# Review of Policies to Improve the Effectiveness of Resource Use in Schools

Country Background Report Iceland

# **Ministry of Education, Science and Culture** December 2014

The OECD and the European Commission (EC) have established a partnership for the Project, whereby participation costs of countries that are part of the European Union's Erasmus+ program are partly covered. The participation of Iceland was organized with the support of the EC in the context of this partnership.

Disclaimer: This report was prepared by the Ministry of Education, Science and Culture of Iceland, as an input to the OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools (School Resources Review). The document was prepared in response to guidelines the OECD provided to all countries. The opinions expressed are not those of the OECD or its Member countries. Further information about the OECD Review is available at www.oecd.org/edu/school/schoolresourcesreview.htm.

# Table of contents

List of tables and charts	4
List of abbreviations and glossary of terms	<del>(</del>
Introduction	
Executive summary	
Chapter 1. The national context	
1.1 The economic and social context	
1.2 Demographic developments	
1.3 Political context.	
1.4 Public sector management	
Chapter 2. The school system	<b>2</b> 1
2.1 Organization of the school system	
2.2 Education environment	
2.3 Objectives of the educational system and student learning objectives	28
2.4 Distribution of responsibilities within the school system	
2.5 Market mechanisms in the school system	
2.6 Performance of the school system	
2.7 Policy approaches to equity in education	
2.8 Main challenges	41
Chapter 3. Governance of resource use in schools	
3.1 Level of resources and policy concerns	
3.2 Sources of revenue	
3.3 Planning of resource use	
3.4 Implementation of policies to improve the effectiveness of resource use	
3.5 Main challenges	
Chapter 4. Resource distribution	
4.1 Distribution of resources between levels of the education administration	
4.2 Distribution of financial resources across resource types	
4.3 Distribution of resources between levels and sectors of the school system	
4.4. Distribution of resources across individual schools	
4.5 Distribution of school facilities and materials	
4.6 Distribution of teacher resources4.7 Distribution of school leadership resources	
4.8 Distribution across specific student groups	00 70
4.9 Main challenges	
Chapter 5. Resource utilisation	
5.1 Matching resources to individual student learning needs	
5.2 Organization of student learning time	
5.3 Allocation of teacher resources to students	
5.4 Organization of school leadership	
5.5 Teaching and learning environment within schools	
5.6 Use of school facilities and materials	
5.7 Organization of education governance	
5.8 Main challenges	97

Chapter 6. Resource management	99
6.1 Capacity building for resource management	99
6.2 Monitoring of resource use	
6.3 Transparency and reporting	101
6.4 Incentives for the effective use of resources	102
6.5 Main challenges	103
Bibliography	104
Annex 1 Trends in the number of public and private schools, 1998 to 2012	114
Annex 2 Comparison of teachers' regular salaries to other occupations, 2013	115
Annex 3 Comparison of teachers' total salaries to other occupations with a graduate	degree,
2013	116
Annex 4 Pre-primary school staff, other than teaching and management, 2004 to 201	2117
Annex 5 Compulsory school staff, other than teaching and management, 2004 to 2013	3 118
Annex 6 Upper secondary school staff, other than teaching and management, 2004 –	2012 119

# List of tables and charts

Table 1 The age distribution of the labour force, 2000 to 2014 – number of individuals by age groups 16-24, 25-54 and 55-75
Table 2 The number of unemployed individuals and rate of unemployment, 2005 - 2014
Table 3 Proportion of the population aged 16-29 in upper secondary and tertiary education, 2004 to 2012 – by age
Table 4 Proportion of foreign nationals in the local population, 2005 to 2013
Table 5 The number of students in pre-primary, compulsory and upper secondary schools, 2012 22
Table 6 The number of students at all education levels by gender, 2004 to 2012
Table 7 The education level of the population aged 25-64, 2004 to 2012 - proportions and by gender
Table 8 The dropout rate of those students who enrolled in upper secondary school in 2004 - four, six and seven years after enrolment, by gender and type of studies
Table 9 Average normal distribution of grades in Icelandic, math and English in 4 <sup>th</sup> , 7 <sup>th</sup> . and 10 <sup>th</sup> grade in compulsory schools, 2013 – by regions
Table 10 Distribution of financial resources across the different levels of the education system, 2004 to 2013 – in million IKR and as a proportion of funding
Table 11 The average cost of spending per students at pre-primary, compulsory and upper secondary schools, 2004 to 2012 in million IKR
Table 12 Capital and current spending for the pre-primary schools, 2004 to 2012 – divided into physical resources, employee cost and other resources
Table 13 Capital and current spending for the compulsory schools, 2004 to 2012 – divided into physical resources, employee cost and other resources
Table 14 Capital and current cost for the upper secondary schools, 2004 to 2011 – divided into physical resources, employee cost and other resources
Table 15 The number of schools and students and average number of students by school level, 2004 to 2013
Table 16 The total number of staff in pre-primary, compulsory and upper secondary schools, 2004 to 2012
Table 17 The composition of the employee body of all pre-primary schools, 2004 to 2012 – grouped into school teachers, others with pedagogical education, unskilled employees with education responsibilities and other / unspecified
Table 18 The composition of the employee body of all compulsory schools, 2004 to 2012 – grouped into principals, assistant principals, department managers, teachers, special teachers, support assistants and others/unspecified
Table 19 The composition of the employee body in all upper secondary schools, 2004 to 2011 – grouped into principals, assistant principals, department managers, teachers, experts/specialized and others

Table 20 School leadership by school level, profession, age and gender, 2014
Table 21 The expected number of working hours of compulsory school teachers, and how they are split between tasks
Table 22 The expected number of working hours of upper secondary school teachers
Chart 1 The number of public and private pre-primary and compulsory schools, 1998 to 2012 26
Chart 2 Number of students in pre-primary, compulsory and upper secondary schools, 2004 to 2013
Chart 3 The size and number of pre-primary schools based on the number of students, 2012 59
Chart 4 The size and number of compulsory schools based on the number of students, 2012
Chart 5 The size and number of upper secondary schools based on the number of students, 2011 61
Chart 6 School leadership by gender, proportions
Chart 7 School leadership by age, proportions
Chart 8 Average student/teacher ratio for the pre-primary schools, 2005 to 2012
Chart 9 Average student/teacher ratio for the compulsory schools, 2004 to 2013
Chart 10 Average teacher/student ratio for upper secondary schools, 2004 - 2011
Chart 11 Comparison of teachers' regular salaries to other occupations, 2013 – for pre-primary, compulsory and secondary school teachers, all state employees, all employees of the local communities, all working in the duration sector and specialist in the private sector
Chart 12 Comparison of teachers' total salaries to other occupations with a graduate degree, 2013 - by pre-primary, compulsory and upper secondary school teachers, all, state employees, employees of the City of Reykjavík, other local communities, non-governmental, foundations, private companies and self-employed owners
Chart 13 The number of pre-primary school staff, other than teaching and management, 2004 to 2012 – by teaching and other support functions, kitchen, cleaning, and other/undefined
Chart 14 The number of compulsory school staff, other than teaching and management, 2004 to 2013 – by librarians / library staff, school psychologist and educational counsellors, school nurses, social pedagogues, school assistants, secretaries and computer administrators, sport and recreational assistants, dining room, janitors, hall monitors / shower monitors / cleaning assistants / student assistants and other
Chart 15 The number of upper secondary school staff, other than teaching and management, 2004 to 2012 – by experts and specialists, consultants and library, office and computer, facility administrators and others
Chart 16 The proportional time compulsory school head teachers spend on different tasks 2013 89

# List of abbreviations and glossary of terms

**Althing** (IS Alþingi) – The national parliament of Iceland.

Collective labour agreement – The framework for the work and salaries of public employees is determined in collective labour agreements that apply to the whole country. An exception is the highest level of employees whose salaries are frequently determined by a Salary Arbitrary Committee.

**Compulsory school** (IS grunnskóli) – The second school level, primary and lower secondary education typically in a single structure, compulsory for 6-16 year olds.

**Hagstofa Íslands** – Statistics Iceland, the centre for official statistics in Iceland, which collects, processes and disseminates data on the economy and society.

**Icelandic** – The native and official language of Iceland, along with the Icelandic sign language.

**Icelandic Student Loan Fund** (IS Lánasjóður íslenskra námsmanna) – A state operated fund that offers student loans to those attending university and some upper secondary school studies.

**Local communities** – The second level of public administration in Iceland, with 74 municipalities that govern local matters.

**Local Council** – A statutory body with responsibility for the governing and operation of the local community, consisting of elected representatives.

National Centre for Educational Materials (IS Námsgagnastofnun) – A state operated institution that is responsible for developing and publishing educational materials for compulsory schools, distributing them to schools free of charge. The Centre will merge with the National Testing Institute in July 2015.

**National curriculum guidelines** – Guidelines published by the state that all schools have to follow. The guidelines determine the policy, objectives, subjects taught and the fundamental working methods of a particular school level.

**National standardized test** - A test given in Icelandic and math in grades 4 and 7 in the compulsory schools, and in Icelandic, math and English in grade 10.

National Testing Institute (IS Námsmatsstofnun) – A state operated institution that is responsible for organising, setting and grading the nationally co-ordinated examinations and for undertaking comparative analysis of the educational system through participation in international surveys. The Institute will merge with the National Centre for Educational Materials in July 2015.

Nám er vinnandi vegur – A special initiative which aims to aid those unemployed to get more education and to keep them active.

Occupational Councils – Councils under the responsibility of the Ministry of Education, Science and Culture. Each Council has the role to define the needs of a particular trade in respect to the

knowledge and ability required, the aims and structure of the education and the curriculum guidelines.

**Parents Councils** – Statutory bodies at each pre-primary school, consisting of representatives from the school and parents. The Councils have the role to comment on and monitor the implementation of the schools curricula and other plans developed for the schools.

**Pre-primary school** (IS leikskóli) - The first school level, for children up to 6 years of age.

**School Boards** – 1. A governing body of each local community, with a statutory responsibility for the operation of pre-primary and compulsory schools in the community. B. A statutory body for each upper secondary school, with representatives from the Ministry of Education, Culture and Science, stakeholders in the local community and the schools. The Boards have the role to determine the emphases in school activities and are, among other things, responsible for the annual operating and financial plans of the schools.

**School Councils** – A statutory body of each compulsory school, consisting of various school stakeholders. The Councils role are to advice and participate in the development of the schools strategies and discuss the schools curricula, annual operational plans and other school related plans.

**Skólavog** – A project of The Association of Local Authorities, collecting information from the local communities on various operational information regarding the compulsory schools. The information collected is on the educational background of the teachers, student performance results in the nationally standardized tests and the results of attitude surveys for students, parents and school employees.

**Special services** – Support services to pre-primary and compulsory schools, that local communities are responsible for operating. The service includes support for students and their families as well as for pre-primary and compulsory school activities and their personnel – particularly in relation to students with special needs.

**Stjórnlagaráð** – A constitutional assembly elected to draft a new constitution.

The Association of Local Authorities (IS Samband íslenskra sveitarfélaga) – The forum for cooperation between local authorities. It was established in 1945 and since 1973 all local authorities in the country have been members of the association.

**The Local Governments' Equalizations Fund** (IS Jöfnunarsjóður) – A state fund that has the purpose to even out the difference in expenditure and income of those local communities with a specific or a greater need.

**Upper secondary school** (IS framhaldsskóli) – The third school level, aimed at 16 - 20 year olds, not a compulsory education.

**Upplýsingaveita sveitarfélaga** - An information centre that gathers centrally financial information from the local communities.

**Vocational Committee** - An eighteen-member co-operation committee that is the national forum for comprehensive policy-making in the affairs of vocational education at the upper secondary level. The committee is under the responsibility of the Ministry of Education, Science and Culture.

# Introduction

This report is written as a part of an OECD review of policies to improve the effectiveness of resource use in schools. The Ministry of Education, Science and Culture in Iceland is the owner of the report.

The report aims to answer specific questions set forward by the office of the OECD Secretariat (OECD, 2013a) based on existing data. The OECD Secretariat also predetermined the chapters in the report. A certain amount of repetition is to be found in the text, in correspondence to the questions asked and chapters decided.

The responses to the questions are basically structured around a description of an existing situation or policy, the status in regard to that specific policy and a description of the impact where known. During the writing of the report it became clear that the policy is often expressed in the relevant legislative framework and that the general legislative foundation is in place. Information on the status was also often available in existing statistical data and / or reports. It was however frequently a challenge to find research and other data that gives an objective view of the impact of the policy. Therefore the impact description is often based on opinions and other subjective information, or altogether missing.

The Ministry of Education, Science and Culture appointed a steering group to oversee and assist with the writing of the report, with the members of the steering group consulting with others as required. The members of the group were:

- Sigríður Lára Ásbergsdóttir, Ministry of Education, Science and Culture
- Guðbjörg Ragnarsdóttir, The Association of Teachers in Primary and Lower Secondary Schools
- Svandís Ingimundardóttir, The Icelandic Association of Local Authorities
- Svanhildur Ólafsdóttir, The Association of Headteachers
- Valgerður Ágústsdóttir, The Icelandic Association of Local Authorities

Björgvin G. Sigurðsson and Hrönn Pétursdóttir processed and wrote the report, with the latter functioning as the project manager. Most of the writing took place from February to September 2014. The information and data used is the newest found when the different sections were written.

Anna Kristín Sigurðardóttir associate professor in education at the School of Education of the University of Iceland, Guðríður Árnadóttir chairman of The Association of Teachers in Upper Secondary Schools and Haraldur Gíslason chairman of The Association of Teachers in Preschools read through the report in its final draft phase and gave their suggestions for improvement.

For the ease of the reader a common terminology is used throughout the report. As an example, children in pre-primary schools, pupils in compulsory schools and students in upper secondary school all go by the word "student". The same applies to the heads of schools, which go by "head teacher" in the report, and so on.

# Executive summary

There are four school levels in Iceland. The pre-primary schools are for children up to 6 years of age, the compulsory schools are for students aged 6-16, the upper secondary schools are primarily aimed at 16-20 year olds and then there is higher education for those that have finished the required studies at the upper secondary school level. This report is focused on the three first levels, the pre-primary, compulsory and upper secondary schools.

There are two levels of government but three administrative levels for education in Iceland. The first is the state, the central government, which has the overall responsibility for education at all levels and therefore for setting the educational policy. The state is furthermore responsible for the funding and management of the upper secondary schools and tertiary education. A funding model developed by the Ministry of Education, Science and Culture guides the distribution of funds to the upper secondary schools.

The second are the local communities, or a total of 74 municipalities, which have the funding and operational responsibility for the pre-primary and compulsory schools. Each local community determines the distribution resources for the schools it operates. The third and solely administrative level are the individual schools, which have a fair amount of autonomy in the execution of policies and day-to-day operations, including the management and use of the resources allocated.

An extensive legislative framework exists for the schools. The legislation is generally specific for a particular school level but the legislation framework as a whole is built on a common foundation and the same basic principles and policies. In addition there are national curricula for the pre-primary, compulsory and upper secondary schools.

The school system is highly decentralized, with the local communities having responsibility for the pre-primary and compulsory schools and schools at all levels having a fair amount of autonomy. One of the effects of the decentralization is a lack of an overview on the status of the effectiveness and efficiency of resource use.

This has been highlighted by the Icelandic National Audit Office, which pointed out in a 2008 report (Ríkisendurskoðun, 2008) the differences in the operational costs of the individual compulsory schools. The Office's report furthermore stated that the gathering of information on the cost of the local communities for the compulsory schools was limited, the definition of expenditure different between the different communities and therefore comparisons were very difficult. Thus it claimed that it was very difficult to assess the professional and financial aspects of school operations. Finally, most of the necessary premises needed to know whether sufficient resources are provided for the operation of the school system were said missing, that is measurable objectives and direct quality monitoring.

Drastic improvements in data collection have been made since the report was published, but the information and statistics collected and made available are not correlated to data on the quality of education or student performance and thus the effective use of resources. In formal evaluations and monitoring of schools and the education system, the focus has not been on assessing the effectiveness and efficiency of resources use either.

Although the report in 2008 centred on the compulsory schools, experiences indicate that the before mentioned also applies to the pre-primary and upper secondary schools.

The potential causes and challenges of ineffectiveness and inefficiencies of resource use in the school system can therefore only be guessed at, based on the available knowledge of the school system itself and the experiences of those that work within it. As such, in public debate on the school system it is common to point out that the cost of the education system in Iceland is above the cost of the neighbourhood countries, while the results of student assessments in the PISA are below their results – thus indicating ineffectiveness in resource use.

Some of the issues brought up in the debates as potential causes and challenges are the decline in student assessment results, the difficulties in implementing the policy on inclusive schools, the high drop-out rate in the upper secondary schools, the number of school years students need to finish upper secondary school, restrictive collective labour agreements and low teacher salaries. A reduction in funding to schools since an economic recession started in 2008 is also stated to be a challenge, as it has led to a reduction in the number of school employees, out-dated ICT equipment, limited facility maintenance, less staff development initiatives and fewer development projects. Given all of this, many schools are challenged in fulfilling legal requirements, making the effective use of resources therefore very important.

Due to the described situation several policies and reform initiatives have been launched in recent years. Among those already implemented is the legal recognition of the status of pre-primary school educators as teachers, two years have been added to the minimum teacher education requirements and a change is being made to the collective labour agreements with more flexibility in the working arrangements and salary structure of teachers. The development of a new legislative base, national curricula and a national qualifications framework has been on going for the last few years.

Another on-going reform initiative is a recent publication of a White Paper by the Ministry of Education, Science and Culture (Mennta- og menningarmálaráðuneytið, 2014). In the White Paper the immediate policy priorities and targets for the education system for 2014 - 2018 are stated to be:

1. That 90% of all students reach basic PISA standards in reading, but the ratio is now 79%.

To achieve this it is for example proposed that education in native languages will be strengthened and increased at the compulsory school level. A criteria is set for reading skills that students should access at each stage of the compulsory school and reading and literacy will be measured regularly from pre-primary school to the end of compulsory school. Immigrant students will receive additional support in order for them to be able to reach the same proficiency in reading comprehension as other students. Teachers will receive sufficient in-service training and support. All pre-primary and compulsory schools shall adopt literacy policy in line with the national curricula guides from 2013 and the school policy of each local community. Students will be encouraged to read for pleasure outside of school and parents will be activated to arouse interest in reading and to support their children.

2. That the percentage of students who graduate from upper secondary school on time will rise from 44% to 60%.

To achieve this it is proposed to reorganize and shorten the time needed to graduate with upper secondary education, reduce dropout and change the organization of vocational training. It is proposed that the matriculation line of study will be based on a three-year study period, and at the same time it is planned to shorten vocational studies. In all upper secondary schools a screening for risk factors for dropout among students is planned.

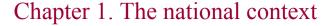
In line with the experience of other countries the White paper thus focuses on a few and ambitious goals for education reforms, with the intend to get a broad long term consensus on them. Concurrent schools at all levels are encouraged to work on school development and make efforts to strengthen the professional awareness of teachers, increased emphasis is on collecting data and analyze the results, evaluating them and drawing the relevant conclusions.

At all school levels there is foremost the demand of the population that the schools increasingly meet the needs of the students as individuals. Regarding disabled students this has meant the need for reform in the services provided, in regard to diagnosis and educational support and advice for teachers, parents and students. Another example of a key demand for different services at the compulsory school level has been the call for the child's daily activities to be continuous and take place during the daytime. That is, for sport, music and leisure time activities for the children to be integrated with and into the traditional school operations so that both parents and children are done with their "work day" around the same time. This has impacted school timetables and provided opportunities for traditional class activities to be segmented with physical movement, for example.

They key priorities and challenges that stand out and/or are an issue of contention among education stakeholders relate to many of the mentioned circumstances and reforms. This includes, in no particular order:

- The decrease in funding to schools over the last few years, and the impact this has had on staff numbers, maintenance of building and equipment, staff and school development and so on.
- The policy on inclusive schools where, while there is general agreement that the policy itself is justified, school administrators and staff feel that the implementation is not sufficiently managed or funded.
- The vision and expressed intend of Ministers of Education, Science and Culture, which has surfaced on a regular for the past 15 years, on reducing the number of years required to finish academic studies at upper secondary school from four to three referring to neighbourhood countries with fewer school years and equal or better student assessment results.
- The reasons for and solutions to the high upper secondary schools dropout rate.
- The proportion of students that attend academic studies vs. vocational training at the upper secondary level is considered by most stakeholders to be uneconomical for the country, as more people are needed with vocational skills.
- The changes in student assessments introduced in the new national curriculum for the compulsory schools.
- Regular disputes on whether the local authorities or the state, or the Ministry of Education, Science and Culture or the Welfare Ministry, have the responsibility for particular health and welfare related services for students with special needs.
- The five-year education requirement for teachers, as the increased educational requirement was not followed through with a sufficient increase in the teachers' salaries.

- Lack of sufficient consultation with stakeholders, by the state, in setting policies or determining reforms.
- The re-examination of the allocation criteria of The Local Governments' Equalization Fund without the necessary consultation with all stakeholders, and then particularly the Ministry of Education, Science and Culture.
- The allocation model used to calculate the funding needs of the upper secondary schools is controversial, with the claim that the model is not being used properly to calculate actual funding needs.
- Access to and operation of specialized services to schools, as there is no central criteria on how the services are provided, to ensure quality and equal access regardless of the school level and the geographic location.



The purpose of this chapter is to briefly outline the broad economic, social, demographic, political, and cultural developments that shape the challenges facing the school system. It is intended to provide the context for the more detailed discussion in later chapters.

#### 1.1 The economic and social context

#### The economic context

The economy of Iceland is based on three main pillars - fisheries and the related industry, tourism and manufacturing industry, with three large aluminium production smelters in the country. The economy is small, the country is natural resource independent and subject to high volatility as can be seen clearly in a financial crisis that struck in 2008.

In 2013, gross domestic product (GDP) was US\$14.6bn, up 3,3% from the year before. By comparison the country's GDP was US\$16.8bn in 2008 but fell sharply by 6,6% in 2009 because of the enormity of the crisis that hit Iceland's economy – due to the volatility of it's large banking system and the IKR, Iceland's currency, which was the smallest floating currency in the world at the time. With a population of 330,000, this is a GDP of US\$42,000 per capita. Iceland has a mixed economy with high levels of free trade and government intervention. (Hagstofa Íslands, 2014j).

Geothermal power is the primary source of home and industrial energy in Iceland, the use of fossil fuels is quite rare and hydro power plants supply three aluminium smelters with a green and rather cheap energy.

In the 1990's Iceland undertook extensive free market reforms, which initially produced strong economic growth. As a result, Iceland was rated as having one of the world's highest levels of economic freedom as well as civil freedoms. In 2007 Iceland topped the list of nations ranked by the Human Development Index and was one of the most egalitarian, according to calculations provided by the Gini coefficient.

In the years 2003–2007, following the privatization of the banking sector, Iceland moved toward having an economy based on financial services and investment banking. It was quickly becoming one of the most prosperous countries in the world but from 2006 onwards the economy faced problems of growing inflation and current account deficits. Partly in response and partly as a result of earlier reforms, the financial system expanded rapidly before collapsing entirely in a sweeping financial crisis in 2008. Iceland had to obtain emergency funding from the International Monetary Fund and a range of European countries in November 2008.

In 2008 the nation's entire banking system systemically failed, affected by the worldwide crisis and the massive size of the industry in the country's economy, which amounted to 11% of the GDP. This resulted in a substantial political unrest. In the wake of the crisis, Iceland instituted "capital controls" that made it impossible for many international investors to get their money out of the country. Though designed to be temporary, the controls remain and are among the biggest hurdles for attracting international investment in the Icelandic economy. Iceland ranks high in economic and political stability, though it is still in the process of recovering from the crisis.

