the pupils. When pupils are working on assignments that involve creativity, inventiveness and resourcefulness, it is important to have a doorway to cooperation with the information centre of the school. This cooperation may involve support to acquire data for guided discovery learning linked to an interdisciplinary assignment where technical factors related to literacy and technical knowledge are involved, or it may involve other requirements that the pupils have. Pupils should have a choice of diverse processing methods for their assignments, access to a variety of

study materials by using the Internet and web media and should be encouraged to communicate with parties outside the school in accordance with the objectives each time.

Cooperation in the information centre between subjects and subject areas enhances the creation of new knowledge. Cooperation should secure a better education for pupils and it should be possible for them to acquire new competences in more varied ways in accordance to their interests and requirements. Rapid developments within digital communication, information and communication technology and interactive communications increases the need to enhance the information and media literacy of pupils.

The information centre is not always operated in the same place. It may be part of the school library, in cooperation with the computer room or linked to the tools and equipment of the classroom, in a space used for independent or guided work. Work may also take place in various spaces. The information centre offers an opportunity for further cooperation, such as with public libraries and other information centres, and through school projects in information and communication technology and communication. An information centre offers pupils a variety of work methods: to work both independently or in a group or under the supervision of a teacher or other professionals. It can offer complex projects, differentiated learning and opportunities for pupils to work according to their own interests and needs.

The information and media literacy of pupils can be enhanced by integrating the subject area with various other subjects or subject areas and by linking it to concrete assignments. The latest information, numbers and data within social studies and natural sciences, for example, may be linked to information and communication technology. It is not sufficient for pupils to know how to look for information, if they do not know how to evaluate the information that they find and communicate it in accordance with copyright and ethical rules in reference work. Cooperation may lead to innovation and practical knowledge and offer opportunities for development of equipment and programming.

Information and communication technology emphasises interdisciplinary cooperation with other subject areas. In the case of integrated studies, it is important that all those who take part in the teaching also take part in the assessment, although supervisory teachers or subject teachers have the main responsibility. The competence criteria are the primary basis for teaching methods and assessment. It is essential that assessment is comprehensive, includes all competence categories and reflects the competence criteria and the study material that has been used. During the study period, the pupils' competence in acquiring information, reflection, independence in work methods and responsibility for their study progress should be assessed. Assessment should be diverse; it should be based on how active the pupils are and the product they have worked

on, whether it is writing, sound processing, music processing or image processing or other forms of communication. Consequently, the pupils' various assignments should be assessed, such as recitals, lectures, presentations, writing, digital communication, both aural, visual and in other forms. There should be an emphasis on formative assessment, which gives pupils information on their status, whether they need assistance and how to encourage their improvement. The pupils' study progress should be followed and they should be guided by the professionals who are in charge of teaching. Those who teach the pupils should report on their status and how far they have obtained their objectives within the subject in addition to competence in information and communication technology.

## 26.4 Assessment criteria for information and communication technology at the completion of compulsory school

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The *National Curriculum Guide* stipulates the assessment criteria for subjects, subject areas and key competences. Assessment criteria are a description of to what extent a pupil has acquired a defined competence. The assessment criteria are only obligatory for Grade 10 where they support assessment at the completion of compulsory school. Schools are expected to define assessment criteria for other grades and describe them in the school curriculum guide. The assessment criteria for Grade 10 describe competences on a scale that appears in the v: the scale A, B, C, D is used, where A stands for exceptional competence, B for good competence, C for passable competence, and D for competence that does not reach the standard described in C.

Assessment criteria in category B are based on the competence criteria for Grade 10 and their presentation is such that most pupils are expected to acquire the competences that are described there. An A is for those who have acquired exceptional competence and C for those who do not quite meet the requirements that are set for the B criterion. No criterion is set for D as this assessment is used when the pupil does not meet the requirements that are set for the C criterion. In such cases the school explains the competence of the pupil in question. Each criterion is a general description of the pupil's competence.

In the final assessment it is of vital importance that teachers assess what the criteria stipulate, make sure that the assessment is based on reliable data and that they use a variety of methods to acquire data, to give pupils, their parents and the school as clear information as possible on their status. Thus teachers can gain better insight into the studies of each pupil. For an accurate conclusion, such as from conversations or on-site inspection, it may be relevant for teachers to cooperate when they consider the data that the assessment is based on and use precise criteria.

The assessment scale is obligatory at pupils' graduation at the completion of Grade 10. In other respects, schools may decide how they conduct their assessment, grading or school reports for pupils in other grades. School reports at the completion of Grade 10 are taken into consideration when pupils enrol in upper secondary schools and select study programmes.

The following issues may be useful in securing the reliability and validity of the assessment.

- Set clear criteria or describe what is to be assessed.
- Select assessment factors that are suitable for assessment criteria, study materials and teaching methods.
- Prepare a description of what is to be assessed or show examples of assignments that are of good quality.
- Ascertain that assignments are in accordance with criteria.
- Be aware of issues that could distort the conclusion.
- Make clear instructions for assessment methods, processing and interpretation of data.

## Assessment criteria

Pupils are able to use **with confidence** various equipment, software, computer programs and data in a responsible and creative manner. Use software and programmes **very well** for structuring written assignments and statistical data. **In a responsible and critical manner**, evaluate the validity of information for knowledge communication, respect ethical rules in reference work and work with source material according to accepted methods. Use **very well** the possibilities of electronic support and study material in various forms.

# A

Pupils are able to use various equipment, software, computer programmes and data **in a responsible and creative manner**. Use software and programmes **well** for structuring written assignments and statistical data. **In a responsible manner**, evaluate the validity of information for knowledge communication, respect ethical rules in reference work and work with source material according to accepted methods. Use **well** the possibilities of electronic support and study material in various forms.

# B



C

Pupils are able to use **to a certain extent** various equipment, software, computer programmes and data in a responsible and creative manner. Use software and programmes **fairly well** for structuring written assignments and statistical data. **To a certain extent**, evaluate the validity of information for knowledge communication, respect ethical rules in reference work and work with source material according to accepted methods. Use **fairly well** the possibilities of electronic support and study material in various forms.

## APPENDIX

### SUMMARY OF REGULATIONS 2013 BASED ON THE COMPULSORY SCHOOL ACT, NO. 91, 12 JUNE 2008:

- No. 1111/2007 on fund for teaching materials,
- No. 1150/2008 on enrolment in upper secondary school,
- No. 1157/2008 on school council in compulsory school,
- No. 242/2009 on Venture fund for preschool, compulsory and upper secondary school,
- No. 435/2009 on arrangements and implementation of national achievement examination in Grades 4, 7 and 10 of compulsory school,
- No. 531/2009 on home tutoring for compulsory school pupils,
- No. 656/2009 on school transportation at compulsory school,
- No. 657/2009 on compulsory school buildings and school premises,
- No. 658/2009 on compulsory school evaluation and supervision and the municipalities' duty to provide information,
- No. 896/2009 on delivery and dissemination of information between preschools and compulsory schools,
- No. 897/2009 on dissemination and handling of information on compulsory school pupils and parents' rights to access to information on their children,
- No. 440/2010 on activities and practices of the committee of exemptions in compulsory schools,
- No. 584/2010 on specialist services of municipalities for preschools and compulsory schools and pupils' welfare council in compulsory schools,
- No. 585/2010 on compulsory school pupils with special needs,
- No. 1040/2011 on responsibilities and duties of the compulsory school community,
- No. 547/2012 on compulsory school education of foster children,
- No. 699/2012 on accreditation of compulsory schools that are not run by municipalities and schools based on foreign or international curriculums and study arrangements.









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