The greatest single challenge facing the economy has thus to do with the currency and one of the main economic tasks for the coming years will be to find a way to remove the capital controls

without significant depreciation taking place, subsequently to an inflation and further deterioration of life

Iceland's economy stabilised under the sitting governments from 2009 to 2013 and grew by 3,3% in 2013 from the previous year (Hagstofa Íslands, 2014). Similarly, unemployment was at 4% in August 2014 while reaching 9,1% at it's highest in 2009 (Vinnumálastofnun, 2014). With booming tourism and one of the highest labour participation in the world the economical forecast is reasonable good. Many Icelanders, however, remain unhappy with the state of the economy and the government's austerity policies.

The centre-right Independence Party came to power in coalition with the Progressive Party in the 2013 elections, after four years by a left of centre government led by The Social Democratic Alliance with smaller partner Left Green movement in a coalition government.

Related to the economic status, one of the greatest political issues is whether to complete negotiations for accession to the European Union or not. The parliament decided to apply for membership in July 2009 but with a change in parliamentary majority in 2013 there has been a change in view towards European Union membership. The current government wants to end the negotiations but the opposition wants to complete them and hold a referendum on the result.

Many see EU membership as a hope for a stability in the standard of living and currency options and a way out of the restrictions, while others view EU membership as a threat to the sovereignty and resource management of the country. This is one of the biggest unsolved disputes in Icelandic politics in the years following the economic crisis.

#### The social context

Until the middle of the last century most of the workforce only had compulsory education. This has changed and now over two thirds of those over 25 years of age in the work force have more than compulsory education.

The demand for people with vocational training, higher education in general and technical and engineering education in particular is high and growing. Admission to universities has increased significantly and the availability of educational courses is diverse, also for adults who want to graduate from upper secondary school or equivalent and start university. A large supply of various distance learning is available.

However, the number of those who do not finish upper secondary education before the age of 25 has remained stable and there is a shortage of skilled workers in some sectors, such as plumbing and carpentry. Upper secondary schools have systematically tried to meet student dropout with counselling and an increase in the variety of trade and vocational studies on offer. This is in accordance to the main aim of a newly published White book from the Ministry of Education, Science and Culture, which is to increase the number of those who finish upper secondary school from 44%-60% in the next few years. (Mennta- og menningarmálaráðuneytið, 2014).

# 1.2 Demographic developments

#### Fertility, population size, gender and age

When the first general census was taken in 1703 the population numbered 50,358 but was from then and until 1825 mostly under 50.000 people, in one year declining to 36.000 people. In 1825 however

the population starts growing consistently, reaching 70.000 in 1871, 100.000 in 1926, 150.000 in 1954, 200.000 in 1968, 250.000 in 1989 and 300.000 in 2007. (Hagstofa Íslands, 2014o).

At the end of the second quarter of 2014 the population of Iceland was 327.050 (Hagstofa Íslands, 2014t) with a population density of approximately 3 inhabitants per km². Live births in Iceland were 1.050 in the second quarter, 540 boys and 510 girls. Although the population is in general growing - by an annual average growth rate of 1,2% in the past five years, a population growth of 0,4% was historically low between 2012 and 2013. This is due to negative net migration in 2011, just barely outweighed by the natural population growth.

There is great variation in population density; the largest local community, the capital Reykjavík, had 121,230 inhabitants as of 1 January 2014, while some of the smaller rural districts had populations of fewer than 100 (Hagstofa Íslands, 2014q).

The proportion of men and women has been similar for the last 80 years, with 30.029 women in 1841 to 27.104 men, and 162.353 women in 2014 to 163.318 men. (Hagstofa Íslands, 2014p). The number of nuclear families - couples, married or co-habituating, with or without children and individuals with children under the age of 18 - was 78.780 on 1 January 2014, compared with 78.168 in 2011 (Hagstofa Íslands, 2014i).

Age distribution has been subject to frequent fluctuations, partly because famines and epidemics of earlier centuries often had a disproportionate impact on some particular age group, while the birth rate also varied according to general conditions in the country. In 2014 about 24,5% of the total population was aged 0-17 years, 64% of the population was aged 18-67 years and about 9,5% of the population was aged 68 and over (Hagstofa Íslands, 2014p).

The overall fertility rate (living born children) dropped from 4.1 births per woman in 1956 to 1,9 in 2013 (Hagstofa Íslands, 2014g). In 2011 life expectancy was 80,1 years for men and 83,8 years for women (Hagstofa Íslands, 2014u). The infant mortality rate in Iceland was 0.9 per 1,000 live births in 2013 (Hagstofa Íslands, 2014w).

#### Working hours, labour force, migration

The average actual working hours per week in 2013 were 39,8 hours for 16-74 year olds, compared to 41,9 in 2007. In the years 2003 to 2013 the average working hours of males decreased from 47 hours to 44. During the same period the average working hours of females went from 36 to 35,1. (Hagstofa Íslands, 2014b).

The number of persons in the labour force in July 2014 was 195.500, with 189.200 employed and 6.400 unemployed. The age distribution of the labour force was as follows:

Table 1 The age distribution of the labour force, 2000 to 2014 – number of individuals by age groups 16-24, 25-54 and 55-75

Age group	2000	2005	2011	2014
16-24	38.697	38.529	42.179	42.875
25-54	117.233	123.285	132.950	131.418
55-75	41.290	47.025	54.582	62.446

(Hagstofa Íslands, 2014x)

Employed as a portion of the total population were 79,3% in June 2014 and unemployed as a proportion of those in the labour force were 6,8%. The number of unemployed has decreased by

1.100 since 2010. Those long-term unemployed (12 months or longer) were 1.700 in the first quarter of 2014 compared with 2,500 in the first quarter of 2010 (Hagstofa Íslands, 2014c). In June 2014 the unemployment rate was 4,6 %.

Table 2 The number of unemployed individuals and rate of unemployment, 2005 - 2014

January	2005	2011	2014
Unemployed	3.800	11.600	9.000
Rate of unemployment	2,2	4,7	4,6

(Hagstofa Íslands, 2014x).

Looking at the percentage of the population aged 16-29 in upper secondary and tertiary education, the following can be seen:

Table 3 Proportion of the population aged 16-29 in upper secondary and tertiary education, 2004 to 2012 – by age

Age	2004	2008	2012
16	93,0	93,5	95,5
17	83,2	84,8	89,9
18	75,1	75,3	82,2
19	69,8	71,4	73,5
20	56,3	52,5	53,6
21	53,0	50,3	55,8
22	53,9	48,7	53,4
23	47,6	42,4	49,1
24	40,4	36,7	43,1
25	33,9	31,2	36,5
26	28,0	27,9	30,8
27	23,7	23,9	25,4
28	20,8	20,8	23,2
29	18,9	19,8	20,6

(Hagstofa Íslands, 2013q)

Foreign citizens were 6,7% of the population 1 January 2013 (Hagstofa Íslands, 2013e). The number of foreign citizens was 19.262, but 3.775 for comparison in 1996 (Hagstofa Íslands, 2013j). In January 2013 citizens of Poland were the most numerous or 9.404, followed by 3.147 from Denmark, 1.967 from the United States of America, 1.869 from Sweden, 1.512 from Germany, 1.487 from the Philippines, 1.408 from Lithuania, 1.200 from the United Kingdom and 1.132 from Thailand (Hagstofa Íslands, 2013k).

Table 4 Proportion of foreign nationals in the local population, 2005 to 2013

Year	Foreign nationals %
2005	3,6
2011	6,6
2013	6,7

(Hagstofa Íslands, 2013e)

In 2013, a total of 3.175 Icelandic citizens migrated from Iceland, with most moving to Norway, Denmark and Sweden, or 2.247 in total. Most migrated to Norway or 996. (Hagstofa Íslands, 2014c).



#### Religion

There is a constitutional freedom of religion in Iceland. The national church of Iceland, according to the constitution, is Evangelical Lutheran. The ministers of the church are civil servants and receive their salaries from the state. The head of the church is the Bishop of Iceland, who is the supreme authority in internal church matters. The state and the national church of Iceland are not legally separated but the church has no authority in state matters. External matters relating to the church are under the jurisdiction of the central government, under the aegis of the Ministry of the Interior.

As of 1<sup>st</sup> of January 2014, 75,1% of the population were members of the National Lutheran Church, while 5,3% did not belong to any religious community (Hagstofa Íslands, 2014s). In a national referendum in 2012 a majority of voters accepted that there should be a national religion in Iceland, based on the constitution.

#### Language

Icelandic is the native language of Iceland and the official and teaching languages are Icelandic as well as the Icelandic sign language. Icelandic belongs, along with Norwegian and Faeroese, to the West Scandinavian branch of the North Germanic family of languages. Morphologically it has remained the most conservative of the Nordic languages, retaining, for example, three genders and a full system of case endings for nouns and adjectives.

During a long period of Danish rule the Icelandic language borrowed many foreign words, but a independence movement in the 19th century was accompanied by a drive towards linguistic purity. Thus to this day new Icelandic terms were (and continue to be) formed on the basis of the original vocabulary, rather than through the borrowing of international terms.

There is widespread awareness in the country of the difficulties facing a language spoken by a small population. The language policy in modern Iceland is characterised by two central elements: on the one hand it supports the preservation of the language, it's form and it's central vocabulary, and on the other hand it encourages further development of the modern Icelandic language, not least through the coining of new words in order to adapt the language to modern times. Icelanders are however also aware of the dangers of linguistic isolation and foreign-language teaching is an important part of the education.

The Icelandic parliament accepted an official language policy for the first time in 2009. The policy is focused on strengthening the foundations of the language in society. The primary objective of the policy is to ensure that Icelandic will continue to be used in all areas of the society. In 2011 the Parliament adopted legislation on the status of the Icelandic language and Icelandic sign language (Alþingi Íslands, 2011). At that time the Icelandic sign language was for the first time recognized as the first language of those who have to rely on it for expression and communication, and for their children.

As a part of compulsory education students learn English and Danish (or Norwegian or Swedish in certain cases instead of Danish), and most of those who continue into upper secondary school add at least a third foreign language, usually German, French or Spanish. There are no minority languages in Iceland.

#### 1.3 Political context

Iceland is a representative democracy and a parliamentary republic. The modern parliament, called "Althing" or "Alþingi", was founded in 1845 as an advisory body to the Danish king. It was widely seen as a re-establishment of the assembly founded in 930 in the Commonwealth period and

suspended in 1799. Consequently, "it is arguably the world's oldest parliamentary democracy" (Giudice, 2008, pg. 85). The parliament is elected for a maximum period of four years. The president is elected by popular vote for a term of four years, with no term limit. The elections for president, the Althing and local community councils are all held separately every four years.

The Althing is composed of 63 members, elected every 4 years unless it is dissolved sooner. Suffrage for presidential and parliamentary elections is 18 years of age and is universal. Members of Althing are elected on the basis of proportional representation from six constituencies. Until 1991, membership of the Althing was divided between a lower and upper house but this was changed to a fully unicameral system. (Ragnarsson, 2006).

The president of Iceland is largely a ceremonial head of state and serves as a diplomat, but can veto laws voted by the parliament and put them to a national referendum. Legal scholars in Iceland dispute the extent of the political power possessed by the office of the president; several provisions of the constitution appear to give the president some important powers, but other provisions and traditions suggest differently.

The president appoints the cabinet after a general election to the Althing; however, the appointment is usually negotiated by the leaders of the political parties, who decide among themselves which parties can form the cabinet and how it's seats are to be distributed, under the condition that it has a majority support in the Althing. In practice, only when the party leaders are unable to reach a conclusion by themselves within a reasonable time span does the president exercise this power and appoint the cabinet personally.

The current president is Ólafur Ragnar Grímsson. The head of government is the prime minister - currently Sigmundur Davíð Gunnlaugsson - who, together with the cabinet, is responsible for the executive government.

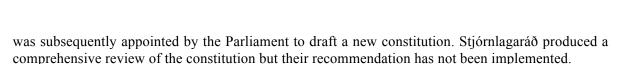
Throughout the republican period the governments of Iceland have always been coalition governments, with two or more parties involved, as no single political party has ever received a majority of seats in the Althing.

Iceland was the first country in the world to have a political party formed and led entirely by women. Known as the Women's List or Women's Alliance (*Kvennalistinn*), it was founded in 1983 to advance the political, economic, and social needs of women. In the term of office from 1979 to 1983 5% of the parliamentarians were female, but 15% in the following term. Although the party disbanded in 1999, merging with the Social Democratic Alliance, it left a lasting influence on Iceland's politics: every major party has a 40% quota for women, and in 2014 41,3% of the members of parliament were female. (Albingi Íslands, 2014).

Gender equality is highly valued in Iceland. In the *Global Gender Gap Report 2012* (Hausmann, Tyson, & Zahidi, 2012), Iceland holds the top spot for the least gap, closely followed by Finland, Norway and Sweden.

The country has a high level of civic participation, with 81,5% voter turnout during the parliamentary elections in April 2013 (Hagstofa Íslands, 2013b). Voter turnout during the local elections in 2014 was 66,5%, but there the turnout is getting less each election, from a turnout of 87,8% in 1974 (Hagstofa Íslands, 2014y).

In a special election in 2010 a constitutional assembly, Stjórnlagaráð, was elected to draft a new constitution. The Supreme Court invalidated the election shortly thereafter and the same assembly



# 1.4 Public sector management

### The structure of public administration

Public administration is divided into three, the legislative, judicial and executive. Then there are two levels of government: a central government and local governments.

Iceland is furthermore divided into regions, constituencies and communities. Examples are regions used to determine areas for law enforcement services and welfare services for people with disabilities. There are also eight regions that are primarily used for statistical purposes; the district court jurisdictions also use an older version of this division.

Until 2003, the constituencies for the parliamentary elections were the same as the regions, but by an amendment to the constitution, they were changed to the current six constituencies:

- Reykjavík North and Reykjavík South (city regions);
- Southwest (four non-contiguous suburban areas around Reykjavík);
- Northwest and Northeast (northern half of Iceland, split); and,
- South (southern half of Iceland, excluding Reykjavík and suburbs).

The change to the constituencies was made in order to balance the weight of the different districts in the country, since previously a vote cast in the sparsely populated areas around the country would count much more than a vote cast in the Reykjavík city area. The imbalance between districts has been reduced by the new system, but still exists.

There are 74 communities in Iceland that govern local matters like the pre-primary, compulsory and music schools, as well as local transport, zoning and welfare services. These are the actual second-level public administration subdivisions of Iceland, as the constituencies have no relevance except in elections and for statistical purposes. The capital city of Reykjavík is by far the most populous community, about four times more populous than Kópavogur, the second biggest one.

#### The organization of public employees

With only two levels of government the government structure is fairly simple and subsequently the structure of civil service also. The President of Iceland gives a parliamentary leader of a political party the authority to form a cabinet, usually beginning with the leader of the largest party. The Ministers of that cabinet – of whom there are 9 in 8 Ministries in the current government – are typically elected to the parliament and have authority over the civil servants of their individual Ministries and relevant institutions. (Alþingi Íslands, 2011b). A Permanent Secretary directs each Ministry under the Ministers ultimate authority. Within each Ministry are a few Departments or Offices directed by a Director, subdivided into Divisions lead by Heads of Divisions. Within each division operate specialists and other staff. The Directors are appointed with a letter of official duty regulations but the Head of Divisions and specialists work according to terms of reference. (Menntaog menningarmálaráðuneytið, n.d.).

The local governments are responsible for the structure of public employment in their community. In each community a local council is elected by general suffrage and that council has the power to decide how the community sources of income are used, to determine the local structure and to discharge of local functions. The functions of the local government are provided for in the various legislative acts, such as relates to the key areas of social welfare, education at the pre-primary and compulsory school level, culture and recreational activities, zoning, local transport and infrastructure such as sewage, water supply, electrical power and heating.

The actions, accountability and working environment of all public employees are governed by the legislation applicable to the field in which they work, but also by a Government Employees Act no. 70/1996, Public Administration Act no. 37/1993, the Local Community Act no. 138/2011 and collective labour agreements.

By law, all public employment positions are filled through public advertisement and a legal framework guides the hiring process. An exception allows though for movement of existing employees within the public system when certain conditions are met.

The Government Employees Act divides government staff into two groups, civil servants and other employees, whereby the term civil servant applies to higher-echelon employees that are appointed for a fixed period, not exceeding five years but renewable. All other employees are appointed either temporarily or indefinitely with a determined notice period that is typically three months. Head teachers of the schools thus count as civil servants but all other school staff as employees.

Some larger local communities operate a system for civil servants at the local level, whereby a special Salary Arbitrary Committee determines the salaries.



The purpose of this chapter is to describe some of the main features of the school system in terms of organization and governance as well as performance. This chapter will provide much of the detail that is needed to understand the process of decision-making and the allocation and use of resources in the school system. The issues covered in this chapter will be referred to in subsequent sections of this report.

## 2.1 Organization of the school system

#### The structure and operational responsibilities of the school system

The Minister of Education, Science and Culture governs the affairs covered by the School Acts, issues the national curricula for all school levels, provides compulsory schools with study material, monitors the quality of school activities, gathers, analyses and distributes information, supports development work and administers conflict resolution according to provisions of the acts of the preprimary, compulsory and upper secondary schools. The Ministry furthermore ensures that the local communities fulfil the duties stipulated in the School Acts, regulations and rules issued thereof and in the national curricula.

The educational system is organized in four levels:

- Pre-primary schools for up to 6 years of age. Governed by the Pre-Primary School Act, no. 90/2008 (Alþingi Íslands, 2008c);
- Compulsory schools (primary and lower secondary in a single structure) for 6 16 year olds. Governed by the Compulsory School Act, no. 91/2008 (Alþingi Íslands, 2008b);
- Upper-secondary schools which are meant for 16 20 years of age. Governed by the Upper Secondary School Act, no.92/2008 (Alþingi Íslands, 2008);
- Higher education from 20 years of age. Governed by the Universities Act, no. 63/2006 (Alþingi Íslands, 2006) and the Act on Adult Education no. 47/1992 (Alþingi Íslands, 1992).

The local communities are responsible for the establishment and operation of pre-primary and compulsory schools, including the provision of special education. They thus pay for instruction, general teaching, substitute teaching, administration and specialists' services. Local specialist education offices provide pre-primary and compulsory schools with various specialist services, such as general pedagogical counselling, counselling in respect to particular subjects, educational counselling for students and psychologist services. Where the local communities themselves do not offer such services, the local authority in question is under an obligation to ensure that other communities or institutions, such as teacher training institutions or other parties, provide the needed services.

The state is responsible for the operation of upper secondary schools and higher education institutions while public authorities, private institutions, companies and organizations provide continuing and adult education.



A fundamental principle of the Icelandic educational system is that everyone should have an equal opportunity to acquire an education, irrespective of gender, economic status, residential location, religion, disability and cultural or social background.

All schools in Iceland have both female and male students and all are formally inclusive except three. Those three schools are for students with disabilities or severe behaviour issues.

Education in Iceland has traditionally been organized within the public sector and there are relatively few private institutions in the school system. Almost all the private schools that do exist receive public funding.

#### The student body

In 2012 the number of students in pre-primary, compulsory and upper secondary education was:

Table 5 The number of students in pre-primary, compulsory and upper secondary schools, 2012

Pre-primary schools   Compulsory sch		Upper secondary schools
19.617	42.320	25.292

(Samband íslenskra sveitarfélaga, 2013b) (Hagstofa Íslands, 2013p)

The composition of the student group was such that 5,8% of pre-primary school students had a foreign nationality, 3,5% of compulsory school students and 2,6% of upper secondary school students. In the pre-primary schools 10,5% of the students had a native language other than Icelandic, as well as 6,2% of the compulsory school students – with no data available for the upper secondary schools. 5,7% of pre-primary school students received special assistance or training under the guidance of specialists, 15,7% of the compulsory school students had a formal diagnosis that called for special assistance or placement in a special education class, with 27% of the total body at both school levels requiring extra support of some kind. Finally, 19% of the pre-primary school students attended privately operated schools, 2% of the compulsory school students and 20% of the upper secondary school students. (The Association of Local Authorities; Statistics Iceland).

#### The pre-primary school

The pre-primary school, or "leikskóli" in Icelandic, is non-compulsory education for children younger than six years of age, and is the first formal part of the education system. In 2012 a total of 263 pre-primary schools operated in Iceland, with 41 of them being privately operated, - and the school level is the operational responsibility of the local communities. The pre-primary schools operate five days a week, year round, typically with a four-week break during the summer. The Pre-Primary School Act of 2008 governs the pre-primary schools (Alþingi Íslands, 2008c).

By law, pre-primary schools are for children who have not reached the age at which compulsory school begins, i. e. in the autumn of the year in which the child turns six. The local communities are not required by law to operate pre-primary schools, but do have the responsibility to establish and operate such schools where they exist according to the Act on Social Services no. 40/1991 (Alþingi Íslands, 1991) and Act on Pre-Primary School no. 90/2008 ( (Alþingi Íslands, 2008c). There is no legal lower age limit for pre-primary school children but in reality not all pre-primary schools accept children younger than one year old and the youngest children are sometimes two years of age. The statistics show though that from 1998 to 2012 the proportion of one year olds in pre-primary schools went from 12% to 32%, and two year olds from 65% to 95% (Samband íslenskra sveitarfélaga, 2013b). This may change further in the coming years, as currently there is on-going a working group

with representatives from the Ministry of Education, Science and Culture, Icelandic Association of Local Authorities and The Association of HeadTeachers in Preschools on the educational and operational aspects of the local communities being required to accept children into pre-primary school immediately following the 9 month maternity/paternity leave. In local communities where there is not the availability to accommodate all applicants, the children of single parents and students are often given priority.

At pre-primary schools students receive education and support for their all-round development, thus preparing them for compulsory school and life itself. At the pre-primary school level the nucleus of the educational work is play.

#### The compulsory school

The compulsory school, or "grunnskóli" in Icelandic, comprises primary and lower secondary education, which most often is organised in a single structure system. That is, primary and lower secondary education form part of the same school level and usually take place in the same school. There are no entrance requirements at this school level and the children generally begin compulsory school at the age of six.

Compulsory education is generally ten years in duration but can be shorter as per article 32 in the legislation for compulsory schools (Alþingi Íslands, 2008b). Compulsory school education is in general mandatory for children between the ages of 6 and 16, although they can start later or graduate earlier according to the pre-primary and compulsory school laws. The Compulsory School Act of 2008 governs the compulsory schools. The law determines the length of the academic year and the minimum number of lessons to be given each week and defines which subjects are obligatory. (Alþingi Íslands, 2008b). The school year thus lasts at least nine month, with the minimum number of school days being 180. Lessons take place five days a week. Parents have the legal responsibility for the education of their children.

In 2012 a total of 167 compulsory schools operated in Iceland, with 10 being privately operated. From the year 1995 the compulsory schools have been the operational responsibility of the local communities. Basically, three types of compulsory schools exists, with most having all ten grades but a few operating grades one to seven or grades eight to ten or some versions thereof. Schools that have grades eight to ten are often merger schools, i.e. they take in students from two or more schools in the catchment area that have grades one to seven. Most communities provide out-of-hours provision for the children.

The size of schools varies tremendously. The largest schools are typically in the capital area, the largest having around 800 students. In other areas there are smaller schools, a few with fewer than 10 students. In 2013 113 compulsory schools had more than 100 students and 54 schools, or a third of all the schools, fewer than 100 students. (Samband íslenskra sveitarfélaga, 2013b).

The main objective of compulsory schooling is to support the all-round development of all students and their participation in a democratic society that is continuously changing. Tolerance and caring, the Christian heritage of the Icelandic culture, equality, democratic co-operation, responsibility, conciliation and respect for human values shall guide the organization of the school as well as its work. Furthermore, the law concerning schools at the compulsory level stipulates that all students are to receive suitable instruction, taking into account the nature of the student and his or her needs and promoting the development, health and education of each individual. Students have the right to attend school in the area where they live. Also, the school is to systematically integrate students with special needs into mainstream education. (Alþingi Íslands, 2008b).

#### The upper secondary school

Upper secondary school – "framhaldsskóli" in Icelandic and also known as gymnasium in English follows the compulsory school. A total of 48 upper secondary level schools operated in 2012 – thereof 19 were privately operated but approved by the Ministry of Education, Science and Culture. The minimum number of school days a year for what constitutes a full study is 175. The school level is the operational responsibility of the state, the central government. The Upper Secondary School Act of 2008 governs this stage of education (Alþingi Íslands, 2008).

At the upper secondary level anyone who has completed compulsory education or has turned sixteen has the right to enter a course of studies - with 27% of those who enter not having achieved satisfactory results upon leaving the compulsory school (Mennta- og menningarmálaráðuneytið, 2014). An effort must be made to give students a choice of subjects and forms of instruction in accordance with their needs and wishes. The primary function of upper secondary education is to prepare students for life and work in a democratic society by offering them suitable opportunities to learn and develop individually, and to prepare them for employment through specialised studies leading to professional qualifications or further study. Students in the upper secondary school can choose between general academic studies and vocational studies, with currently around 100 different studies on offer and thereof 87 vocationally related. The work in upper secondary school is assessed in standardised secondary school credits, with a full time study equalling 60 credits per school year.

Traditionally many upper secondary school students work at the same time as they undertake their upper secondary school education, and many go back to upper secondary school later in their life. A valuable aspect of the Icelandic educational system is that it is easy to access education at any time.

As described in the general section of the national curriculum for the upper secondary schools (Ministry of Education, Science and Culture, n.d.), the general academic education aims at preparing students for university education in Iceland or abroad. It is at the minimum organised as 200 secondary school credits leading to a matriculation examination. Subjects to be studied are divided into three groups: general subjects that all students are required to take, specialised subjects according to the aims of a particular programme of study and electives. The central issue of the studies can be academic, artistic or vocational.

Vocational education at upper secondary school level can be 90- 240 secondary school credits. Within vocational education, students can choose between training for a skilled trade or vocational education in other areas -for example, in the field of fisheries, the travel industry or health and commerce. The skilled trade studies often give the students legal certification or professional rights in regulated professions or the right to take journeyman's examination in trades such as carpentry, electricity, plumbing and hairdressing.

Students in vocational programmes have the possibility of completing the matriculation examination in preparation for entering higher education by doing additional studies.

Although the upper secondary school is aimed at 16-20 year olds, there is a high ratio of older students. Thus upper secondary school students aged 21 and older were 8.180 in December 2012. That is, out of all the population born in a specific year, 23,2% of 21 year olds were students at upper secondary schools, 18,3% of 22 year olds, 13,6% of 23 year olds, 12,6% of 23 year olds, 7,6% of those aged 25-29, 3,8% of those aged 30-39 and 1,1% of those 40 years and older. (Hagstofa Íslands, 2013p). In an introduction of the Budget Bill for 2015 the Minister of Education, Science and Culture introduced the aim to prioritize 16-25 year olds in the upper secondary schools, with those older being directed to alternative resources.

An OECD study shows that 64% of Icelanders aged 25–64 have earned the equivalence of a high-school degree, which is lower than the OECD average of 73%. Among 25–34 year-olds, only 69% have earned the equivalent of a high-school degree, significantly lower than the OECD average of 80%. (OECD, 2013).

#### The higher institutions

There are 7 higher education institutions - háskóli in Icelandic - in Iceland. The largest is the University of Iceland, but other institutions offering university-level education are Háskólinn á Akureyri, Háskólinn á Bifröst, Háskólinn í Reykjavík, Hólaskóli - Háskólinn á Hólum, Landbúnaðarháskóli Íslands and Listaháskóli Íslands. The universities are entrusted with the task of carrying out research and offering higher education programs in different subjects, as stipulated by the legislation governing each institution.

All higher education institutions are subject to the provisions of the Higher Education Institutions Act of 2006 (Alþingi Íslands, 2006). In the Act the Icelandic term "háskóli" is used to refer both to those higher education institutions which have a number of faculties, permanent research facilities and undergraduate and graduate programmes, and institutions that do not have research responsibilities. Consequently, there is no formal distinction between non-university and university institutions in Icelandic; but by law, the Ministry of Education, Science and Culture determines the title of each institution in foreign languages, i.e. whether it is to be called a university or college. Iceland spent around 2.4% of its GDP in 2011 on scientific research and development according to Eurostat. (Eurostat, n.d.).

#### Structural changes in the school system

The main structural changes in the school system in recent years have been the legal recognition of the status of pre-primary school educators as teachers, two years have been added to the minimum teacher education requirements and a trend can be seen in the local communities merging pre-primary, compulsory and music schools under one administrative leadership. Furthermore some issues are under regular debate, such as reducing the number of years at school (currently 14 years in compulsory and upper secondary school) before the matriculation examination is achieved.

Another on-going structural debate focuses on the collective labour agreements between the state/local communities and the teachers, which stipulate how the working hours of the teachers shall be spent. The debate is then both on the number of teaching hours of the teachers and where the work takes place – that is whether the teacher is bound to spend all the working hours at the school itself or can do certain aspects of the work from home.

Finally and as mentioned earlier, a working group has recently been established with representatives from the Ministry of Education, Science and Culture and The Association of Local Authorities on whether the local communities will be required to accept children into the pre-primary schools immediately following the end of the maternity/paternity leave.

#### 2.2 Education environment

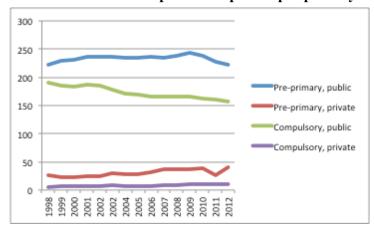
Society places great importance on education, an importance that is increasing by the years.

#### Public vs. privately operated schools

Most schools at pre-primary, compulsory and upper secondary level are funded and operated by the public authorities. A few private schools exist – see the following chart and the underlying figures in Annex 1. Most, if not all privately operated schools receive public funding and therefore parents

have a minimum investment in their children's education other than through their taxes. Prevalence of private tutoring is very limited.

Chart 1 The number of public and private pre-primary and compulsory schools, 1998 to 2012



(Samband íslenskra sveitarfélaga, 2013b)

Out of the pre-primary schools 15% were privately operated in 2012, 6% of the compulsory schools and 40% of the upper secondary schools. Of the students 19% attended privately operated pre-primary schools, 2% compulsory schools and 20% upper secondary schools.

The local communities are responsible for and fund the construction and operation of the preprimary and compulsory schools. They can grant authority (pre-primary schools) or approve (compulsory schools) that private parties operate individual schools – compulsory schools need the approval of the Ministry of Education, Culture and Science as well. The privately operated schools need to fulfil the same laws, regulations and national curricula as the publicly operated schools, but have more allowance regarding financial contributions from parents.

The Minister of Education, Science and Culture can approve upper secondary schools operated by private parties. The schools such approved need to go by the Upper Secondary School Act and relevant regulations. They do not have automatic right to public funding, but in practice most receive their primary funding from the state.

Schools operated by private parties have the autonomy to operate as they wish, as long as they fulfil the basic requirements set forth in the related legislative framework.

## The funding of schools

Like publicly operated schools, privately operated pre-primary schools normally receive funding from the local community in accordance to an agreement between the two parties. An approved privately operated compulsory school has by law the right to a funding from the local community that is at the minimum 75% of the weighted average cost of the total operational cost of the community operated schools in the country, per student. This applies to the first 200 students in the school, after which the amount is lowered to 70% for each additional student. Privately operated schools at both school levels can charge the parents a fee, but the price list for a compulsory school needs to be a part of the agreement between the local community and the school.

Most parents pay a fee for their children to attend pre-primary school, whether publicly or privately operated – with a few known cases where there is no fee. Each local community determines what

that fee should be. In 2012 the parental contributions covered as a weighted average 18% of the operating cost of publicly operated pre-primary schools. The cost of operating the schools was from 3% and up to 29% of the tax income of the individual local communities. The cost as a weighted average of the total tax income of the local communities was 14%. (Samband íslenskra sveitarfélaga, 2013b).

Compulsory school education, including educational material and school transportation, is fully funded by the local communities. Textbooks are funded by the state. The cost of operating the schools was from 25% and up to 66% of the tax income of the individual local communities. The cost as a weighted average of the total tax income of the local communities was 32%. (Samband islenskra sveitarfélaga, 2013b).

The operating costs of upper secondary education are funded by the state. Construction costs and initial capital investment for equipment are divided between the state and the relevant local communities, which pay 60% and 40% respectively. Education at the upper-secondary level is free, but students pay a low enrolment fee and the cost of their textbooks. Students in vocational education pay a materials fee. Some upper secondary school students – particularly those in selected vocational studies – have access to student loans from the Icelandic Student Loan Fund (www.lin.is) in order to cover their living expenses.

Tertiary educational institutions receive an annual budget allocation from the state, which they themselves administer. Instruction in state institutions at the higher education level is considered to be free for students, although they are charged a registration fee and pay the cost of textbooks and other study material. Privately operated institutions charge an additional tuition fee. Most university students have access to student loans from the Icelandic Student Loan Fund.

#### Key traditions, culture and values of the educational system

Among the key traditions and the base for the culture and values of the Icelandic educational system is equal access for all to education as well as inclusive schools. Thus a fundamental principle of the Icelandic educational system is that everyone shall have equal access to education irrespective of sex, economic status, geographic location, religion and cultural or social background. This principle is stated in the Constitution of the Icelandic Republic as well as in the various acts pertaining to the different educational levels. Education is compulsory (primary and lower secondary education in a single structure) from age six through age sixteen, i.e. for ten years. Emphasis is placed on providing the opportunity for upper secondary education for all and everyone has the legal right to enter school at that school level, irrespective of their results at the end of compulsory schooling. All the three school levels, pre-primary, compulsory and upper secondary, are built on the same values as stated in the national curriculum for each level - values such as respect, caring, tolerance and responsibility.

One of the important characteristics of the Icelandic educational system is furthermore the decentralization within the system, with the independence of the local communities and individual schools strengthened with the School Acts of 2008. Correspondingly monitoring and evaluations were in general increased in order to ensure the quality of education, at the level of the schools, the local communities and the Ministry of Education, Science and Culture.

Educational administrators and teachers that work in the schools operated by the public authorities – which most are - are part of the civil service.

The national educational authorities are responsible for all regulatory setting, as well as standards set through the national curricula. The local communities and/or individual schools are responsible for the implementation of those regulatory settings and national standards.



An extensive study of the compulsory schools, performed during the winter 2009 – 2010, showed that 99% of parents and school employees believed that parental support was an important factor in the educational accomplishment of students. The same research showed that 95% of school employees believed that co-operation with the parents was an important contributing factor to the good behaviour of students. 40% of parents agreed, while 32% disagreed, that teachers should be the only ones organizing the students studies, given the teachers expert knowledge. However, while 64% of parents felt that it is very easy to communicate with the student's supervisory teacher, only 15% of supervisory teachers thought that communication with the parents was very easy. (Óskarsdóttir, Starfshættir í grunnskólum við upphaf 21. aldar, 2014)

The role of the media in forming the public's attitudes and perception towards education is considerable and growing, and then both the traditional media and the social media. The intensity and impact of the media's role on the public opinion on schooling has not been specifically studied but experience has shown that in cases of concerns of the treatment of individual students the media attention is high and shapes public opinion. As schools and teachers are bound by a confidentiality clause, they are not able to defend themselves when the media takes an interest in cases of individual students. The media attention is also focused on school performance in student assessments each year, graduation and dropout rates, etc.

The debate about the teachers' salaries furthermore gets a lot of media attention, with teacher salaries and union struggles getting pretty extensive coverage in the educational debate every now and then. Generally the population has sympathy with the teaching profession.

# 2.3 Objectives of the educational system and student learning objectives

#### The principles, goals and purpose of the educational system

A fundamental principle and main goal of the Icelandic educational system is that everyone should have equal opportunities to acquire an education, irrespective of sex, economic status, residential location, religion, disability and cultural or social background.

The purpose and policies of the educational system are set forth in the legislative acts for the respective schools levels and subsequent regulation. Furthermore, the Ministry of Education, Science and Culture issues national curriculum guidelines for each of the three school levels, that specify the aims that schools are to follow and describe the basic goals and purposes that apply in the education of children and young people. The national curricula guidelines are intended both to provide the detailed objectives necessary to implement the respective laws and offer direction as to how they should be carried out in practice.

The curricula guidelines are based on six fundamental pillars: literacy, sustainability, health and welfare, democracy, equality and creativity. Each of the fundamental pillars derives from the laws for the pre-primary, compulsory and upper secondary schools but other legislation are also used as a foundation, such as the Act on Equal Status and Equal Rights of Women and Men, no. 10/2008.

In addition, government policy on various issues is taken into account, for example in regard to sustainability. International conventions to which Iceland is a party are taken into consideration also - the United Nations Convention on the Rights of the Child, the UN Convention on the Rights of Persons with Disabilities and the UNESCO Policy on General Education and Sustainable Development are apt examples and also the Council of Europe Policy on Democracy and Human Rights.

In formulating the policy that appears in 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 schools.

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, the ability and will to influence and be active in maintaining society, change it and develop. The pillars are based on the view appearing in school legislations that both social objectives and the educational objectives of the individual are to be achieved.

The pillars are socially oriented as they aim to promote increased equality and democracy and to ensure well-educated and healthy citizens, 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.

The fundamental pillars are an intrinsic part of the curricula guidelines for all school levels and stipulation 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 that 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.

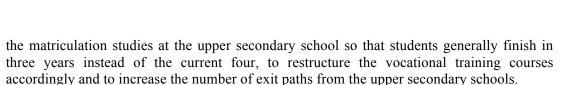
In school activities it is important to approach tasks in an integral manner, applying professional broadmindedness and when appropriate interdisciplinary methods. This can necessitate unconventional teaching methods and an unusual approach to school activities.

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.

#### Policy priorities and targets

The immediate policy priorities and targets for the education system for 2014 - 2018 are set forward in a White book published by the Ministry of Education, Science and Culture in the spring of 2014 (Mennta- og menningarmálaráðuneytið, 2014):

- 1. That 90% of all students reach basic Pisa standards in reading, but the ratio is now 79%. One of the possible actions in order to reach this goal is to stipulate increased native language teaching in the national curriculum. It is also mentioned that criteria can be formulated for the reading skills that students should possess at each stage of compulsory school, and that reading could be measured regularly from pre-primary school to the end of compulsory school.
- 2. That the percentage of students who graduate from upper secondary school on time will rise from 44% to 60%. The possible actions to accomplish this goal are among others to organize



#### Standards and learning progression

Key competences are set forward in the national curricula guides. They are articulated in competence groups such as communication, creativity and critical thinking, independence and co-operation. A description is given for each competence group and then stated what the student should know or be able to do at the end of a particular school grade. Examples of such competence requirement is: "At the end of grade four I should be able to communicate my thoughts and opinions and express them in an appropriate manner", and "At the end of grade 10 I can take initiative in my studies and be independent and responsible in how I work".

When it comes to standards and learning progression the National Testing Institute (will be merged into a new institute in 2015, responsible for both testing and educational materials) is an independent governmental institution funded by the state through the Ministry of Education, Science and Culture. The institution is responsible for organising, setting and grading the nationally co-ordinated examinations and for undertaking comparative analysis of the educational system through participation in international surveys.

## 2.4 Distribution of responsibilities within the school system

#### Responsibilities for the operation of the school system

The Icelandic parliament is legally and politically responsible for the educational system, determining its basic objectives and administrative framework. All education comes under the jurisdiction of the Ministry of Education, Science and Culture, with the exception of the Police Academy.

The educational system has, to a large extent, been decentralised both with regard to responsibilities and decision-making. This reflects a general trend in Icelandic society. Local communities are accordingly responsible for the operation of pre-primary and compulsory schools and the state for the upper secondary schools and higher education.

The local communities are thus responsible for opening and closing pre-primary and compulsory schools, approving their school curriculum, annual work plans and deciding strategies for support to students with learning difficulties. They are also responsible for organizing school leadership and allocating financial and physical resources. Both the local communities and the Ministry - or the National Testing Institute on the ministry's behalf, are responsible for monitoring and evaluation of the schools work

The Ministry is responsible for opening and closing upper secondary schools, approving their course offer, school curriculum and annual work plans, organizing school leadership, monitoring and evaluating the schoolwork, and allocating financial and physical resources.

Individuals schools, at all levels, are responsible for formulating the school calendar and instruction time – in accordance to legal stipulations as well as those in the teachers collective labour agreements, developing the school curriculum, implementing student assessment as well as school assessments, deciding class size and grouping of students, managing the use of financial and physical resources and selecting, evaluating and dismissing the human resources. All schools are furthermore responsible for strategies to support students with learning difficulties. In general the head teachers

of pre-primary, compulsory and upper secondary schools are legally granted extensive independence and responsibility for school operations in the respective School Acts.

The Ministry of Education, Science and Culture furthermore issues national curricula guidelines for all pre-primary, compulsory and upper secondary education, whether publicly or privately operated. These national curricula guidelines are intended to provide the detailed objectives necessary to implement the legal framework and to offer direction as to how it should be carried out in practice.

The distribution of responsibilities within the school system has not changed in any great way since 1995, when the responsibility for the compulsory schools transferred from the state to the local communities. Since then all changes have been minor, for example determining what responsibilities the state and the local communities have in specific support services for students with disabilities. Furthermore, no major initiatives or changes have been decided, but the local communities have expressed an interest to take over the operation of the upper secondary schools and under consideration is to move the responsibility for child day-care from the Ministry of Welfare to the Ministry of Education, Science and Culture.

#### National education institutions

The National Centre for Educational Materials (under the auspices of the Ministry of Education, Science and Culture) develops and publishes educational materials for compulsory schools and distributes them to schools free of charge.

The National Testing Institute is an independent institution funded by the state through the Ministry of Education, Science and Culture. The institution is responsible for organising, setting and grading the nationally co-ordinated examinations and for undertaking comparative analysis of the educational system through participation in international surveys.

The National Centre for Educational Materials and the National Testing Institute are to merge into one institution in July 2015.

#### Local education bodies

The individual pre-primary and compulsory school operates under the authority of the local community and is responsible for acting in accordance to laws and regulations and local statutes that may apply. School Boards have a crucial statutory responsibility regarding the operation of pre-primary schools and compulsory schools in each local community. The Boards roles include both the professional and the operational aspects of schooling. (Alþingi Íslands, 2008c) (Alþingi Íslands, 2008b).

The main functions of the School Boards for the pre-primary and compulsory schools are to:

- Ensure that all entitled children enjoy statutory education.
- Approve the work program and the school curriculum of individual schools each year.
- Monitor the implementation of teaching and learning and make recommendations to the head-teacher and/or school authority for reforms in education.
- Monitor and promote the students and schools access to specialist support services.
- Ensure that suitable accommodation for teaching and other facilities is in place, including an outdoor playground.

- Ensure that laws and regulations are complied with and make recommendations for improvements to the local authority.
- Promote communication and cooperation between the pre-primary school and compulsory school on the one hand, and compulsory and upper secondary schools on the other.

The Local Council, which consists of elected representatives and governs the local community, appoints the School Board at the beginning of each political four-year term. Head teachers, teachers and parents in each local community appoint representatives to attend meetings of the School Boards, as non-voting observers. It is up to each Local Council to decide whether there is one School Board for both pre-primary and compulsory education, or whether there are two separate ones.

In addition each compulsory school shall have a School Council, with a total of nine members, i.e. the head teacher, two representatives of the teachers and one for other school employees, two representatives of the students and parents and one community stakeholder. The role of the School Council is to participate in the development of the school's strategy and discuss the school curriculum, annual operational plan and other school related plans. The Council furthermore comments on any major changes planned and monitors safety, facilities and generally the student body welfare. However, as less populated local communities pointed out their difficulty in implementing the School Councils an amendment has been made to the Compulsory School Act in 2011 where a local community can apply to the Ministry for Education, Science and Culture for an exception to have a School Council.

Instead of a School Council, the pre-primary schools have a Parents Councils, with a minimum of three representatives appointed by the group of parents. The role of the Parents Council is to comment on and monitor the implementation of the school's curriculum and other plans.

Being responsible for upper secondary education, the Minister of Education, Science and Culture appoints a School Board for each upper-secondary school. Three representatives out of five on the School Board represent the ministry, the other two come from the local community or communities concerned. Representatives of teachers and students are non-voting observers on the School Board. The head teacher attends meetings of the School Board as a non-voting member, serving the board in an executive function. The School Board determines the emphases in school activities and is, among other things, responsible for the annual operating and financial plan of the school. (Alþingi Íslands, 2008).

School Boards of upper-secondary schools are permitted to establish one or more advisory committees in order to promote the best possible co-operation between the school in question and local industries.

#### Vocational committee and occupational councils

According to the Upper Secondary School Act, an eighteen-member co-operation committee on vocational education at the upper secondary level is the national forum for comprehensive policy-making in the affairs of vocational education. It's function is also to give advice in the setting of common rules on matters related to vocational education. The Minister of education, Science and Culture appoint the committee and also occupational councils for the individual vocational trades.

The role of the occupational councils is to define the needs of the vocation in question in respect to the knowledge and ability required for the trade, and to define the aims of that particular vocational course of study. Occupational councils also suggest the structure of the education and curriculum guidelines that pertain to their specific vocation.

#### Privately operated schools

Publicly funded but privately managed schools are present in the education system but they are relatively few as shown earlier. The responsibility for privately managed pre-primary and compulsory schools lies with the local communities, which has to authorise their operation and the schools have to fulfil all legal requirements made to the publicly managed schools, with the exception of decisions on fee taking. In addition to legal requirements, each local municipality determines the requirements it otherwise makes to the rights and responsibility of the privately managed schools. The Ministry of Education, Science and Culture is furthermore authorized to approve privately managed compulsory schools already approved by a local community. As a condition for the Ministry's approval, the operations and facilities of the school need to comply with existing laws and regulations, as well as the education and hiring practices of teachers and the schools leadership, the rights and duties of the students need to be respected and the requirements for internal and external evaluations and public information. (Mennta- og menningarmálaráðuneytið, 2009e). Thus approved compulsory schools have the right to a funding contribution from the local community. (Alþingi Íslands, 2008c) (Alþingi Íslands, 2008b).

Privately managed upper secondary schools may also receive the approval of the Ministry of Education, Science and Culture. They need to fulfil the legal requirements that apply to publicly managed upper secondary schools. To be approved the school needs to submit information on the role and objectives of the school, it's organization and leadership structure, school curriculum and study description, the study and teaching arrangements, employee competency requirements, the student admission requirements, the rights and obligations of the students, employee and student facilities and service, internal quality control system, finances and assurances. (Alþingi Íslands, 2008).

## 2.5 Market mechanisms in the school system

Each local community can set it's own policy for admission and the rights of parents to select a school at the pre-primary and compulsory school level, according to the legislation for the respective school levels (Alþingi Íslands, 2008c) (Alþingi Íslands, 2008b). In general the criteria should take into account both the situation of the children and their parents, but also of the schools themselves. By law parents have the right to choose which school within the local community their child attends. In practice some local communities allow parents the choice of school, while others do not and the criteria differs also when demands exceeds supply. Also, in practice most children attend the school closest to their home. Whether a child goes to a public or private school is entirely the choice of the parents. The same applies for the few special needs schools that exist in the system. Parents can apply for a place at a special needs school, some of which have a specific criterion for entry, and then a decision is taken on a case-by-case basis.

As a rule a child attends a school in the local community where it has a registered legal residence. A child may attend a pre-primary or compulsory school in another local community if an agreement to that extend is made between the two communities.

At the upper secondary level each school is responsible for its own admission criteria and procedure, in accordance to terms agreed between the school and the Ministry of Education, Science and Culture. The National Testing Institute supervises upper secondary school applications for the academic and vocational tracks, and from the beginning of 2015 will take over the supervision of applications to the special need tracks as well. In practice all applications are made electronically to the institute, with each applicant naming a first and second choice school. In the spring of 2013 85,17% applicants were accepted to the first school of choice, 12,36% into their second choice and around 100 students were not accepted into either of the schools they chose (Námsmatsstofnun, n.d.).

However, legally all those who have finished compulsory school or reached 16 years of age have the right to start studies at the upper secondary school level. The Ministry of Education, Science and Culture therefore takes over the procedure for those applicants that were not accepted into the two chosen schools and finds them school placements.

Most privately managed schools – pre-primary, compulsory and upper secondary - receive public funding but are not operated for profit. To that extend an article is to be found in the regulation on the approval of compulsory schools operated by other than the local communities, which stipulates that any operating surplus derived from public funding be used to strengthen the operation of the school (Mennta- og menningarmálaráðuneytið, 2009e).

The only policy available that can be said to encourage competition between schools is in a vision for the compulsory schools to the year 2020, formulated and adopted by the local communities and unions of teachers and head teachers in 2007. One of the objectives there states that parents should be able to choose a school based on the school's policies and emphasis, where possible. (Pétursdóttir, 2007). The implementation of this policy is left to the individual local communities.

Information about the results of the general student body in standardized tests, which only applies to the compulsory schools, is published every year. Some local communities have chosen not to publish the information for individual schools, but in a recent verdict it was determined that information for individual schools should be made available to those who request them (Forsætisráðuneytið, 2014). At the same time the National Testing Institute has from the beginning published the results down to the individual schools in it's reports.

No publication of information on examination results in upper secondary education exists. There are no standardized tests at that school level, nor are examination results gathered centrally.

# 2.6 Performance of the school system

#### Admission criteria

At the pre-primary school level, by law, each local community formulates it's own policy and admission criteria. By practice local communities try to ensure all children over a specific age (often the age of two, in the fall of the year they start pre-primary school) access to pre-primary school – with no discrimination being made to the social, financial or other status of the family. A priority is though sometimes given to the children of single parents. Furthermore, if there are not a sufficient number of places available during the fall admissions, many communities prioritise the older children when places become available.

The compulsory school act stipulates that attending school is a mandatory for all children aged 6-16. The local communities are responsible for ensuring places for the children that have a legal residence in the community and for ensuring that they attend school. (Alþingi Íslands, 2008b).

The upper secondary school law stipulates that all those who have finished compulsory school or equivalence or have reached 16 years of age have the right to attend upper secondary school. Those with the right to enter the school furthermore have the right to stay in school until age 18. (Alþingi Íslands, 2008).

#### Student fees

At the pre-primary school level each local community can determine the fees it charges the parents, but the pre-primary school act stipulates though that the fee for each child cannot be higher than the

average actual cost of a child in the community's schools (Alþingi Íslands, 2008c). In practice each local community often develops a discount system in their admission criteria in regards to the fee charged – for example a half fee may be charged for a second child in a family attending pre-primary school.

According to the respective laws, compulsory (Alþingi Íslands, 2008b) and upper secondary schools (Alþingi Íslands, 2008) are free of charge to all students. In the compulsory schools parents may be charged the cost of specific educational materials under strict conditions and for meal cost in school canteens. In the upper secondary schools students pay an enrolment fee approved by the Minister of Education, Science and Culture and cover the cost of their educational books and some materials and optional activities such as field trips.

No stipulation is found in the School Acts in regard to school completion, but the national curricula guidelines for the compulsory and upper secondary schools do state a required knowledge or competence to be the pre-requisite for graduation.

#### Student statistics

Every year *Statistics Iceland* (www.hagstofa.is) collects various data for all the schools in Iceland. The student enrolment data shows that a total of 107.353 people were attending school in the fall of 2012, with similar numbers for the preceding years. The data shows a fair gender balance at the lower education levels - pre-primary, compulsory and upper secondary. However, more males attend additional schooling at the upper secondary school level (such as master classes for the specialized trades) and substantially more females attend tertiary education than males. At the timing of writing this report this data was only available for two school levels for the fall of 2013 and for none after that. Therefore the fall of 2012 is the newest data used.

2008 2004 2012 **Total** Males Females **Total** Males Females **Total** Males **Females** Pre-primary school 16.755 8.551 8.204 18.278 9.370 8.908 19.615 10.097 9.518 21.575 20.785 44.511 22.936 43.511 22.166 21.345 42.320 21.535 Compulsory school 12.726 25.460 Upper secondary school 22.603 10.997 11.606 25.590 12.189 13.401 12.734 Additional schooling 453 260 1.160 736 424 869 713 603 266 10.726 University 15.245 5.358 9.887 16.662 5.936 18.619 7.033 11.586 Doktorate 134 55 79 282 117 165 470 184 286 51.611 105.483 99.961 48.350 50.514 54.969 107.353 52.178 **Total** 55.175

Table 6 The number of students at all education levels by gender, 2004 to 2012

(Hagstofa Íslands, 2014e)

A total of 83% of children aged 1-5 attended pre-primary school (Samband íslenskra sveitarfélaga, 2013b) and 98,7% of children aged 6-16 attended compulsory school. (Hagstofa Íslands, 2014p). The 1,3% of children aged 6-16 years of age - around 550 children - that are not in compulsory school according to the calculation, which is based on information from Statistics Iceland, is unexplained as data from the local communities indicate that 100% of the children in that age group are in school. The discrepancy may be due to a calculation error somewhere in the process, children that start compulsory school late, finished compulsory school early and/or started upper secondary school early.

#### Education level and drop-out rates

The education level of the population aged 25 to 64 is presented in the following table. The data shows the proportion based on the total population during three comparative years. Looking at the

total population -i.e. both males and females -a larger percentage of the population has tertiary education in the more recent years, and fewer have basic and vocational and upper secondary education only. Comparing males and females a substantially higher number of females have tertiary education than men, which corresponds to the data in the enrolment table at the beginning of the chapter.

Table 7 The education level of the population aged 25-64, 2004 to 2012 - proportions and by gender

		2004	2008	2012
Total	All	100	100	100
	Basic education - ISCED 1,2	33,6	31	29,2
	Vocational and upper secondary education - ISCED 3,4	38,3	37,3	35,7
	Tertiery education - ISCED 5,6	27,7	31,5	34,9
	Information missing	0,5	0,2	0,2
Males	All	100	100	100
	Basic education - ISCED 1,2	26,7	28,1	27,4
	Vocational and upper secondary education - ISCED 3,4	46,9	43	43,5
	Tertiery education - ISCED 5,6	25,9	28,6	28,9
	Information missing	0,5	0,2	0,2
Females	All	100	100	100
	Basic education - ISCED 1,2	40,6	34,2	30,9
	Vocational and upper secondary education - ISCED 3,4	29,5	31,1	27,8
	Tertiery education - ISCED 5,6	29,5	34,6	41,1
	Information missing	0,4	0,1	0,1

(Hagstofa Íslands, 2013m)

Statistics Iceland has also collected national information on dropout rates at the upper secondary school level for students who started their studies in the years 1995, 2000, 2002, 2003 and 2004. The information was collated to show the status of these students four, six and seven years after enrolment. The data for those students that entered upper secondary school in 2004 shows the following:

Table 8 The dropout rate of those students who enrolled in upper secondary school in 2004 - four, six and seven years after enrolment, by gender and type of studies

	All studies		Academic studies		Vocational and trade studies		
	Men	Women	Men	Women	Men	Women	Total
New students	2424	2406	1726	2037	698	369	100%
Dropout rate, 4 years after enrolment	31%	24%	27%	22%	42%	31%	27,6
Dropout rate, 6 years after enrolment	34%	25%	30%	23%	45%	33%	29,6
Dropout rate, 7 years after enrolment	33%	22%	29%	21%	37%	29%	27,2

(Hagstofa Íslands, 2014z)

The data in the table shows that over 27% of those who enrolled in upper secondary school had not graduated 7 years later, with men having a higher dropout rate than women and those attending vocational and trade studies having a higher dropout rate than those in academic studies. The data also seems to indicate that around 2% of the students drop out after four years but return back to school, given that the dropout rate spikes at 6 years after enrolment and then lowers again.

A study was furthermore done in 2013 on those who left upper secondary school without finishing their exams at the end of the fall semester (MMR, 2014). The study showed that 21% of those who left were dismissed from the school due to breaking school rules (mostly attendance), 16% transferred to another school, 13% went into the labour market and 10% were due to mental illnesses. 58% of those who left were aged 16-20 years and 42% were then older than 20. Those in the younger age group were more likely to drop out of school due to breaking the school rules and transferring to another school.

Addressing dropout has been high on the agenda of the Icelandic government for several years, and its importance has increased in the context of the economy crisis that started in 2008. To tackle the high dropout rate and its consequences, the Icelandic government has taken measures with recent reforms throughout the education system. These include lengthening teacher education and the development of a new national curricula and a national qualifications framework. Iceland has worked on the implementation of these reforms and is continuously strengthening upper secondary education and at the same time focusing on improving and investing in pre-primary and compulsory education.

#### Student performance

Student performance is annually assessed nationally in 4<sup>th</sup>, 7<sup>th</sup> and 10<sup>th</sup> grade in compulsory schools and the results published for individual schools and regions. In grades 4 and 7 competence in Icelandic and math are tested and in grade 10 English is added. According to a report on the 2013 results, between 70% and 100% of the students in the different regions take the tests, the remaining students being absent or excepted for some reason.

The average normal distribution of grades in 2013, broken down by regions, was as follows:

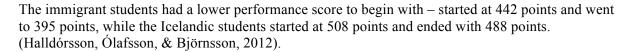
Table 9 Average normal distribution of grades in Icelandic, math and English in 4<sup>th</sup>, 7<sup>th</sup>. and 10<sup>th</sup> grade in compulsory schools, 2013 – by regions

		Icelandi	ic		Math		English
	4th gr.	7th gr.	10th gr.	4th gr.	7th gr.	10th gr.	10th gr.
Reykjavík	30,8	30,8	30,4	30,6	30,6	30,4	31,2
Surroundings of Reykjavík	30,5	30,2	31,2	30,9	30,8	31,4	31,0
South peninsula	29,5	26,9	27,8	30,8	30,6	29,8	29,3
West	28,2	30,9	29,8	30,7	31,3	29,4	28,5
Westfjords	26,3	26,2	26,7	26,7	26,7	27,1	26,9
North West	26,8	30,2	27,5	25,6	27,0	27,7	25,8
North East	29,1	29,8	29,0	26,8	29,0	29,2	28,4
East	27,9	29,9	29,5	26,9	26,9	27,6	28,2
South	30,5	29,5	29,7	30,0	28,2	28,8	28,6
Total	30,0	30,0	30,0	30,0	30,1	30,0	30,0

(Skúlason, 2013)

More detailed information is available in the report, including further presentation of the test results, as well as data broken down by gender, individual local communities and individual schools.

Performance data is not available specifically on the performance of students from cultural minorities, except in relation to PISA. There it is clear that there is a decline in reading comprehension between the years 2000 and 2012, both for native Icelandic and immigrant students. However, the decline in performance is on the average by 47 points for immigrant student – or the equivalence of a whole school year as by OECD definition, but by 20 points for Icelandic students.



Analyzing student performance in PISA by social status, only 8,8% of the variance in student performance can be explained by habitation in areas with low vs. high social status in the capital area. Outside the capital area, in towns with more than 1.000 habitants, the explained variance is only 4% and almost non-existent in rural areas with fewer inhabitants or only 2.7%. Social status in this case is related to the respect the parents' jobs hold, the educational background of the parents and their economic situation.

A decline in math literacy is noticeable in all regions of Iceland in the PISA results for 2012 compared to 2003, but to different degrees. Thus the decline is smallest in the Reykjavík capital area, the rural West and South of Iceland, more in the North East region, and most in the Southern Peninsula, the West fjords, North West and East Iceland – where performance has declined by the equivalence of a full school year. This variance in trend across regions does not seem to be related to geographic location or population size, to rural vs. urban areas or how advanced or developed the areas are. There is no clear denominator for trends by region. The same can be said of the results of reading comprehension.

No performance data has been tabulated specifically for students with special needs, or for public vs. private schools. Tabulation on the latter could probably be done though, as the data is available for individual schools. The latest data available on Iceland from TIMMS is since 1999 or from PIRSL since 2006.

Data on transition rates and incidence of year repetition is not applicable to the compulsory schools, as students automatically go up from one grade to the next according to age. At the upper secondary level there are a few schools which operate a class system which requires a full year to be repeated if a student fails a particular course, but most schools operate on a course system whereby a single course can be repeated if a student fails it. Year repetition has not been recorded for the upper secondary schools.

# 2.7 Policy approaches to equity in education

#### The welfare of children

In the legislation on pre-primary, compulsory and upper secondary schools from 2008 the welfare of children and adolescents is defined as a basic principle of all school activity. Schools are to emphasise the mental, physical and social wellbeing of their students. Schools are to be sanctuaries for students, where they feel safe, have opportunities to develop and apply their talents and enjoy their childhood. In the objective articles of the laws on all the three school levels the role of the schools is defined as to encourage students general development and prepare them for active participation in a democratic society. The school is the students' workplace and in the policy students' welfare is defined as an essential part of school activities. Children's rights and participation are also fundamental in the new legislation. Parents' involvement and participation is also made clearer than before.

Linked to this, the main strength of the Icelandic educational system in comparison to the other OECD countries is that academic achievement is rather equal between schools, students do themselves generally feel well and the school system is both flexible and not greatly centralized. (Halldórsson, Ólafsson, & Björnsson, 2012)

# Students with special needs

As for students with special needs, the Pre-primary School Act (Alþingi Íslands, 2008c) and the Compulsory School Act (Alþingi Íslands, 2008b) from 2008 require the local communities to ensure that specialist support services are provided in pre-primary and compulsory schools and to determine the organization of such services. Specialist services include support for students and their families as well as support for pre-primary and compulsory school activities and it's personnel.

In the same way, the Upper Secondary School Act from 2008 (Alþingi Íslands, 2008) stipulates that students with special needs shall be provided with instruction and special study support. Specialised assistance and appropriate facilities shall also be provided. Students with special needs are to study side by side with other students, but in addition many schools offer a special four-year track of study where students with special needs are provided with education according to individual educational plans. All individuals with special needs, who have reached the age of 16, have the right to attend upper secondary school.

A regulation from 2010 (Mennta- og menningarmálaráðuneytið, 2010c) on specialist services for students with special needs in pre-primary and compulsory schools and a regulation from 2012 for students with special needs in upper secondary schools (Mennta- og menningarmálaráðuneyti, 2012) stipulate that all students are entitled to education and support programmes in accordance with their assessed needs, in inclusive educational settings. Students who have difficulty learning because of specific learning disabilities have the right to special study support, according to an evaluation of their specific needs. Those specific learning disabilities can be emotional or social difficulties and/or disabilities according to the act on the Affairs of People with Disabilities, students with dyslexia, students suffering from long-term illnesses and students with health related special needs.

A policy regarding assistance for deaf, hearing-impaired and deaf blind students is being formulated when this report is written and is expected to lead to improvements. The work involves co-operation between representatives from various ministries and stakeholders. It is expected that similar policies will be developed for other groups of students with special needs, with the next group being students with language disorders and those who need speech therapy of any kind.

Furthermore, on the 11<sup>th</sup> of June 2012 the Parliament approved a Parliamentary Resolution on a Plan of Action on Disabled Persons' Affairs until 2014 (Alþingi Íslands, 2012). The plan of action takes account of the UN Convention on the Rights of Persons with Disabilities and other international human rights agreements to which Iceland is a party. Emphasis is placed on human rights and the prohibition of discrimination on the basis of disability.

#### Children in foster care

A regulation was released in 2012 on compulsory schooling of children in foster care, with the main goal to secure appropriate education for those children that live temporarily in foster homes in other communities, with often disrupted schooling while in foster care (Mennta- og menningarmálaráðuneytið, 2012b). Prior, the rights of foster children to attend school in the foster community were not clear. This new regulation has proved to be a great improvement, as can be seen in the reduction of complaints received by the Ministry of Education, Science and Culture.

### Students with a native language other than Icelandic

The school system, i.e. the pre-primary, compulsory and upper secondary schools, has a great responsibility regarding the education and adaptation of immigrants. The aim is that the students will be bilingual; that they can be educated in general schools and can participate actively in the Icelandic society.

The principal task of the school system in this respect is first and foremost to give support to civic education, provide opportunities for learning Icelandic, enable immigrants to pursue studies in other subjects, provide them with the appropriate study materials, work to promote their assimilation, eliminate prejudice and antagonism towards them, and to educate teachers to meet the more varied needs of their students.

According to the Pre-Primary School Act, all students are supposed to be provided with systematic linguistic stimulation in order for them to gain common skills in the Icelandic language. Students whose native language is not Icelandic are then entitled to learn Icelandic as a second language in compulsory and upper secondary schools.

#### Students from low-income families

There is not a special provision for support for students from low-income families through the educational system. However the welfare system has a role here, working in close partnership often with the school system.

#### Reforms

The greatest challenge in Iceland is to ensure quality education in compulsory and upper secondary schools that is comparable to the countries that Iceland normally benchmarks against, ensuring that young people of Iceland will have the same opportunities to live and work in a rapidly changing world as the youth of other comparative countries. The Icelandic educational system is according to PISA results faced with declining literacy and reading skills of students at the end of compulsory education and the academic progress in upper secondary schools is poor. Thus, the performance of Icelandic students in reading comprehension and literacy in math and science has deteriorated over the past decade and is now lower than the OECD average. Furthermore, too few Icelandic upper secondary students complete their studies on time, with high dropout rates. Then relatively few students are enrolled in vocational education and they are less likely to graduate on time than students enrolled in academic education.

The Ministry of Education, Science and Culture has recently published a White Paper on educational reforms that can be seen as a reaction to the PISA results that were published in 2013 (Mennta- og menningarmálaráðuneytið, 2014). Iceland did not participate in the PIAAC survey, but in general a correlation can be found between good performance in the PISA survey of 15 year olds and the ability to solve issues in a technical environment in adulthood. There is also a correlation between the competence of people and what level of education they have completed. (OECD, 2013b). It can be concluded that the same may apply to Iceland.

In the Ministry's *White Paper* there are two main objectives for the educational reform in Iceland to be achieved by the year 2018: 90% of all students shall reach minimum requirements in reading and 60% of students shall complete their studies in upper secondary education on time.

To achieve the first objective it is for example planned that education in native languages will be strengthened and increased at the compulsory school level. A criteria is set for reading skills that students should access at each stage of compulsory school, and reading and literacy will be measured regularly from pre-primary school to the end of compulsory school. Immigrant students will receive additional support in order for them to be able to reach the same proficiency in reading comprehension as other students. Teachers will receive sufficient in-service training and support. All pre-primary schools and compulsory schools should adopt literacy policy in line with the National Curricula Guides from 2013 and the school policy of each local community. Students will be encouraged to read for pleasure outside of school and parents will be activated to arouse interest in reading and to support their children.

As for the second objective, the *White Paper* states the intent to reorganize and shorten the time for study to graduate from upper secondary education, reduce dropout and change the organization of vocational training. It is proposed that the matriculation line of study will be based on a three-year study period, and at the same time it is planned to shorten the vocational studies. In all upper secondary schools a screening is planned for risk factors for dropout among students.

In line with the experience of other countries it is belived effective to implement few and ambitious goals for education reforms and attempt to get a broad long term consensus on them. With the *White Paper* concurrent schools at all levels are encouraged to work on school development and to make efforts to strengthen the professional awareness of teachers, increased emphasis is on collecting data and analyze the results, evaluate them and draw relevant conclusions from.

In order to implement the *White Paper*, project managers were recruited in the autumn of 2014 and working groups of representatives from various stakeholders established. The *White Paper* will be presented throughout the country to establish a consensus on the goals. The intention is also to strengthen the support services for education with the merger of two state institutions, the National Testing Institution and The National Centre for Educational Materials. It is expected that the new institution will play an important role in consolidating quality and evaluation, providing data on the educational system. It is expected that the institution will also work on developing the curriculum and teaching materials, as well as administration in relation to vocational training. A bill of law is ready at the time of the writing this report, and it is assumed that the institution can formally start to operate in mid 2015.

The biggest challenge concerning immigrant students and students with disabilities is to implement fully inclusive education at all school levels with sufficient support to schools and individual teachers and students. The Ministry of Education, Science and Culture is carrying out an extensive analysis on the status, aiming to tackle this challenge in broad co-operation with stakeholders. The objective is to investigate the implementation of the policy of inclusive education and its implications on schools activities and stakeholders within the school community, for example on the students and the teachers. Results are expected to be available in 2015.

In addition work is on-going, under the leadership of the Minister of Welfare, on developing a parliamentary resolution to improve the situations of immigrants and people with disabilities based on executive plans that already exist.

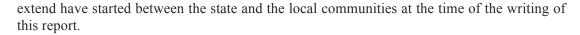
Extending the teachers education by two years was expected to cost 280m IKR on an annual basis, according to the calculations that are to be found in the bill to the parliament in 2007. The increase in cost was linked to the salaries of teachers as the expectation was that more of them would have graduate level degrees, and to the increase in cost of teachers studies. (Alþingi Íslands, 2007).

The expected financial implications of other recent and planned reforms are not known or available for the report.

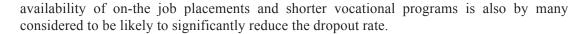
# 2.8 Main challenges

The following main challenges are facing the school system, in regard to decision-making, coordination among the different decision-making levels and disagreements on current school policy:

The local communities have expressed an interest in taking over the operational responsibility for the upper secondary schools. However, no formal discussions to that



- Occasionally a dispute comes up as to which ministry has the responsibility for particular health and welfare related services for students with special needs. The Ministry of Welfare takes the position that such services are the responsibility of the education sector even when the services are delivered by institutions that report to the Ministry of Welfare, while the Ministry of Education, Science and Culture claims that what matters is the service that the welfare system is required to give to all citizens, not that the individual in question happens to be attending school.
- Ministers of Education, Science and Culture have, on a regular basis for the past 20 years, had the vision and intend to reduce the number of years required to finish academic studies at upper secondary school from four to three referring to neighbourhood countries with fewer school years and equal or better student performance. This is a controversial policy that has especially been opposed by the Association of Teachers in Upper Secondary Schools. The Association agrees that students should finish their studies in the expected number of years instead of taking longer to finish their studies, but state that the content of the studies may not be degraded and that all students need to have equal opportunities to finish their studies regardless of their situation. The Association also argues that the time needed to finish Upper Secondary School is already flexible, as decreed in the relevant legislation and expressed in the operation of the schools with many upper secondary school students already finishing their studies in three years instead of four.
- The policy on inclusive schools is debated. While there is general agreement that the policy itself is justified, school administrators and staff feel that the implementation of the policy is not sufficiently managed. The local authorities claim that funding from the state has not followed the policy development and subsequent increased demands on the compulsory schools. The state takes the position that although the policy was formally legalized in 2008 it has a history since prior to the transference of the compulsory schools from the state to the local communities in 1996 and that therefore the cost of the implementation at that time-point was included in original calculations of funding. In any case, there are increased demands on the school system because of the policy on inclusive schools, as expressed in the increased need for co-operation between the education and welfare systems and that inclusive schools have become a human rights issue, for example.
- The five-year education policy for schoolteachers is debated; teachers feel the higher educational requirement was not followed through with a sufficient raise in the teachers' salaries while the public authorities responsible for the schools operations point out that a graduate degree is always better paid than an undergraduate degree. In any case, the collective labour agreements signed in the spring of 2014 did raise the salaries, with the impact for the teachers to be seen.
- The high upper secondary schools dropout rate is a key challenge of the Icelandic education system, where too many start academic programmes in the upper secondary schools but do not complete. The consequence is a waste of resources and a high number of people who have no formal education other than the compulsory one. Furthermore, the limited availability of and relatively few applications for vocational training is a major concern. This is addressed in the Ministry of Education, Science and Culture *White Book*, which was published in spring 2014 (Mennta- og menningarmálaráðuneytið, 2014). Increased



Stakeholders often feel that the state does not have sufficient consultation with stakeholders in setting policies or determining reforms. An example is the Icelandic Association of Local Authorities which requested involvement in the formulation of the before mentioned White Book, which was not granted. The Association will however be consulted on the implementation and funding of the objectives and actions presented in the White Book, as presented by the Ministry of Education, Science and Culture. The emphasis of the Association is that as the representative of one of two levels of public administration and with the responsibility for the operation and funding of two education levels, the Association cannot be placed on par with stakeholders such as labour unions or parents.

# Chapter 3. Governance of resource use in schools

This chapter is concerned with how resources are governed within the school system. It addresses the level of resources for education, sources of revenue for education, the planning of resource use and the implementation of policies to improve effectiveness of resource use.

# 3.1 Level of resources and policy concerns

### Government expenditure on education

The government expenditure on education as a percentage of GDP was 8,2% in 2004, 8,35% in 2008 and 7,66% in 2013 (Hagstofa Íslands, 2014æ). The financial resources allocated to the different levels of the education system can be seen in the following table. Adult education is excluded, as the information is not available. These are resources from both the state and the local communities, in million IKR and at present value for the year 2013.

Table 10 Distribution of financial resources across the different levels of the education system, 2004 to 2013 – in million IKR and as a proportion of funding

		Funding	, million IK	R				Proportion	n of funding	
	Pre-primary	Compulsory	Secondary	Teriery	Other	Total	Pre-prima	Compulsor	Secondary	Tertiary
2004	20.617	62.913	23.557	26.433	7.235	140.755	15%	45%	17%	19%
2005	22.376	67.947	22.823	29.823	7.840	150.809	15%	45%	15%	20%
2006	25.872	72.845	25.418	31.349	8.210	163.694	16%	45%	16%	19%
2007	29.604	73.949	24.443	33.967	7.871	169.834	17%	44%	14%	20%
2008	30.735	75.380	25.632	37.164	8.233	177.144	17%	43%	14%	21%
2009	30.687	70.028	24.788	35.024	7.722	168.249	18%	42%	15%	21%
2010	30.097	66.921	22.678	35.027	8.086	162.809	18%	41%	14%	22%
2011	30.142	68.342	22.846	31.577	7.463	160.370	19%	43%	14%	20%
2012	29.813	65.181	22.618	32.095	7.818	157.525	19%	41%	14%	20%
2013	32.015	66.491	22.580	31.986	7.948	161.020	20%	41%	14%	20%

(Hagstofa Íslands, 2014x) (Samband íslenskra sveitarfélaga, 2013b)

As the table shows the compulsory school system receives the biggest proportion of the educational budget or 41 to 45% depending on the year, while pre-primary receives 13 to 20%, upper secondary 14 to 17% and tertiary 19% to 22%. The funding has increased by around 55% for the pre-primary schools between the years of 2004 and 2013, by 5% for the compulsory schools, by 17% for tertiary education and 9% for other costs. The proportional funding has however decreased for the upper secondary level by 4%.

Information is not available on the resources allocated to adult education, which is operated only partially by public parties such as schools at upper secondary and tertiary level. Other parties responsible for adult education include the labour unions and private companies.

#### Unit cost of spending per student

The unit cost of spending per student across the different educational levels is as follows, in present value for 2013:

Upper Pre-primary Nr. of Compulsory Nr. of Nr. of Year Average secondary Average Average schools, cost students schools, cost students students schools, cost 20.617 15.902 44.511 23.557 1.04 2004 1.30 62.913 1.41 22.603 2005 22.376 16.208 1,38 67.947 44.336 1,53 22.823 23.345 0,98 1,53 2006 25.872 16.856 72.845 43.875 1,66 25.418 24.463 1,04 2007 15.805 73.949 0,97 29.604 1,87 43.841 1,69 24.443 25.090 2008 30.735 17.443 1,76 75.380 43.511 1,73 25.632 25.590 1,00 2009 30.687 18.701 1,64 70.028 42.929 1,63 24.788 26.364 0,94 2010 30.097 18.818 1,60 66.921 42.539 1,57 22.678 25.168 0,90 2011 19.122 1,58 42.365 0,87 30.142 68.342 1,61 22.846 26.153 2012 29.813 19.618 1,52 65.181 42.320 1,54 22.618 25.460 0,89

Table 11 The average cost of spending per students at pre-primary, compulsory and upper secondary schools, 2004 to 2012 in million IKR

(Samband íslenskra sveitarfélaga, 2013b) (Hagstofa Íslands, 2014e) (Hagstofa Íslands, 2014x)

For the pre-primary school the student numbers are the equivalence of full time students, while actual hours at school vary for each child. The cost is the total cost of the state and/or local communities including funding to privately operated pre-primary and compulsory schools, but private operators other funding excluded. Income from other sources, such as parents and students, has not been deducted to lower the figures. The data in the table shows that the spending has increased by 17% for each pre-primary school student and by 9% for compulsory school students between the years of 2004 and 2012. It has however gone down by 15% for upper secondary school students during the same time period. The spending per student has decreased at all school levels between the years of 2008 and 2012, or from the beginning of the economic recession. The decrease since 2008 is 14% for the pre-primary students and 11% for the compulsory schools and the upper secondary students.

The data is not available for students in academic and vocational studies at upper secondary school, nor for different regions or school contexts at the pre-primary and compulsory school level.

#### Challenges facing the school system

Following the economic crisis that started in 2008 the state and most local communities cut down financial and other resources to the school system, which has been a challenge to the system. Operational budgets were lowered or not raised in keeping with increased cost, as well as budgets for the maintenance and development of facilities. According to a study done in two local communities this situation impacted overtime allowance, led to larger classes, school leadership taking on teaching in absence of teachers, both leadership and teaching positions being cut down, less funding being available for special education and co-operation within the schools, people without teaching credentials being hired for part time positions, recreational activities being cut down and so on (Davíðsdóttir, et al., 2012). Furthermore, some communities merged schools at the same or different levels, such as pre-primary, compulsory and/or music schools.

Each local community decided whether and then how to reduce the funding to the pre-primary and compulsory schools. In general though, while the local communities undertook severe budget cuts in 2008 they protected the basic services such as education but cut down on investments and anything that could count as extra services. In 2014 the local communities are still careful in their budget decisions but there are signs indicating that the financial situation is getting better. Thus the compulsory school cost of the local communities increased by 2% at real value between the years of 2012 and 2013.

At the upper secondary school level however, the schools have had their funding decrease each year, last by further 1,2% in the Budget Bill for 2015. Of interest is that as unemployment increased with the economic recession a special campaign was launched to give people with little formal education an opportunity to enlist in upper secondary school and thus improve their employment prospects in the future, at the same time as the budgets for education were reduced (Mennta- og menningarmálaráðuneytið, 2014). However, in the instructions with the budget cuts for the upper secondary schools for 2015 students under the age of 25 are prioritized. This impacts vocational students more than academic ones as vocational students are typically older, and adults going back to school. To counterbalance this, funding to vocational education was not cut for 2015.

Most schools have a fair amount of discretion on how to level the lowered financial resources. In any case, most of the funding goes towards salaries and other fixed cost items, and thus housing maintenance, replacement of computers, purchase of teaching materials and continuous education for teachers has often taken the brunt of the situation.

Judging by articles written by and discussions in the school community the funding available to operate the upper secondary schools, as well as the pre-primary and compulsory schools of many local communities, is below what is needed to fulfil legal requirements. Improving the effective use of resources in education is therefore of great importance.

A second important challenge is the salaries of the teachers, which have often been considered low in comparison to other similarly educated professions in the public sector in Iceland. It is however expected that the latest collective agreements, signed in the spring and summer of 2014, will rectify this – although the teaching profession is concerned that their salaries will still be lower than those professions they compare themselves to. In the past young people have not been highly motivated to enter teaching as can be seen in the high average age of teachers, with turnover and succession issues a concern to all stakeholders.

### 3.2 Sources of revenue

As mentioned earlier, schools at all levels are for the most part publicly funded - the pre-primary and compulsory schools by the local communities and the upper secondary schools by the state. The few privately managed schools in the country largely operate through public funding also, with parental contributions being the other main source of funding. Information on the relative proportion of public and private funding for the privately managed schools is explained in chapter 2.2.

The local communities finance schools through the local income tax collected centrally by the state as well as taxes collected locally, such as the property tax. The communities can choose to use their tax income for schooling to any extend they wish. Parents pay a certain pre-primary school fee according to fee criteria that each local community determines. That fee only covers part of the cost. Compulsory schools are legally free for the user, but parents pay meal costs if they so choose and limited material cost.

The state finances the upper secondary school through state taxes, with the budget being determined each financial year. Upper secondary school students pay a registration fee, as approved by the Ministry of Education, Science and Culture. They also pay the cost of textbooks and other educational material. Privately managed schools typically also charge tuition fees as stipulated in a contract with the Ministry of Education, Science and Culture.

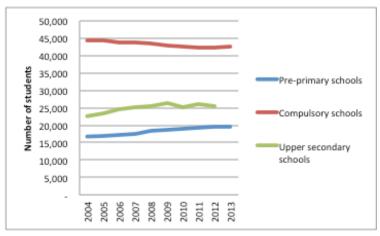
Contributions from others than the local community/state, and to some extent the parents, for operating the schools are rare and do not occur to any significant extent. Culturally it is even

considered negative for the business sector to contribute financially or otherwise to a school, with some local communities and schools having clear policies on the contributions. Philanthropy associations sometimes contribute a piece of needed equipment or facility, but it is not something the schools expect or depend on.

# 3.3 Planning of resource use

Attendance at pre-primary, compulsory and upper secondary schools has been fairly constant for the last ten years as can be seen in the following chart, with the development mostly linked to changes in the population size.

Chart 2 Number of students in pre-primary, compulsory and upper secondary schools, 2004 to 2013



(Hagstofa Íslands, 2014e)

### Population demand for changes

At all school levels there is foremost the demand of the population that the schools increasingly meet the needs of the students as individuals. For students with special needs this has called for reform in the services provided, in regard to diagnosis, educational support and consultancy for teachers, parents and students. This reform is still on going, but an example of what has been accomplished is that in 2008 one seriously visually impaired student attended university but ten do in 2014.

A key trend in population demand for different services at the compulsory school level in the last years has been the call for the childrens daily activities to be continuous and take place during the daytime. That is, for sport, music and recreational activities for the children to be integrated with and into the traditional school operations so that both parents and children are done with their "work day" around the same time. This demand has impacted school timetables and provided opportunities for traditional class activities to be segmented with physical movement, for example.

At the upper secondary school the demand has been for more various vocational training studies and then specifically those of 1-2 year duration. Furthermore, at the upper secondary level the population is increasingly calling for schools to be located in physical proximity to the local communities, so that students do not need to travel long distances or move away from home at the age of 16 in order to continue their education.

Following the economic crash in 2008, there was furthermore an increased demand for adult attendance at the upper secondary school level as those unemployed wanted to improve their employment prospects. At the same time the public authorities wanted more ways to help people to stay active while unemployed. A special initiative was therefore set up in 2011, *Nám er vinnandi vegur*, with the aim to aid those unemployed. The state, universities and upper secondary schools joined forces to ensure on the one hand that everybody under the age of 25 that so wished was able to enrol in an upper secondary school and on the other to create new study opportunities in upper secondary schools, universities and continued education for those seeking employment. A total of 1.141 people under the age of 25 enrolled in upper secondary school as a part of the initiative and 1.042 employment seekers enrolled at the different school levels. (Mennta- og menningarmálaráðuneytið, n.d.(c)).

The claim of the school community is that funding has not been increased to the schools to meet the demands made in the recent years. Furthermore, it is also the opinion of many school employees that salaries and working conditions do not correlate to the changes in the schools operations.

The Ministry of Education, Science and Culture determines the distribution of resources to the upper secondary schools and state institutions in a support function, as well as the channelling of resources linked to state set policy priorities. The local communities determine the distribution of resources to the pre-primary and compulsory schools, the support services operated at the local level and those linked to locally set policy priorities. Head teachers and heads of support institutions and agencies at all levels have then the responsibility for the day-to-day resource distribution and use. See chapter 2 for further information.

The head teachers distribute resources within each school and organize the school leadership. The school leadership manages the teaching workforce but have limited authority to financially reward good performance and to let teachers go for bad performance. The school leadership also manages infrastructure and communication with the School Board and the School or Parents Council. Setting and maintaining budgeting and accounting systems are in most cases the responsibility of the state or local community depending on the school level. The state/local communities also typically set up the relationship with contractors and vendors through framework agreements or bids, but the follow up relationship on the day-to-day purchases and work is then the responsibility of the individual school or institution.

#### Effectiveness and efficiency of resource use

The legislations for the different school levels require internal and external evaluation and monitoring of school operations. The focus is on supplying the school community with information on school operations, performance and development, ensuring that the operations fulfil legal requirements, increasing the quality of the education and encouraging reform, and ensuring that the rights of the students are respected and that they receive the services they are entitled to according to the law. In the formal evaluations and monitoring the focus is not very much on assessing the effectiveness and efficiency of resource use.

In public debate on the school system it is common to point out that the cost of the educational system in Iceland is above what the neighbourhood countries pay, while the results of student assessments in the PISA is below their results. Thus there is a debate on the effectiveness of resource use. However, little research exists on the subject and data is not easily found.

The Icelandic National Audit Office published an audit report on The Local Governments' Equalizations Fund (see chapter 4.1 for information on the Fund) and the compulsory schools in 2008 (Ríkisendurskoðun, 2008). The report states that in 2004 there was a great difference in the

operational cost of the compulsory schools, with the local communities spending from 528.000 IKR to 3,4m IKR per student, or from 73.000 IKR to 305.000 IKR per each local resident. The difference is mostly explained by the variance in school sizes and the variance in the student/staff ratio. Thus the ratio was from 1,5 to 10 depending on the school. Other factors include the ratio of students to the total population and population density. In the audit these statistics are not correlated to the quality of education or student performance and thus the effective use of resources.

The audit report furthermore states that there is limited quality monitoring of the educational system, with the Ministry of Education, Science and Culture assessing the internal assessment systems of the schools on a regular basis, but little else. The gathering of information on the cost of the local communities for the compulsory schools is also said limited, the definition of expenditure different between the different communities and therefore comparisons are very difficult. Thus the report states that due to limited monitoring and insufficient data it is very difficult to assess the professional and financial aspects of school operations. Finally it states that most of the necessary premises needed to know whether sufficient resources are provided for the operation of the school system are missing - or measurable objectives and direct quality monitoring.

The Audit report was published in 2008 as stated before. Some of the concerns it raises have been addressed since. Thus in 2007 The Association of Local Authorities, in partnership with selected schools, set up a pilot project that became permanent in 2011. The project, *Skólavog (www.skolapulsinn.is)*, collects three types of information; one of them is operational cost per student. Also collected is various operational information for the compulsory schools, information on the educational background of the teachers, student performance results in the nationally standardized tests and the results of attitude surveys for students, parents and school employees. Participation is elective to the local communities, with compulsory schools primarily participating. Each local community receives the results for it's schools, along with information on how the schools compare to the other participating schools as a whole. It is up to each community to decide how the information is shared.

Furthermore, in 2012 the *Upplýsingaveita sveitarfélaga* was established. It is an information centre that gathers centrally financial information from the local communities, allowing for easier and much more detailed analysis of cost than before. The information is used for calculating the various cost elements, that are then published in annual reports such as the School Report or *Skólaskýrsla* (Samband íslenskra sveitarfélaga, 2013b) and on the website of the Icelandic Association of Local Authorities (www.samband.is).

No information is available centrally on what type of evidence is used for the planning of resource use. As a rule each local community develops their own financial budgets with the participation of school leaders. No known research about the effects of resource use exists.

Research on the effective use of resources does not impact the planning of resource use at the upper secondary school level, as such research is mostly lacking. Instead there is a comprehensive funding model that determines the type of evidence that is used for the planning of funding to each school. The models role and operation is specified in regulation no. 335/1999 (Mennta- og menningarmálaráðuneyti, 1999). The regulation stipulates that the funding model take into account general criteria that applies to all schools, as well as specific criteria taking into account the specific circumstances of each school. The model is explained in chapter 4.4.

No specific central or regular mechanism is in place that allows schools to share information and experiences on how to effectively manage their resources. No central or regular methods are either



available for benchmarking or the adoption of best practices in resource use between different schools

# 3.4 Implementation of policies to improve the effectiveness of resource use

A formal cooperation in developing public education policy does not exist, instead a decision on whether and then who should be consulted or involved is taken in each individual case. Thus a consultative process was established in formulating the legislation on the pre-primary, compulsory and upper secondary schools in 2008 and the subsequent regulations, although the final legislation is set by the parliament. Involved in the process were The Association of Local Authorities and the relevant teachers and head teachers unions.

An extensive co-operation was similarly in place while the national curriculum guidelines were drafted, both in the preparation of the curriculum and also in the formal review process.

Furthermore, there is also an active partnership on various issues related to the education policy, such as a working group with the task to assess the implementation of the policy on inclusive schools, which includes representative of the ministries of education and welfare, local authorities, teachers unions and head teachers unions.

On the other hand, it has been criticised that a recently published *White Book* establishing educational priorities for the next few years was developed in the Ministry of Education, Science and Culture without consultation or involvement of the local authorities.

The consultation and co-operation practices are thus not set in a particular process or method.

To a certain extent school policy is negotiated in the collective labour agreements for the teachers, such as teaching obligations within school time. A part from that high tensions do not exist regarding setting school policy, although there are different views of course on various issues, for example whether and how to reduce the number of study years in upper secondary schools.

It is not common for the state or local communities to run pilots or other policy experimentation before the implementation of a school policy. An exception though is the development of an external evaluation for schools, which was a pilot project between the state and local communities in 2012 and is a development project in 2013 to 2015. Furthermore, examples exist of individual schools, or a group of schools, who have developed pilot projects in order to test the implementation of a policy. The results of the monitoring of resources are not generally shared with stakeholders.

# 3.5 Main challenges

The following aspects of governance of resources are being challenged or are subject to reexamination:

The labour unions of teachers and managers at the upper secondary school level have pointed out that the constant decrease in funding to the upper secondary schools has reached a serious point. In an article written on 17 September 2014 (Arnardóttir & Sigurjónsson, 2014) it is pointed out that the constant decrease in funding from 2009 have called for reduction in staff, fewer study programmes on offer, larger student groups in each course and less student support. With a proposed further funding decrease for the 2015 financial year, the upper secondary schools are supposed to reduce the student numbers by 4,7% and give those student under the age of 25 priority access. The article points out the conflict to

existing policy, which aims to strengthen vocational training where the average age of the students is 25,2. Finally, the article points out that in the comments for the proposed 2015 budget it is stated that the expected reduction of the time needed to finish matriculation studies will streamline costs at the upper secondary school level, and that a political decision has been taken without the upper secondary schools having been consulted.

- The Ministry of Education, Science and Culture introduced changes in student assessments in the new national curriculum for the compulsory schools. The change refers to the level of competence that is required for students at the end of the compulsory school. Those changes are liked by some schools and not by others. Those who criticise the initiative are more critical toward the implementation of the change rather than the change itself though. In response the Ministry has consulted stakeholders on the matter and agreed to a delay in when the change takes effect.
- Following a parliamentary resolution adopted in 2013 (Alþingi Íslands, 2013) the Ministry of Education, Science and Culture is working on a proposal on how the local communities can accept children into the pre-primary schools immediately following the end of the maternity/paternity leave, which is 9 months. The work is being done in partnership with representatives from the local communities, experts, stakeholders and political parties.

# Chapter 4. Resource distribution

This chapter is concerned with how resources are distributed within the school system. It deals not only with resources levied at the central level but also with those levied at the more local level (e.g. regions, communities). It addresses the distribution of resources between the different levels of the administration (e.g. central, state, regional and local), across resource types (e.g. human resources, physical resources, targeted programmes), between levels of the school system (e.g. pre-primary, compulsory, upper secondary), between different sectors (e.g. general programmes, vocational programmes) and between individual schools. In addition, it concerns the distribution of school facilities (e.g. organization of the school network), the organization of teacher resources (e.g. number of teachers; teacher preparation), the organization of school leadership resources (e.g. number and profile of school leaders) and resources targeted at specific student groups (e.g. special needs; compensatory programmes for disadvantaged students).

### 4.1 Distribution of resources between levels of the education administration

### Centralized and decentralized public spending

The total public spending in the year 2012 for the pre-primary, compulsory and upper secondary level is 117.612 billion IKR. Out of that amount 19% was centralized – i.e. funded and managed by the state, and 81% was decentralized or funded by the local communities. What is centralized and decentralized varies greatly between the different school levels as the funding for the pre-primary schools is 100% decentralized and 99% for the compulsory schools, but only 9% for the upper secondary schools. (Hagstofa Íslands, 2013h) (Hagstofa Íslands, 2013i) (Samband íslenskra sveitarfélaga, 2013b).

The 1% that is centralized for the compulsory schools is used to finance the National Centre for Educational Materials, The National Testing Institute, various development funds, copyright fees for educational materials, and so on.

The funding is fully or mostly decentralized for the pre-primary and compulsory schools since they are the responsibility of and operated by the local communities. While the local communities have always operated the pre-primary schools, responsibility for the compulsory schools moved from the state to the local communities with changes in it's legislation in 1995. At that time the cost of the compulsory schools was determined to be 2,84% of the total income tax received by the state.

That percentage was decided by using the capital city, Reykjavík, as a zero point – calculating by how many percentage points the local income tax would have to go up for the city to cover the cost of operating the compulsory schools, which came to 2.07% of the states total income tax. In 1995 2,07% of the states annual income tax was therefore permanently transferred to the local income tax, that the state collects centrally and transfers to the local communities in order to even out salary costs in the compulsory schools and to cover other costs due to transference of the schools from the state to the local communities. (Innanríkisráðuneytið, 2010). The funding is not earmarked for spending on specific budget items. However, that percentile is still used to calculate the funding for the compulsory schools although the schools have changed drastically - with full school days instead of half days, longer teaching hours, higher salary cost that are mostly due to an increased number of employees and variety in professions working within the schools, and a policy on inclusive schools. The cost for the local communities has therefore surpassed the initial cost estimates, with them making up the cost difference through other income sources.

Following the calculations for the City of Reykjavík, the total cost of operating all the compulsory schools in the country was then determined, which came to a total of 2.84% of the states income tax. The difference between the 2.84% and 2.07% - or 0,77% - was then allocated by the state to The Local Governments' Equalizations Fund, which operates on the basis of legislation no. 4/1995 on the income base of local communities (Alþingi Íslands, 1995). The role of the fund is to even out the difference in expenditure and income of those local communities with a specific or a greater need, through allocations from the fund, based on the relevant legislation, regulation and internal procedures established for the operation of the fund (Innanríkisráðuneytið, 2010).

A part of the 0,77% is earmarked to cover proportionally the operational cost of the fund itself but the main part, or 8.145 billion IKR according to the draft budget for the fund for 2014, is reallocated to the local communities. 71% of that amount goes towards general support but the rest is earmarked as follows: 129 million IKR to the Icelandic Association of Local Authorities, 1.890 billion IKR to support disabled students with special needs, 4.5 million IKR for the assistance of experts and teaching consultants and 193 million IKR for educational programmes for new arrivals in the country. The remaining amount is allocated towards various small and specific projects such as a school camp and lessons for students with long-term illnesses (Jöfnunarsjóður sveitarfélaga, 2013). However, there is no direct link between the allocation of funding from the Fund and the execution of the school operations or monitoring of the quality of education.

In addition to the 0,77% the fund provides a special allocation to cover the cost of transporting students to school in rural areas. The criteria for allocation are based on the number of transporting students and the distances between homes and schools.

The allocation criteria of the fund are currently under review, with a new criteria expected to be put into effect in 2015. According to a comment by the director of the Fund, at a meeting in the Ministry of Education, Science and Culture in the spring of 2014, the new criteria will be more general than before.

### Criteria for funding

83% of 1-5 year olds attended pre-primary school in 2012 and 100% of 6-15 year olds attended or were already finished with compulsory school (Samband íslenskra sveitarfélaga, 2013b). All but three of the compulsory schools are inclusive to all students and the criteria for funding has therefore limited effect on the characteristics of the student population in each school. However a handful of pre-primary and compulsory schools have been designated and receive the funding to support a small group of students with special needs, such as those who speak sign language, are autistic or have severe physical and mental disabilities. The schools that have thus been designated do have an advisory function in their area of expertise for all the other schools nationwide.

The educational budget for the upper secondary schools is fully centralized, as they are the responsibility of and operated by the state. The local communities have though expressed an interest in taking over the responsibility for the upper secondary schools, as agreed in a meeting of the general assembly of the Icelandic Association of Local Authorities in 2007 and reiterated in the school policy agreed on in 2008 (Samband íslenskra sveitarfélaga, 2008). However, no agreements to that end have been made at the time of the writing of this report.

Being responsible for the operation of the upper secondary schools the Ministry of Education, Science and Culture has developed a comprehensive funding model, which is explained further in chapter 4.4. The actual allocation to each school is then determined in the states Budget Bill for each year, and agreed to by the parliament. The assumptions behind each criteria is adjusted rather than the criteria itself changed, to meet the funding available, in order to ensure a just and transparent

contribution of funding to the individual schools. (Sigurðsson, 2008). Out of the allocation nothing is specifically earmarked for a particular spending.

The criteria for funding to each upper secondary school takes into account the differences in costs for vocational and academic study programmes, where lies the biggest difference in the characteristics of the student population in each school. That is, some upper secondary schools only offer academic programmes, a few only vocational programmes and some both. The student population in the academic study programmes consists of 45% males and 55% females, with the reverse numbers applicable to those doing vocational studies (Hagstofa Íslands, 2012b). Comparing student age, 88% of those who receive their journeyman's licence from the vocational study programmes are 22 or older, but only 16% of those who graduate with their matriculate exam from the academic study programmes (Hagstofa Íslands, 2013d).

Furthermore several upper secondary schools offer a special study programme for students with a formal diagnosis that indicate the need for a special learning assistance.

# 4.2 Distribution of financial resources across resource types

The financial resources for the pre-primary and compulsory schools have been spent on different budget items as shown in the following tables. They include the total public cost for each school level, including schools operated by private parties and the local communities, as well as schools for students with special needs. For comparative purposes the amounts are stated in million IKR using present value for the year 2012.

Table 12 Capital and current spending for the pre-primary schools, 2004 to 2012 – divided into physical resources, employee cost and other resources

	Capital	Curre	nt cost	
	Physical	Employee	Other	Total
	resources	cost	Resources	Total
2004		15.022.014	5.595.196	20.617.210
2005		16.290.024	6.086.224	22.376.248
2006		18.431.815	7.439.674	25.871.490
2007		19.293.460	10.310.803	29.604.263
2008		19.605.102	11.129.374	30.734.476
2009		19.821.627	10.865.128	30.686.755
2010		19.564.713	10.532.257	30.096.970
2011		20.464.472	9.677.422	30.141.894
2012	2.966.303	19.998.993	6.847.592	29.812.888

(Samband íslenskra sveitarfélag, 2014).

Capital **Current cost** Physical Employee Other Resources resources **Total** cost 2004 35.030.052 18.427.801 53.457.853 2005 38.925.625 20.039.835 58.965.460 21.238.460 **60.091.632** 2006 38.853.172 2007 38.386.220 23.323.846 61.710.066 2008 40.889.220 24.428.384 65.317.603 2009 41.007.590 23.317.236 **64.324.826** 2010 40.371.607 23.322.146 **63.693.752** 2011 40.077.110 23.060.598 63.137.708 2012 12.293.011 37.122.398 11.616.944 61.032.354

Table 13 Capital and current spending for the compulsory schools, 2004 to 2012 – divided into physical resources, employee cost and other resources

(Samband íslenskra sveitarfélag, 2014).

Detailed information on the financial statements of the different local communities has only been centrally available from 2012. This includes "internal" rent, but as a principle property owned by the local communities is entered in an independent operational unit called the *Property Fund*, which is responsible for the purchase, sale, construction and operation of the property of the local community (Fjármálaráðuneytið, 2013). The Fund then rents the property to the schools and other operational units of the local community, thereby collecting "internal" rent. This cost would be the only one covered by capital spending. Nationwide such internal rent was on average around 11% of the total cost for the pre-primary schools and 22% for the compulsory schools in 2012 (Samband íslenskra sveitarfélaga, 2013b).

As for current cost it is only possible to account for labour cost and other cost for the pre-primary and compulsory schools. Labour cost is not available separated for the different types of school employees – i.e. teachers, management, administration etc. Included in other costs are items such as rent (internal rent also until 2012) and the purchase of commodities and service.

Labour cost for the pre-primary schools goes from 73% of total current cost in 2004 to 67% in 2012, and for the compulsory schools from 66% in 2004 to 61% in 2012. The total operational cost of the pre-primary school is from 4% to 17% of the tax income of the different local communities in 2012, and of the compulsory schools from 25% to 66%. (Samband islenskra sveitarfélaga, 2013b).

The following table shows how expenditure for the upper secondary schools has been spent on the different budget items. It includes the total cost for the upper secondary school level. For comparative purposes the amounts are stated using present value for the year 2011.

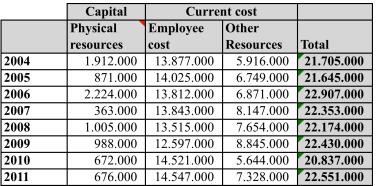


Table 14 Capital and current cost for the upper secondary schools, 2004 to 2011 – divided into physical resources, employee cost and other resources

(Hagstofa Íslands, 2013f)

The information is only available to the year 2011 for employee cost and other resources and for investments on the capital side. Employee cost cannot be separated for the resource types, i.e. teachers, school leaders and non-teaching staff.

The table shows that employee cost has changed proportionally through the time period, was 64% of the total current cost in 2004, went down to 56% in 2009, up to 70% in 2010 and back to 65% in 2011.

# 4.3 Distribution of resources between levels and sectors of the school system

For information on how financial resources are distributed across the different levels of the education system, see chapter 3.1.

No formal and separate vocational studies take place in the pre-primary and compulsory schools. Information on the distribution of resources across sectors in the upper secondary schools is not available.

## 4.4. Distribution of resources across individual schools

### Distribution of resources to pre-primary and compulsory schools

According to legislation no. 90/2008 on pre-primary schools (Alþingi Íslands, 2008c) and no. 91/2008 on compulsory schools (Alþingi Íslands, 2008b), the local communities have operational and financial responsibility for those two school levels.

In general, the individual local community determines the funding that is allocated to each preprimary and compulsory school, either through specific funding models that the local communities design for themselves or general budget frameworks that they determine themselves also. The criteria for funding are primarily based on the number of students, legal requirements and collective labour agreements. Most, if not all, local communities use as a basis for their estimation of financial resources the number of generic class hours on the one hand and the number of class hours required for supported teaching or teaching of students with special needs on the other. Otherwise each local community determines the financial requirements based on local needs, which are usually not very varied between schools when it comes to aspects such as the socio-economic background of the students or the students special needs. For more information see a detailed description of The Local Communities Equalization Fund in chapter 4.1.

As each local community is an independent financial authority, it determines also the discretion of the individual head of school in deciding the use of the funding received, within the requirements of laws and regulation. Thus some heads of school can use the funding as they see fit as long as they remain within the total budget provided, while others cannot transfer funding between different cost areas without approval from the local community. In the same way, in some local communities surplus or loss is transferred to the next financial year and in others not.

The local communities approve schools operated by private parties. Those need to fulfil the same legal requirements as schools operated by the local communities themselves, with the exception of fees charged to students and/or their legal guardians. The law does not require the local communities to provide funding for the pre-primary schools operated by private parties. However, a stipulation is made that compulsory schools operated by private parties have the right to a financial contribution from the local community, which is calculated to be 70-75% of the effective average total operational cost of the students in all the compulsory schools operated by the local communities, per student. This funding is for general use. Any additional funding is acquired from parental contributions and/or other sources of funding as the individual schools decide themselves.

### Distribution of resources to upper secondary schools

According to legislation no. 92/2008 on upper secondary schools the parliament provides state operated schools with operational funding through each years Budget Bill. Privately operated upper secondary schools require an approval from the Minister of Education, Science and Culture in order to operate, but that approval does not guaranteed state funding. However, the Minister of Education, Science and Culture has the authority to sign funding contracts with such privately operated schools. (Alþingi Íslands, 2008). Traditionally such funding contracts exist for those upper secondary schools that are privately operated.

According to the legislation the Minister proposes the funding for each school individually, for teaching and other costs as required. The proposed funding is based on a comprehensive funding model whose role and operation is specified in regulation no. 335/1999 (Mennta- og menningarmálaráðuneyti, 1999). The regulation stipulates that the funding model take into account general criteria that applies to all schools, as well as specific criteria taking into account the specific circumstances of each school.

According to the regulation the general criteria used in the model includes the:

- number of teaching hours pr. student pr. week,
- average class and group sizes,
- average number of students pr. class or group,
- salary cost,
- proportion between teaching jobs to teaching cost,
- proportional division of teaching hours into daytime and overtime work.
- The specific criteria includes:
- the number of registered students of the past calendar year,

- the estimated number of students, average for two semesters of the coming financial year,
- the estimated number of students attending evening school, average for two semesters of the coming financial year,
- proportion of teaching hours for students attending preliminary and remedial education to total student teaching hours,
- square meters of housing split into usage for academic studies, management and administration, vocational studies, dormitories and cafeteria,
- rental cost of facilities used for teaching, the price for a cubic meter of hot water and kwh of electricity,
- the distance from Reykjavík,
- average annual income of teachers,
- annual income and paid overtime of the head of the school.

Each of these criteria is not weighted against each other, but is instead based on actual, average or estimated cost. Thus each student has a cost figure attached depending on the type of study, maintenance cost is a proportional cost of the book value of the facilities used for the students, funding for the purchase of equipment and its maintenance is a proportional amount of the value of the equipment in use and so on. Compensation is then made for schools away from the capital City of Reykjavík, those with fewer students and those with student dormitories. The assumptions behind each criteria is adjusted, rather than the criteria itself changed, to meet the funding available, in order to ensure a just and transparent contribution of funding to the individual schools. Thus if there is a need to cut funding, the assumption of students per class can be changed, etc. (Sigurðsson, 2008).

According to an appendix to the collective labour agreement (Fjármálaráðuneytið and Kennarasamband Íslands, 2014) between the Ministry of Finance and the Association of Teachers in Upper Secondary Schools, signed in April 2014, the funding model is to be updated in accordance to the agreement, so that the criteria in the model reflects the salary structure and salary costs. This update is to be finished in the first half of the year 2015.

The Minister of Education, Science and Culture signs contracts with each school, applicable for 3-5 years, covering the main priorities of the school, the school curriculum, study programmes offered, teaching arrangements, assessment and supervision etc. In addition, the contracts for the privately operated upper secondary schools need to include clauses on the students legal status, the estimated number of students, fees paid by students and payment for other services provided according to the contract. These contracts are taken into account in the funding model. (Alþingi Íslands, 2008).

Art. 37 in legislation no. 88/1997 on the state finances stipulates that with the consent of a relevant Minister, institutions of the state are authorized to keep funding unused at the end of the financial year. In the same way it is authorized to subtract debts from a previous year from the funding for a new year. (Alþingi Íslands, 1997). Based on the procedures that the state has established this transference of unused funding and debt is generally allowed (Fjármálaráðuneytið, n.d.).

# 4.5 Distribution of school facilities and materials

There are no policies or rules, at central or local administrative level, regarding the size of schools, their location or distribution around the country.

Each community determines the number, size and location of its pre-primary and compulsory schools, as well as whether it wants to operate its own schools or join in partnership with neighbourhood communities. In its planning the community is required by law to consult with stakeholders in order to ensure that the facility and the equipment meets the needs of the school community and planned teaching environment.

The Ministry of Education, Science and Culture and the local community, or communities, in the area where the school will be located, decide jointly on new upper secondary schools, according to art. 47 in legislation no. 92/2008 on upper secondary schools (Alþingi Íslands, 2008). The start-up costs are divided between the state and local communities in a 40/60% split, with the majority of the cost falling on the parties according to the nature of the partnership. For the last several decades new upper secondary schools have always been built at the initiative of the relevant local community or communities in a specific area, which deem it a necessity and benefit to the community to have an upper secondary school there.

### The average number of students per school

The average number of students per school can be seen in the following table:

Table 15 The number of schools and students and average number of students by school level, 2004 to 2013

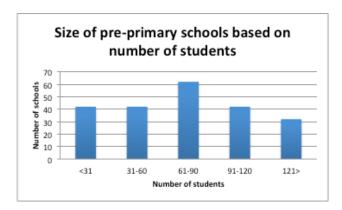
Year	Pre-primary schools	No. of students	Average	Compulsory schools	No. of students	Average	Upper secondary schools	No. of students	Average
2004	262	16.755	64	187	44.511	238	34	22.603	665
2005	262	16.864	64	187	44.336	237	35	23.345	667
2006	267	17.216	64	173	43.875	254	34	24.463	720
2007	270	17.561	65	173	43.841	253	35	25.090	717
2008	275	18.278	66	174	43.511	250	34	25.590	753
2009	281	18.716	67	175	42.929	245	35	26.364	753
2010	277	18.961	68	172	42.539	247	36	25.168	699
2011	265	19.159	72	172	42.365	246	36	26.153	726
2012	263	19.615	75	167	42.320	253	36	25.460	707
2013	255	19.713	77	168	42.734	254	36	25.456	707

(Hagstofa Íslands, 2014e) (Samband íslenskra sveitarfélaga, 2013b)

The student numbers are from Statistics Iceland and the school data for the pre-primary and compulsory schools is based on information in the Annual School Report of the Icelandic Association of Local Authorities. The data shows that the average number of students per pre-primary school has gone up by 17% between the years of 2004 and 2013 and by 6% for the compulsory and upper secondary schools.

### The size of pre-primary and compulsory schools

Looking at the network of pre-primary and compulsory schools, the student distribution and size of schools was as follows in the year 2012:



(Samband íslenskra sveitarfélaga, n.d.(a))

Thus 42 or 19% of pre-primary schools had fewer than 31 student, 31 to 60 students and 91-120 students, 62 or 28% schools had 61-90 students, and 32 or 15% schools had more than 120 students. In total, 66% pre-primary schools have fewer than 90 students and 34% have more.

Size of compulsory schools based on number of students

Chart 4 The size and number of compulsory schools based on the number of students, 2012

(Samband íslenskra sveitarfélaga, n.d.(b))

Of the compulsory schools 11 or 7% have twenty students or fewer, 48 or 31% have fewer than 100 students, 133 or 87% have fewer than 500 students and 20 or 13% more than 500.

### Closing down pre-primary and compulsory schools

Generally, local communities with a smaller population operate the smaller pre-primary and compulsory schools, but there is not a clear correlation between the population size of the local communities and the larger schools. Smaller community schools are not a pressing issue in national or regional policies. However, local communities with the smallest and/or most scattered population and easy transportation access to other local communities or urban cores have increasingly considered partnerships in operating the schools. The key reasons for such considerations are to ensure viably sized schools in regard to operational cost and the quality of the education. The conclusions have then mostly been two or more schools merging in order to create a bigger one, and/or splitting the student population of two or more schools into different age groups and thus enlarging the age section in a school.

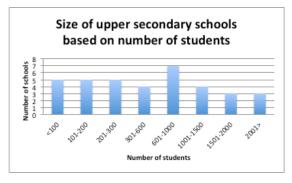
It is extremely rare, however, that pre-primary and compulsory schools are completely closed down. A more common approach is to merge schools where the school buildings in different location then

fall under the same administrative unit for financial streamlining purposes, or to operate pre-primary, compulsory and sometimes music schools under the same leadership. On the rare occasion a school is closed down it is believed that the cost of redirecting the students to other schools is limited, however no data is available to substantiate that believe.

#### The size of upper secondary schools

As for the network of upper secondary schools, the student distribution and size of schools was as follows in the year 2011:

Chart 5 The size and number of upper secondary schools based on the number of students, 2011



(Hagstofa Íslands, 2012b)

The chart shows that 15 or 42% of upper secondary schools have fewer than 300 students, 26 or 72% fewer than 1000 students and 10 or 28% more than 1000 students. The same as with the other school levels, upper secondary schools are rarely shut down. Furthermore, it is also very rare to merge or administratively change upper secondary schools. The cost of redirecting students when schools close down is unknown, but estimated to be very limited.

#### Innovative use of ICT

When it comes to innovative uses of ICT with the purpose of extending the benefits of large schools to small community schools, the local communities have established no common policy or direction but individual communities may have.

According to a survey done in compulsory schools in 2013 (Samband íslenskra sveitarfélaga í samstarfi við Samtök áhugafólks um skólaþróun, 2013) there are on the average 4,6 students to each computer station and laptop and 33,2 students to each smart tablet.

When asked about the top three priorities in regard to ICT development, 26 schools of the 104 that responded stated that purchase of smart tablets for student use was number one on the list, followed by 21 who have no plans for ICT development and then 12 whose priority is to develop wireless networks. No clear correlation was regarding the size and location of the school and it's ICT status and plans.

Since the 1990's the Ministry of Education, Science and Culture has emphasized the development of ICT use in schools, including establishing a project plan for distributed learning for rural areas. The plan included development projects in small compulsory schools in rural areas in the west of Iceland as well as the set-up of a new small upper secondary school in 2004 built on the concept of distributed learning. This was followed in 2010 by another new upper secondary school in the north of Iceland built on the same principles. The Ministry furthermore organized ICT conferences for

teachers and other school employees annually from 1999 to 2005, where participants were encouraged to share their experiences. There was no special focus on small community schools during those conferences, although the theme in 2002 was on distributed learning.

Over the last two decades the Ministry has regularly developed policies in the use of ICT in schools. In 2013 the development of a new policy and action plan started, for the time period of 2013 to 2024. That policy has not been published at the time of the writing of this report. In addition the Ministry advertises regularly grants to support the development of ICT in schools. The focus isn't especially on small community schools but according to a response to a parliamentary query (Alþingi Íslands, 2009), the development of distance learning originally started in order to ease the access of people to education, irrespective of where they live or their financial and personal circumstances.

#### The infrastructure of schools

Each local community determines the infrastructure of the pre-primary and compulsory schools but information on what has been done to develop the infrastructure is not available centrally. Investments for the upper secondary schools are a joint decision by the state and relevant local community as stated before. The best available information on the total investment can be seen in chapter 4.2, under capital cost.

Regulation no. 655/2009 (Menntamálaráðuneyti, 2009g) on the working environment of pre-primary schools provides guidelines on the adequacy of facilities, equipment and safety of pre-primary schools. The regulation requires school facilities to adhere to the requirements stated in legislation no. 90/2008 on pre-primary schools, the school curriculum and legislation no. 46/1980 on the facilities, health and safety of workplaces. Art. 5 of the regulation provides a list of minimum requirements to the school facilities, including study spaces for the students, multi-use space for art project, physical movement and so on, facilities for specialist working with students with special needs, dining facilities, staff work and rest facilities, etc.

Regulation no. 657/2009 (Menntamálaráðuneyti, 2009f) provides guidelines on the adequacy of facilities, equipment and safety of compulsory schools. The regulation states that consultation with the key stakeholders, such as school employees, students, parents, representatives of local sport and youth groups as well as the employment sector, should be a part of designing, constructing and maintaining the school facilities. It also requires school facilities to adhere to the requirements stated in legislation no. 91/2008 on compulsory schools, the school curriculum and legislation no. 46/1980 on the facilities, health and safety of workplaces. Minimum space requirements based on the number of students is provided in art. 4 of the regulation, for example that 22-28 student classes or groups require 60m² study space. Art. 5 then provides a list of minimum requirements to the school facilities, including study spaces for the students, working spaces for the staff, facilities for student leisure time activities, dining facilities, facilities to meet the learning needs of students with special needs, health care facilities etc.

No such regulation or legal framework exists for the facilities of upper secondary schools. Each school negotiates investments in school infrastructures as needed with the Ministry of Education, Science and Culture and the relevant local community if the cost is shared.

### Learning materials

Legislation no. 71/2007 on learning materials (Alþingi Íslands, 2007c) covers the responsibility and support that the state has in the development, production and distribution of learning materials for pre-primary, compulsory and upper secondary schools. That responsibility is:

- The operation of The National Centre for Educational Materials, which is responsible for providing compulsory schools with the learning materials they need.
- To provide a financial contribution to the Learning Material Fund, which contributes funding to compulsory schools to purchase learning material. The fund, by agreement from October 2011 (Mennta- og menningarmálaráðuneytið, n.d.(d)) between the Ministry of Education, Science and Culture and the Icelandic Association of Local Authorities, is operated and funded by the local communities.
- To provide a financial contribution to the Learning Material Development Fund, which supports innovation, development, production and publication of learning materials for preprimary, compulsory and upper secondary schools.

Students in pre-primary schools are not required to use any learning material other than those provided by the school. Art. 31 in legislation no. 91/2008 on compulsory schools (Alþingi Íslands, 2008b) stipulates that students cannot be charged for the cost of textbooks and other learning materials, although personal provisions such as pen and paper are excluded. Art. 45 in legislation no. 92/2008 on upper secondary schools (Alþingi Íslands, 2008) states that the cost of material provided to students after a unilateral decision by the school cannot be charged to the students. However, the school is allowed to charge students for the cost of material provided the student benefits from its use or has personal use of the material. No stipulation is found in the law stating that the schools shall provide textbooks and other learning materials free of charge, and the reality is that students purchase most of the material from bookstores and similar third parties.

## 4.6 Distribution of teacher resources

### Number of employee positions in schools

The total number of employee positions in the pre-primary, compulsory and upper secondary schools for the years 2004 to 2011/2012 can be seen in the following table. The data for the pre-primary and compulsory schools is from the School Report 2013 of the Icelandic Association of Local Authorities while the data for the upper secondary schools is from Statistics Iceland.

Table 16 The total number of staff in pre-primary, compulsory and upper secondary schools, 2004 to 2012

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Pre-primary	3.872	3.935	4.201	4.367	4.761	4.847	4.770	4.798	4.946
Compulsory	6.576	6.801	6.977	7.164	7.332	7.115	6.858	6.681	6.551
<b>Upper secondary</b>	2371	2435	2490	2557	2561	2563	2411	2516	
Total	12.819	13.171	13.668	14.088	14.654	14.525	14.039	13.995	11.497

(Samband íslenskra sveitarfélaga, 2013b) (Hagstofa Íslands, 2012c)

When this report is written the information is not available for the year 2013, or for the year 2012 for the upper secondary schools. The total number of employee positions for these three school levels has gone up by 8,5% between the years of 2004 and 2011. The increase in positions in the preprimary schools is around 22% between the years of 2004 and 2012 while the difference for the compulsory schools is almost none. For the compulsory schools it is worth noticing however, that the number of positions increased every year until 2008, when the number started decreasing again. Thus between 2008 and 2012 the number of positions decreased by 9%. The same trend cannot be

seen for the pre-primary or upper secondary schools. For the upper secondary schools there is an increase in employee positions of around 6% between the years of 2004 and 2011.

### The composition of the school employee group

The composition of the employee body in the pre-primary schools is in the following table, with the data being compiled from the School Report 2013 as before.

Table 17 The composition of the employee body of all pre-primary schools, 2004 to 2012 – grouped into school teachers, others with pedagogical education, unskilled employees with education responsibilities and other / unspecified

Year	Pre-primary school teachers	%	Others with pedagogical education	%	Unskilled empl. with education responbilites	%	Other and unspecified	%	Total
2004	1.170	30%	193	5%	2.096	54%	413	11%	3.872
2005	1.227	31%	225	6%	2.083	53%	400	10%	3.935
2006	1.340	32%	253	6%	2.214	53%	394	9%	4.201
2007	1.347	31%	269	6%	2.333	53%	418	10%	4.367
2008	1.498	31%	453	10%	2.399	50%	411	9%	4.761
2009	1.596	33%	537	11%	2.299	47%	415	9%	4.847
2010	1.548	32%	560	12%	2.269	48%	394	8%	4.771
2011	1.658	35%	764	16%	1.982	41%	393	8%	4.797
2012	1.694	34%	801	16%	2.071	42%	380	8%	4.946

(Samband íslenskra sveitarfélaga, 2013b)

The figures in the table include the employee positions of all pre-primary schools in the country, both operated by the local communities and private parties. Teachers, other with pedagogical education and unskilled employees with education responsibilities comprise the teaching body. Management is included in the numbers of the teachers.

The most noticeable change during the time-period of 2004 - 2012 is the 22% increase in employee position, and then particularly positions with an educational background in pre-primary teaching and other pedagogical education.

The composition of the employee body in the compulsory schools is in the following table, with the data also being compiled from the School Report 2013:

Table 18 The composition of the employee body of all compulsory schools, 2004 to 2012 – grouped into principals, assistant principals, department managers, teachers, special teachers, support assistants and others/unspecified

¥7	Dorton of an alla	0/	Assistant	%	Department	%	T	%	Special	%	Support	%	Other and	%	T-4-1
Year	Principals	%	principals	%	managers	%	Teachers	%0	teachers	%	assistants		unspecified 70		Total
2004	183	3%	139	2%	191	3%	3.712	56%	233	4%	407	6%	1.711	26%	6.576
2005	186	3%	139	2%	190	3%	3.912	58%	269	4%	412	6%	1.693	25%	6.801
2006	178	3%	147	2%	236	3%	3.778	54%	455	7%	468	7%	1.715	25%	6.977
2007	190	3%	142	2%	246	3%	3.896	54%	512	7%	472	7%	1.706	24%	7.164
2008	180	2%	138	2%	271	4%	4.012	55%	415	6%	512	7%	1.804	25%	7.332
2009	178	3%	148	2%	279	4%	3.709	52%	478	7%	517	7%	1.806	25%	7.115
2010	175	3%	126	2%	252	4%	3.630	53%	488	7%	479	7%	1.708	25%	6.858
2011	169	3%	126	2%	218	3%	3.560	53%	489	7%	522	8%	1.597	24%	6.681
2012	165	3%	123	2%	199	3%	3.682	56%	366	6%	519	8%	1.497	23%	6.551

(Samband íslenskra sveitarfélaga, 2013b)

These figures include the number of employee positions of all compulsory schools in the country, both operated by the local communities and private parties. Included in the numbers for teachers are those with and without formal teaching qualifications. Those employee positions counted under "others" include librarians, social workers, psychologists, guidance counsellors, school nurses, social pedagogues, support assistants, secretaries, computer technicians, recreation assistant dining room employees, janitors, school assistants, hall monitors etc.

The decrease in the number of principals and assistant principals show the emphasis that has been placed on merging schools or placing more than one school under the same management team. Otherwise the biggest change is in the increase in special teachers and support assistants, but together the number of positions in these categories has gone up by 28% in the time period of 2004 to 2012. At the same time the number of employee positions that fall under the other and unspecified category has decreased by a similar number of positions.

The composition of the employee body in the upper secondary schools is in the following table, with the data having been compiled from Statistics Iceland.

Table 19 The composition of the employee body in all upper secondary schools, 2004 to 2011 – grouped into principals, assistant principals, department managers, teachers, experts/specialized and others

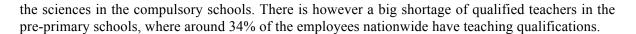
Year	Principals	%	Assistant principals	%	Department managers	%	Teachers	%	Experts and specialized	%	Others	%	Total
2004	40	2%	36	2%	375	16%	1.411	60%	19	1%	490	21%	2.371
2005	38	2%	36	1%	324	13%	1.525	63%	23	1%	489	20%	2.435
2006	39	2%	35	1%	335	13%	1.577	63%	22	1%	482	19%	2.490
2007	41	2%	37	1%	314	12%	1.660	65%	13	1%	492	19%	2.557
2008	40	2%	38	1%	305	12%	1.663	65%	16	1%	499	19%	2.561
2009	41	2%	36	1%	281	11%	1.677	65%	43	2%	485	19%	2.563
2010	49	2%	33	1%	222	9%	1.611	67%	31	1%	465	19%	2.411
2011	45	2%	33	1%	238	9%	1.678	67%	40	2%	482	19%	2.516

(Hagstofa Íslands, 2012c)

These figures include the number of employee positions of all upper secondary schools in the country, both operated by the state and private parties. Included in the numbers for the teachers are all those who were in teaching positions, whatever their education is. Included in the "other" category are consultants, librarians, office workers, computer technicians, janitors, etc.

There is a discrepancy in the number of principal positions in the upper secondary schools, as one of the schools, the Technical College, counts 11 individuals as principals from the year 2010 onward, but not before. It is furthermore not known what numbers of positions are behind those 11 individuals. Those 11 individuals would be counted as department heads in other schools. According to a communication with Statistics Iceland those numbers will be corrected in the next update of the data. Department managers were 16% of the employee body in 2004 but were down to 9% in 2011, with a decrease in the actual number of positions by 37% between 2004 and 2011. While experts and specialized employees only went from 1-2% of the employee body, the actual number of positions doubled.

Overall there is not a shortage of teachers in the compulsory and upper secondary schools, but the concern is that there will be a shortage in the not so distant future, given the high age and low turnover in the teaching group. In addition it is hard to get teachers for certain subjects, for example



### The educational requirements and offers for teachers

Legislation no. 87/2008 on the education and recruitment of teachers and administrators of preprimary, compulsory and upper secondary schools (Alþingi Íslands, 2008d) stipulates the educational requirements for those who teach in pre-primary, compulsory and upper secondary schools. The basic prerequisite to entering the teaching profession is passing a five-year university programme, or a graduate degree, as a minimum, and then accreditation by the Ministry of Education, Science and Culture. For upper secondary school teachers for vocational training courses the requisite is a master level certificate in the relevant trade and in addition a 60-credit programme in teaching.

The content of the education for teachers in pre-primary, compulsory and upper secondary schools is defined in regulation no. 872/2009 (Mennta- og menningarmálaráðuneytið, 2009b). The regulation does not state what subjects are to be taught, but focuses instead on the minimum credit requirements.

Three universities in Iceland offer teacher education programmes that fulfil the Ministry's of Education, Science and Culture requirements for accreditation.

The first of the three universities, the University of Iceland, (<a href="http://www.hi.is/kennaradeild/kennaradeild">http://www.hi.is/kennaradeild/kennaradeild</a>) offers four five-year programmes that end with a three-year B.Ed. degree and a two-year graduate degree. The four programmes are:

- Pre-primary schoolteachers, which also gives accreditation to work with the younger age groups in compulsory school.
- Compulsory schoolteachers with a special emphasis on the younger age sections, which also give accreditation to work with the older students in pre-primary schools.
- Compulsory schoolteachers, which favours general education and a specialization in two subjects.
- Compulsory schoolteachers specializing in one subject, which also gives accreditation to teach the beginners courses in the subject in upper secondary schools.
- The University of Iceland also offers a graduate programme for working teachers, as well as a diploma for teachers of vocational training courses. In addition a graduate degree is available for those with a BA or BS degree who seek accreditation for teaching in the preprimary, compulsory or upper secondary schools. The programmes available for those with BA or BS degrees are:
- Diploma for pre-primary school teaching, a prerequisite is a BA, BS or B.Ed. degree in a subject related to child rearing or the learning areas of the pre-primary schools, and additionally work experience in a pre-primary school.
- M.Ed. degree in pedagogy for compulsory school teaching, a prerequisite is a BA or BS degree in a learning area of the compulsory schools.
- M.Ed. degree in pedagogy for upper secondary school teaching, prerequisite is a BA or BS degree in a learning area of the upper secondary schools.

• Diploma in pedagogy for upper secondary school teaching, a 60-credit diploma for those who obtain a graduate degree in their own field of study.

The prerequisites for entering the initial programmes at the University of Iceland are to have finished matriculation examination (academic programmes at the upper secondary school level). Exceptions to these prerequisites can be made for those who have finished 170 upper secondary school credits and have a minimum of a five years job experience. Those who apply to the graduate programmes need to have obtained an undergraduate degree.

A third of the courses are the same for the initial educational programmes for the teachers in preprimary and compulsory schools, but close to half the courses are aimed at specialization or towards a specific school level. Field study, in a pre-primary or compulsory school are also important elements in the initial programmes.

The second university, the University of Akureyri (<a href="http://www.unak.is/hugogfelagsvisindasvid/kennaradeild">http://www.unak.is/hugogfelagsvisindasvid/kennaradeild</a>), offers the following teachers education programmes:

- A five-year programme in pedagogy and educational sciences, which concludes with a three year B.Ed. degree and a two year M.Ed. degree. The five-year programme is offered for future teachers in pre-primary schools and compulsory schools.
- A two-year diploma programme at undergraduate level in pre-primary school teaching.
- A M.Ed. degree programme for those with a BA or BS degree in fields other than educational sciences.
- A MA degree programme in educational sciences, for those who wish to specialize in certain fields within the educational sector and/or do research and academic work.
- Instead of the full M.Ed. and MA degree a 60-credit study at graduate level is an alternative.

The prerequisites for entering the initial programmes at the University of Akureyri are to have finished matriculation examination (academic programmes at the upper secondary school level). Those who apply to the graduate programmes need to have obtained an undergraduate degree.

The third university, the Icelandic Academy of the Arts (<a href="www.lhi.is/namid/listkennsla">www.lhi.is/namid/listkennsla</a>), offers two teachers accreditation courses.

- A 60-credit diploma course for those who wish to teach art at the upper secondary school level a prerequisite is a master's exam in an art field.
- A two-year MA or M.Art. Ed degree programme for art teachers a prerequisite is an undergraduate degree in design, architecture, theatre, dancing, music or visual arts.

In addition to the three universities the Technical College in Iceland (<a href="http://www.tskoli.is/skolar/meistaraskolinn/">http://www.tskoli.is/skolar/meistaraskolinn/</a>), which is an upper secondary school operated by the private sector, operates a master's school for those who have obtained a journeyman's licence in a specific vocational trade. Those who finish the master's school receive accreditation from the sheriff's office, which among other things authorizes them to take on and teach apprentices in a

work-study programme. Other upper secondary schools around the country that are strong in vocational training programmes, may also offer such master's schools.

#### Hiring practices of teachers

No programmes or initiatives are targeted at attracting high quality upper secondary school graduates into initial teacher education. An effort is on going though to attract more people to pre-primary school teacher education, as can be seen on <a href="www.framtidarstarfid.is">www.framtidarstarfid.is</a>, which promotes the job and the education.

Each local community and upper secondary school has discretion in hiring teachers. Their hiring practices need to fulfil all legal requirements, such as advertising available positions, hiring the most qualified individual, giving accredited teachers priority over other applicants, etc. In local communities with multiple pre-primary and compulsory schools, teachers can be offered assignments in a different school if the one that employed them no longer requires their services.

No centralized schemes or policies have been implemented in order to attract qualified teachers to disadvantage or remote schools. Some local communities have encouraged and supported those working in the pre-primary and compulsory schools to get teaching qualifications, which has for example lead to a higher percentage of qualified teachers in the pre-primary schools. Some smaller and more remote local communities have in the past chosen to offer incentives in order to hire teachers for their pre-primary and compulsory schools, often in the form of housing subsidies and similar amenities. Such practices have though mostly ceased following the economic crash of 2008.

Furthermore, statistics show that attracting qualified teachers is not necessarily linked to the location of the school, as the capital City of Reykjavík has proportionally the fewest qualified pre-primary school teachers, or 30% of the employee group while the more rural regions of the country have 33-54%. The numbers for qualified compulsory school teachers are from 60-93%, with the more rural and remote areas having the lower numbers. (Samband íslenskra sveitarfélaga, 2013b).

# 4.7 Distribution of school leadership resources

### The size and composition of the leadership group for schools

The size and composition of the personnel in charge of pre-primary, compulsory and upper secondary schools can be seen in the following table, by profession and gender on the one hand and profession and age on the other.

Table 20 School leadership by school level, profession, age and gender, 2014

		Gender				A	ge		
	Men	Women	Total	21-30	31-40	41-50	51-60	61-70	Total
Pre-primary schools	14	424	438	3	60	151	164	60	438
Head teachers	5	222	227		13	71	106	37	227
Assistant head teachers	9	202	211	3	47	80	58	23	211
Compulsory schools	131	364	495	6	58	179	184	68	495
Head teachers	69	99	168		19	53	73	23	168
Assistant head teachers	35	87	122		13	42	48	19	122
Department managers	27	178	205	6	26	84	63	26	205
Upper secondary schools	62	66	128	0	4	41	62	21	128
Head teachers	17	11	28		1	4	17	6	28
Assistant head teachers	18	20	38		1	15	17	5	38
Educational managers	27	35	62		2	22	28	10	62
Total	207	854	1.061	9	122	371	410	149	1.061

(Kennarasamband Islands, 2014) (Ministry of Education, Science and Culture)

The data on the profession, gender and age of those in charge of the schools is from the members' register of The Icelandic Teachers' Union where all school leaders are members except the head teachers of the upper secondary school. Their data is from the Ministry of Education, Science and Culture and refers only to the 28 state operated schools. The data is for the year 2014 and the numbers indicate individuals but not positions. The number of assistant head teachers includes 11 individuals for one upper secondary school (www.tskoli.is), which is set up similar to many universities, with "schools" for each of the trades and technical fields taught there. The educational managers for the upper secondary schools include study directors.

90% 80% 70% 60% 50% 40% 30% Women 20% 10% Men Assistant Read teachers 0% Computery schools Salare Read teachers Department manages Secondary schools Land Bear Lead teachers Head tea thers Edward rander Head reachers

Chart 6 School leadership by gender, proportions

(Kennarasamband Íslands, 2014) (Ministry of Education, Science and Culture)

As can be seen in the chart the gender proportions are different for each school level, with the preprimary schools being dominated by female leadership while the majority of head teachers in the upper secondary schools are men.

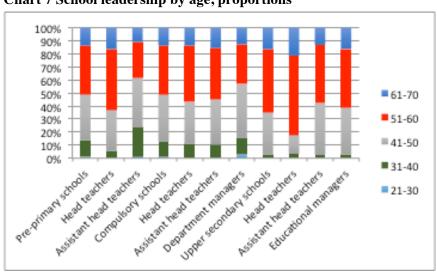


Chart 7 School leadership by age, proportions

(Kennarasamband Íslands, 2014) (Ministry of Education, Science and Culture)

There is not a shortage of candidates for leadership positions in the schools. When looking at the leadership by age, it is clear that proportionally the biggest part of the leadership is in the age groups 41 and over, or around 86-87% at the pre-primary and compulsory level and 97% for the upper secondary. At the same time 51% of the school leadership of pre-primary and compulsory schools is 51 and older, and 65% in the upper secondary schools.

### Hiring practices for leadership positions in schools

Legislation on the education and hiring of teachers and leadership for the pre-primary, compulsory and upper secondary schools no. 87/2008 (Alþingi Íslands, 2008d) stipulates that the prerequisites for those hired as head teachers and assistant head teachers at the three school levels shall be accredited teachers for the relevant school level and have an additional education in management or a teaching experience at that particular school level.

The recruitment of head teachers at the pre-primary and compulsory school level is the responsibility of the local council according to the legislation for the local communities no. 137/2011 (Alþingi Íslands, 2011c). Legislation no. 87/2008 furthermore states that the hiring practices need comply with the legislation for the pre-primary school (Alþingi Íslands, 2008c). Traditionally the positions of head teachers are advertised for application. The head teachers also traditionally hire other school employees.

In legislation no. 87/2008 on the practices of hiring school leadership the head teachers of the upper secondary schools are given the authority to hire other school employees in compliance with the legislation on upper secondary schools (Alþingi Íslands, 2008) and legislation on the rights and responsibilities of state employees (Alþingi Íslands, 1996). The legislation also states that all leadership positions in the upper secondary schools shall be advertised in accordance with rules determined by the Minister of Finance, which is responsible for state personnel matters. The legislation on upper secondary schools (Alþingi Íslands, 2008) then states that the Minister of Education, Science and Culture appoints head teachers of upper secondary schools. Traditionally positions of head teachers of upper secondary schools are advertised for application.

No policies or incentive schemes have been implemented to attract qualified school leaders to disadvantaged schools.

### Educational offers for education managers

Two universities in Iceland offer graduate degrees that place emphasis on management in the educational sector (<a href="www.hi.is">www.hi.is</a>, <a href="www.hi.is">www.hi.is</a>) that prospective school leaders can use to prepare themselves for their functions. In addition the Continuing Education Institute of the University of Iceland (<a href="www.endurmenntun.is">www.endurmenntun.is</a>) has offered management courses for school leaders, as well as some of the larger local communities and the district chapters of the Association of Headteachers. The associations of head teachers for the different school levels have furthermore joined in partnerships with the various universities to offer management courses that the associations promote to their membership. Interest and demand at the time influences what is on offer and when.

# 4.8 Distribution across specific student groups

At the pre-primary level the local communities traditionally meet those families in especially dire financial situations by subsidising the pre-primary school fees. This is only done in exceptional circumstances, based on the financial assistance criteria of the local communities and often related to child protection cases. No fees or cost is applicable to the parents or students at the compulsory level, as that level is fully funded by the local communities. Parents normally pay meal costs though if a

child uses the school canteen for meals, but the financial assistance criteria of the local communities does also allow for subsidising those meal costs in exceptional circumstances.

At the upper secondary school level there is a grant distributed directly to students, through an application to the Icelandic Student Loan Fund (<a href="www.lin.is">www.lin.is</a>). The grant compensates students who attend a school far away from their homes and families. The grant is split into two sections, one supports travelling between home and school for those students who live at home and the other supports the cost of accommodation for those who attend a school that is at least 30 km away from their home. In order to qualify for this grant students need to be registered at their home, be undertaking at study that is at least a year long at a recognized upper secondary school in Iceland and attending a school a certain distance away from their home. The grant can be received for four years or a total of eight semesters in total.

The Icelandic Student Loan Fund also provides student loans to those upper secondary school students attending certified trade and vocational studies. The loan is meant to cover the basic cost of living. The amount varies depending on whether the student is living rent free or not (with parents for example), whether he has children and is then legally co-habituating with a spouse, any other income the student has and the number of school credits taken during the school year. In order to apply for the grant students need to be attending accredited studies and taking a minimum number of credited courses. The students also need to be legally emancipated (over the age of 18). It is not possible to obtain a student loan for the first 1- 2 semesters for students who start trade or vocational studies directly after finishing compulsory school.

Students with special needs are as a policy integrated into regular schools, with 5,7% of pre-primary school students (Hagstofa Íslands, 2013c), and 27% of compulsory school students (Hagstofa Íslands, 2013n) receiving any kind of special support. A total of 470 students received special support at the upper secondary school level in 2013, according to the Ministry of Education, Science and Culture.

Three special needs schools at compulsory level operate in the country. One (<a href="www.bruarskoli.is">www.bruarskoli.is</a>) is for students in grades 5 to 10, with severe mental and emotional disabilities, with social and behaviour disorders or who are in difficulties due to drug abuse or criminal behaviour. As a rule there are between 50 and 60 students who attend the school. The second school (<a href="www.klettaskoli.is">www.klettaskoli.is</a>) is for students with average, serious and deep intellectual developmental disabilities or a mild developmental disability and a diagnosed disability such as autism, blindness, deafness and serious motor disability. In the school year 2013-2014 109 students attended the school. The third (<a href="www.hlidarskoli.akureyri.is">www.hlidarskoli.akureyri.is</a>) is for students in grades 1-10 with social and behaviour difficulties. During the school year 2013 – 2014 20 students attended the school. The proportion of students attending special needs schools is therefore extremely low.

In addition to the three special needs school, some regular schools operate special needs classes. Also there the students are few.

As for special provisions and resources for students with special needs, the local communities operate special expert school services that support and provide support to the pre-primary and compulsory schools. Special teachers and support assistants are also a part of each schools employee group. The state furthermore operates specialized service centres responsible for formal diagnosis (www.greining.is), services to those with visual disabilities (www.midstod.is), with hearing difficulties (www.hti.is) and those who are deaf (www.shh.is).

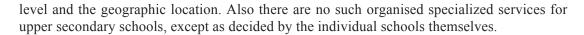
For funding for students with special needs at pre-primary and primary school level, see chapter 4.1



The following issues regarding the distribution of resources are currently being challenged or subject to re-examination.

- The allocation criterion of The Local Governments' Equalization Fund is being re-examined, with a new criteria expected to be in place by 2015. The main criticism regarding the current criteria has been that the formula and method of calculating the contributions to each local community are too complex and not transparent enough although it is recognized that it is not easy to set up a simple system that reflects a complex reality. The local communities furthermore criticize that information on the allocations is late to arrive.
- Informal discussions are taking place within the Ministry of Education, Science and Culture on the need for the Ministry to be formally involved in The Local Governments' Equalization Fund, which it is not today. The Icelandic National Audit Office has also criticized that the Ministry of Education, Science and Culture is not involved in the Fund.
- The local communities criticize that more funding is needed to carry out the government's policy on inclusive schools. A special working group was set up in the fall of 2013 with the task of evaluating how the implementation of the policy is going and what needs to be done to further improve the implementation. The working group includes representatives from the ministries of education and welfare, local communities, teachers union and head teachers union.
- There has been an on-going debate on the terms of the collective labour agreements between the local communities / state and the labour unions of the teachers. Following the agreements signed in the spring and summer of 2014 a joint initiative is under way, where the parties aim and hope to seek a solution. Among the disputes are:
  - The framework on how to use the agreed working hours, which the local communities claim are too strict and limiting while the teachers claim they need to be reconsidered taking into account the different responsibilities and tasks that have been added to their work schedule.
  - o How teachers use time for in service training and their professional development.
- The employees of the pre-primary and compulsory schools consider the allocation of funding to maintenance and renewal of buildings and equipment too low.
- The allocation of operational funding to the upper secondary schools is considered too low, given the current funding and priorities set for the schools, as pointed out by The Icelandic National Audit Office. The funding to the schools has been decreased due to the economic crises that started in 2008. However, the schools have not been able to reduce their operations as needed both as legal requirements have stayed the same and due to political policy priorities in dealing with the recession. As a result 16 of the 28 upper secondary schools operated by the state had a deficit in the year 2013, a deficit of a 100m IKR in total and an expected deficit of 400m IKR for the year 2014. This situation was given a priority in the collective labour agreement signed in April 2014, where the cabinet of state agreed to add a 400m IKR contribution to the schools from the year 2014 onwards. (Fjármálaráðuneytið and Kennarasamband Íslands, 2014).

- The allocation model used to calculate the funding needs of the upper secondary schools is controversial, as it is difficult to assess the exact actual needs of each school due to their differences and diversity. Among the controversies are (Sigurðsson, 2008):
  - There are different opinions on the role of the model, on the one hand that it is meant to show the actual costs of the schools and therefore be the base for funding and on the other to determine how the funding available is to be shared between the schools.
  - How individual criteria is financed and/ or calculated, with examples being that the figures behind salary cost and maintenance cost are too low and that the figure for the number of students are those that attend final examination in a course, but not those that registered and started school but those that registered are the ones that determined for example staffing needs.
  - O The use of the funding model for performance management purposes is criticised by the schools—that is, counting only students who attend final examination—and that if performance management is it's true purpose then more indicators should be devised. The Ministry of Education, Science and Culture defends this purpose as being a political decision but accepts the need for a further discussion on the issue.
  - The Ministry of Finance feels that more individuals are registered in the schools than the schools have the legal requirement to cater to, taking funding away from actual students.
  - The school leadership feels that not all cost is considered in the model and thus that the conclusions do not reflect the actual cost of the schools.
  - Head Teachers for the upper secondary schools claim that the transparency of the model has decreased over the years and point out that additions and changes have been made to it without consultation with the schools – changes they particularly relate to political interference with the intend to further specific interests.
- On occasion there is a dispute regarding funding responsibilities of the ministries of education and welfare in regard to specialized services to students with special needs. The Ministry of Welfare takes the position that such services are to be paid by the education sector even when the services are delivered by welfare agencies, while the Ministry of Education, Science and Culture claims that it does not matter that the individuals in question are in school.
- Funding for staff development and in-service training at all school levels. There is no central policy on how staff development and in-service training is financed or who decides on the priorities. It is difficult for the state and the local communities to implement national or local policy in this matter, for example in relation to on-going reforms, because the funding is decentralised and to a great extent connected with negotiations of the collective labour agreements. A working group has been established where this is being discussed.
- The local communities shall by law provide specialized services for pre-primary and compulsory schools. Each local community determines how these services are organized. This situation has been questioned and suggested that the state set more central criteria on how the services are provided, to ensure quality and equal access regardless of the school



■ Since the start of the economic recession, in 2008, funding to renew school facilities and equipment has been minimized. Parents, students and school employees have pointed out the serious situation arising because of this, with the teachers unions making this a negotiation point in the collective labour agreements in 2014.

# Chapter 5. Resource utilisation

This chapter is concerned with how resources are utilised through specific policies and practices, to different priorities and programmes once they have reached different levels of the school system. It addresses the matching of resources to individual student learning needs, the organization of student learning time, the allocation of teacher resources to students, the organization of school leadership, the teaching and learning environment within school, the use of school facilities and materials and the organization of education governance.

# 5.1 Matching resources to individual student learning needs

### Organization of student groups

Typically pre-primary school students are organized into learning groups according to age. In compulsory schools students are also typically grouped by age, although there are examples of mixed age groups (Óskarsdóttir, Starfshættir í grunnskólum við upphaf 21. aldar, 2014). In a few cases the older age sections in compulsory schools are grouped in accordance to abilities. In the upper secondary schools students are either grouped by the year in school and the field of study (class system) or, as is the case in most schools, by individual courses (course system). The evidence of these different types of organization has not been researched.

#### Special education

Most compulsory schools address special education in the school curriculum, policies or guidelines, according to a survey the City of Reykjavík did in 2011 among its own schools (Reykjavíkurborg, 2011). Addressing the learning difficulties of individual students is typically the responsibility of a department manager for special education or alternatively the class teacher receives advice and assistance from a special education teacher. If no special education teacher is available in the school the head teacher or somebody so appointed takes on the supervisory function.

According to regulation no. 584/2010 on the expert services of the local communities for preprimary and compulsory schools (Mennta- og menningarmálaráðuneytið, 2010c) the local communities are required to provide expert services in support of students and their parents, as well as the schools and their employees. Included is to provide diagnosis on the condition of students, to suggest the appropriate means of follow-up and to provide direct support to the student and/or parents and teachers in regard to advise, consultation and education. Following diagnosis, treatment and therapy is the responsibility of the state. In the same regulation the head teachers of the schools are given the responsibility to co-ordinate the services that the students require.

In actuality, according to a survey done in 2013, 32% of the responding local communities stated that they did not have educational or school policies and 36% that the policies did not define how the objectives in the regulation are to be met. Some of those that did not define how to meet the objectives of the regulation said however that the information was to be found in documents for an expert service operated jointly by several communities, or in the policies of the individual schools. Others stated that their policies pre-dated the regulation and/or that new policies were in the making. (Capacent Gallup, 2013).

Art. 34 in the legislation on upper secondary schools (Alþingi Íslands, 2008) stipulates that students with disabilities, as defined in legislation no. 59/2009 on the subject of people with disabilities (Alþingi Íslands, 1992b), or experiencing emotional or social difficulties shall be taught and receive special support as needed. Regulation no. 372/1998 on the education of disabled upper secondary

school students (Menntamálaráðuneytið, 1998), states that the support can be in the form of specialized employees, student assistants and/or equipment. The regulation goes on to state, among other things, that disabled students shall receive their education alongside other students if possible, and their educational plan should be either part of a student group's or an individual one. Another regulation, on upper secondary school students with special needs no. 230/2012 (Mennta- og menningarmálaráðuneyti, 2012), then goes into the rights of students, the rights and responsibilities of the parents to information, the arrangements for the education, support for the students and so on.

In these two regulations the head teacher of an upper secondary school is given the responsibility for assessing the support a disabled student requires and to organize that support in partnership with the employees of the school. Requests for funding the support are applied for at the Ministry of Education, Science and Culture at around the middle of each semester for the on-going semester (Mennta- og menningarmálaráðuneyti, n.d.).

## Repetition of studies

In the compulsory schools it is extremely rare for students to repeat a year or to start school later than at 6 years of age. The only general action taken to prevent dropout is that teachers notify the parents if students are absent without authorisation. Compulsory school is mandatory by law, with the parents or legal guardians being responsible for the child attending school. If a child does not attend, the school authorities are responsible for notifying the welfare authorities of the situation. (Alþingi Íslands, 2008b). If a solution is not found in partnership with the parents, a legal action can be taken against the parents – something that is almost unheard of in practice. In some local communities the school authorities furthermore partner with the local welfare authorities in ensuring that students in disadvantaged family circumstances get to school – with an employee going into the home, waking the student, ensuring he is fed and clothed and going to school.

It is not required by law to attend upper secondary school, but all those who have finished compulsory school or have reached 16 years of age have the right to start their education at the upper secondary school level and stay there until they are 18 years old. Students are responsible for their own studies and attendance at school. (Alþingi Íslands, 2008). Upper secondary schools are encouraged to take the actions they choose to minimize year repetition and early dropout as they receive their funding based on the number of students that finish their courses. Information on course and year repetition in the upper secondary schools is however not collected centrally and the status is therefore not known.

## Vocational education and training

No formal vocational tracks are offered for the older age groups in the compulsory schools, but individual vocational courses may be available. Also, older compulsory school students can attend selected courses at the upper secondary school level if the student has acquired the necessary competence and if approved by the student's head teacher (Alþingi Íslands 2008). Upper secondary schools have not received special funding in order to meet the legal rights and interests of compulsory school students, but are allowed to offer these students courses if their budget allows it. It is not currently known to what extend compulsory school students attend courses at the upper secondary school, but the Ministry of Education, Science and Culture is presently running a study on the issue.

At the upper secondary school level over 100 educational programmes are on offer, with around 87 of those programmes being vocational tracks (Mennta- og menningarmálaráðuneytið, n.d.(b)).

#### Student admittance

Each upper secondary school is responsible for the acceptance of students to the school, with the conditions for the acceptance agreed on in the school's contract with the Ministry of Education, Science and Culture. Each school can thus determine the requirements for preparation and academic achievements for the individual educational programmes. (Alþingi Íslands, 2008). The educational offer in each school is introduced in the school curriculum, along with the conditions for acceptance to the school and each educational programme (Menntamálaráðuneytið, 2008). Students select their chosen educational programme when applying to an upper secondary school.

# 5.2 Organization of student learning time

## Organization of the school year

Each pre-primary school is required to publish annually an operation plan that details the school's activities and calendar (Alþingi Íslands, 2008c). The plan is developed in partnership with the employees of the school, the students and their parents and approved by the members of the School Board of the local community. Attendance at a pre-primary school is not compulsory, with parents choosing whether their child goes to pre-primary school, which days of the week and how many hours a day or week. The number of instruction days or the duration of school holidays are therefore not regulated, nor the average number of hours of instruction per week and year. As a rule of thumb though, pre-schools operate weekdays, excluding national holidays. According to regulation no. 655/2009 (Menntamálaráðuneyti, 2009g), the operations of the pre-primary schools shall take into account the age, needs and interests of the students when organizing their daily hours, with expected stay at the school not exceeding 9 hours a day. Also pre-primary school students should have four weeks off a year, with many schools closing down for four weeks during the summer. According to Statistics Iceland out of 262 pre-primary schools, 19 were open year round in 2012, 10 were open 50-51 weeks, 162 were open 48-49 weeks, 63 were open 46-47 weeks, 7 were open 30-45 weeks and the data for 1 is missing (Hagstofa Íslands, 2013s).

The legislation on compulsory schools no. 91/2008 (Albingi Íslands, 2008b) stipulates that the school year for students shall at the minimum be 9 months or 180 days. How those days are divided into educational instruction time vs. other activities is at the discretion of the head of the school, subject to the approval of the School Board of the local community. Students in grades 1 to 4 shall have a minimum of 1.200 instruction minutes a week, in grades 5 to 7 a minimum of 1.400 minutes and in grades 8 to 10 a minimum of 1.480 minutes. The head teachers of the schools can decide further on the weekly plans. The local authorities can co-ordinate holidays within the school year for all the schools in the community, following a consultation with the stakeholders. According to the national curriculum guideline for compulsory schools (The Ministry of Education, Science and Culture, 2014), each school is obliged to publish an annual operation plan with information on the school's calendar. As a rule of thumb the compulsory schools start their operation mid August with a few preparatory days for the teachers before classes start, and finish late May or early June. Most will schedule a couple of days break in fall and again in spring. According to Statistics Iceland the average number of school days in the school year 2011 to 2012 was 179,4. The number of teaching days was 171,1, academic assessment days were 1,4, and days used for other things were on the average 6,9. (Hagstofa Íslands, 2013o).

The working days for upper secondary school students are at a minimum 175 during the school year, according to the legislation on upper secondary schools no. 92/2008 (Alþingi Íslands, 2008). Each course counts as a specific number of standardized educational credits and the students need to finish in a satisfactory manner a predetermined number of credits in order to graduate. The number of credits depends on the educational programme the student is attending, but a full time study equals

60 credits a year or 30 credits a term. One secondary school credit equals 18 to 24 hours of work for an average student (Ministry of Education, Science and Culture, n.d.). The students can to a certain extend choose how many credits they sign up for in a given semester, with some schools requiring a minimum number for the students to stay in school.

In an appendix to the collective labour agreement signed in April 2014 (Fjármálaráðuneytið and Kennarasamband Íslands, 2014) it is further stipulated that the school year shall be within the time period of 22 August and 31 May during the school year 2014-1015, and within the time period of 18 August and 31 May from the school year 2015-2016, and that student working days shall be 180 a year from that time on. According to Statistics Iceland the number of days where students received organized instruction was on the average 149,4 for the school year 2011-2012, and days used for academic assessments and repeated tests were 25,4 (Hagstofa Íslands, 2012e).

It is currently under discussion to decrease the number of years it takes to graduate from the academic programmes at the upper secondary schools – which requires today 10 years in compulsory school and typically four years in the upper secondary school. This discussion has been on and off the table for the last 20 years, with the current Minister of Education, Science and Culture defining the decrease in years as an action in the *White Book on Education Reform* published in 2014 (Mennta- og menningarmálaráðuneytið, 2014). The Upper Secondary School Teachers Union have opposed this idea, stating that students can already finish their studies in three years if they so choose, given the existing flexibility of the system. The Minister of Education, Science and Culture however stated in the run up to the negotiations for the collective labour agreements that took place in the spring of 2014, that the funding released through a decrease in the required number of years could be used to raise the teachers salaries. In the collective labour agreement for the upper secondary school teachers a clause can now be found stating that if there will be fundamental changes in the organization of the education, such as a change to the length of study to graduation, it will call for a reassessment of the associated workload for the teachers.

#### Homework and extra curricular activities

The extend of homework and extra curricular activities are the decision of each compulsory and upper secondary school, with data on the actual extend not collected centrally and little research done on the issue. However, a survey among teachers in compulsory schools showed that 86% of teachers of grades 1 to 4 consider homework to be important, 71% of teachers in grades 5 to 7 and 75% of teachers in grades 8 to 10. Most of the respondents wanted the homework to be in moderation. According to the survey the priority in giving homework was on training reading skills, with math exercises coming second. (Óskarsdóttir, Starfshættir í grunnskólum við upphaf 21. aldar, 2014).

## 5.3 Allocation of teacher resources to students

Chapter 5.1 explains how students are typically organized into groups.

#### Student / teacher ratios

The actual ratio of students to teachers for the pre-primary schools is presented in the Annual School Reports of the Icelandic Association of Local Authorities. There is very little change between the years 2004 and 2012:

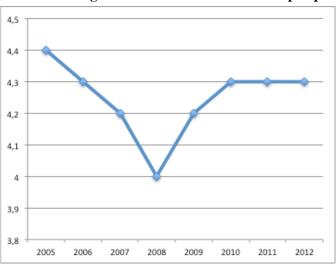


Chart 8 Average student/teacher ratio for the pre-primary schools, 2005 to 2012

(Samband íslenskra sveitarfélaga, 2013b)

The numbers refer to all students in all schools and the proportion of students to all employees that have an educational and up-bringing role. Included in the employee number are therefore teachers, educational support staff, department managers, head teachers and so on.

The actual average number of students to teachers in the compulsory schools according to Statistics Iceland can be seen in the following chart:

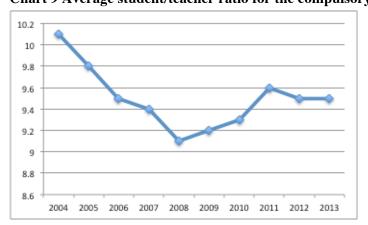


Chart 9 Average student/teacher ratio for the compulsory schools, 2004 to 2013

(Hagstofa Íslands, 2014d)

As can be seen in the chart the average student / teacher ratio for the compulsory schools has not drastically changed between the years 2004 and 2013, or lowered by around 6% or from 10,1 in 2004 to 9,5 in 2013.

Similar statistics for the upper secondary schools show the following, based on headcount:

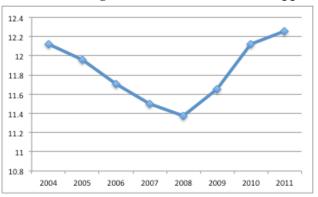


Chart 10 Average teacher/student ratio for upper secondary schools, 2004 - 2011

(UNESCO Institute of Statistics, n.d.)

For the upper secondary schools, there has not been a drastic change between the years of 2004 and 2011 either.

Similar statistics are not available for students with greater needs.

#### Organization of the teachers' working time

The organization of the teachers' work is determined in the collective labour agreements that apply to all teachers employed by the state and local authorities.

On June 16 2014 an agreement was signed to renew the existing collective agreement for the preprimary schools, with changes to the salary scales (Samband íslenskra sveitarfélaga og Félag leikskólakennara, 2014c). The existing collective agreement (Samband íslenskra sveitarfélaga og Kennarasamband Íslands vegna Félags leikskólakennara, 2011) states that the working week of full time pre-primary schoolteachers shall be 40 hours. Of those 40 hours teachers shall use a minimum of 4 hours and department managers and special needs teachers 5 hours for preparation. Included in the preparation is the planning of teaching, parent/teacher meetings and other communication with parents, diagnosis of the student's behaviour, and school trips.

The collective labour agreements for the pre-primary school teachers do not specify a number of days dedicated to professional development each year or how the cost of such development is covered. The employer pays though 1.72% on top of the regular salary of the teachers into a special fund set up by the labour unions of teachers and school managers, which is meant to cover the cost of continued education. The agreement furthermore specifies that a plan for continued education be developed in each school each year and that teachers get an extra pay grade for participating in such continued education. Also, teachers keep their regular salaries while participating in continued education. In addition, teachers can apply for a paid study leave for up to three months after each five years of teaching, six months after each ten years and nine months after each 12 years. Alternatively the teacher can apply for a paid study leave more frequently, but then no more than one month for each 20 months at work.

The collective labour agreement for the compulsory schoolteachers signed in May 2014 (Samband íslenskra sveitarfélaga og Kennarasamband Íslands vegna Félags grunnskólakennara, 2014b), divides working hours into three parts, A, B and C. The A part covers teaching, preparation of teaching and the necessary follow-up to teaching – all priority aspects of the teachers working day. Part B covers any other assignments and work that teachers undertake and do not fall under parts A and C,

continued education, coffee breaks and classroom breaks are included here. Also included are meetings at the school and outside the school, parent meetings, record keeping, information dissemination, teacher co-operation, professional development, school development, curriculum development, participation in school assessments and research, supervision of class facilities and equipment, substitution in case of short term absences, student meetings and supporting students for example in the library and on field trips, etc. Part C covers special assignments and projects that a head teacher assigns a teacher, with the agreement of the teacher. This includes such things as project management, team management and management of special inittives such as beginners literacy. As agreed between the head teacher and the teachers, the weight of parts A to C can vary, but if one part takes more time another is supposed to take less time.

As a base the collective agreement for the compulsory school teachers states that the A part of the teachers working hours be 1.036 hours a year for a teacher in a full time position, or 641 hours for teaching and 395 hours for preparation and follow up. The expectation is that the group of teachers in a school spend on the average 26 teaching hours teaching a week (or 17,33 clock hours as each teaching hour is 40 minutes), however actual teaching hours for the individual teacher can be 19 (12,66 hours) to 28 (18,66 hours). Part B is determined for each teacher in a special assessment of his work, but is 764 hours a year as a base. Part C is fully determined in each teachers assessment of work, and the hours needed for this part are subtracted from parts A or B or the teacher is alternatively paid overtime.

Table 21 The expected number of working hours of compulsory school teachers, and how they are split between tasks

	26 thrs pr. wk / 37 wks.	28 thrs pr. wk / 37 wks.	24 thrs pr. wk / 37 wks.	19 thrs pr. wk / 37 wks.
Part A	Hrs. / year	Hrs. / year	Hrs. / year	Hrs. / year
Teaching	641	691	592	469
Preparation, follow up	395	425	370	308
Total	1.036	1.116	962	777
Part B	Hrs. / year	Hrs. / year	Hrs. / year	Hrs. / year
Other general tasks, breaks	614	534	688	873
Prof. development, preparation*	150	150	150	150
Total	764	684	838	1.023
Part C	Hrs. / year	Hrs. / year	Hrs. / year	Hrs. / year
Special assignments				
Total				
Total A+B+C	1.800	1.800	1.800	1.800

<sup>\*</sup>As a baseline those who are 55 to 59 years old, in a full time position and have taught for a minimum of 10 years, teach 24 teaching hours a week, and those who have reached the age of 60 19 teaching hours a week. Those who are entitled to such a teaching "discount" taka on other non-teaching related work for the school instead for a total of 2 to 5 hours a week, depending on the teaching discount they receive. Or, alternatively, those with the right to such a "discount" can waive the discount, teach full hours and receive a higher salary instead.

The collective agreement specifies that 102 to 150 hours a year, depending on the age of the teacher, shall be used for professional development and preparation. The employer pays 1,72% on top of the regular salary of the teachers into a special fund that the teachers use at their discretion to cover the

cost of continued education. The employer pays an additional 1,3% into another fund which covers the cost of paid study leaves, the local communities operate another small fund that is a left over from the transfer of the compulsory school from the state to the local communities, and finally the state operates a fund for development projects that include certain aspects of the teachers' professional development.

The agreement furthermore specifies that a plan for continued education be developed in each school each year, and that the education take place as much as possible within the regular hours of the working day. Also, teachers keep their regular salaries while participating in such continued education. In addition, teachers can apply for a non-paid leave for an appropriate length of time if a study or project opportunity arises in connection to their jobs.

As a part of the new collective labour agreement for the compulsory school teachers an individual assessment determines the final number of hours that a teacher uses for the different parts of the working day. That assessment is based on the scope of teaching, student assessment, time needed to review student assignments and prepare lessons, supervision of the facilities and equipment, the amount of teacher co-operation required, the number of students in a supervisory class, the combination in the student group, use of new teaching methods, the development of study material, communication with parents, and record keeping in excess of what is "typically" required.

At the time of the writing of this report the development of a system of assessing individual teachers based on the agreed on work criteria was being developed. A first draft was introduced in November 2014, with a final version to be approved by teachers vote no later than 20 February 2015. If the teachers do not approve the assessment system the teaching hours and workday arrangement explained will not be implemented nor an attached 11,5% salary increase but instead a basic 12-20% increase will keep along with the working day arrangement in the previous collective labour agreement.

The collective labour agreement for the upper secondary school teachers signed in April 2014 (Fjármálaráðuneytið and Kennarasamband Íslands, 2014), divides working hours into three parts, A, B and C. The A part is time for teaching which is ultimately determined by the subject taught, the size of the student group, the needed preparation, the scope of the assessment of achievements, the students credit and other factors which impact the total amount of work required, such as maintenance of equipment and facilities. Personal factors such as the number of subjects that a teacher teaches also counts here. The B part involves those aspects of the work that all teachers need to spend time on but are not a part of actual teaching. This includes items such as staff meetings, parent meetings, information dissemination, student supervision, teacher co-operation, work on the curriculum, involvement in school assessments and professional development. The C part includes special projects or additional work that teachers take on as agreed to with the head teacher. This can include student supervision in addition to that which falls under the B part, subject management, a special equipment or facility supervision, project management, development of study material etc.

As a base the collective agreement states that the A part of the teachers working hours be 1.440 hours a year and part B a minimum of 360 hours - a total of 1.800 hours. Each school can determine if more hours are needed for the B part, and if so the hours in the A part are reduced to compensate. If a teacher spends working hours on work covered by the C part, the hours for the A part are also reduced to compensate.

Teachers aged 55-59 receive a discount of 4,17% spent on part A and those aged 60 years and older get a discount of 20,83%. In addition teachers 30-37 years of age have a total of 24 hours of extra

holiday a year and 38 year olds and older of 48 hours a year. Taking these reductions into account, and using the baseline criteria for parts A to C, the total hours worked are as follows:

Table 22 The expected number of working hours of upper secondary school teachers

Teachers age	A, with holiday reduction	Age discount	A	В	C	Total hours a year
<30	1.440		1.440	360	-	1.800
30-37	1.416		1.416	360	-	1.776
38-54	1.392		1.392	360	-	1.752
55-59	1.392	58	1.334	360	-	1.694
60+	1.392	290	1.102	360	-	1.462

In the B part, 105 hours go towards coffee breaks and 80 hours towards professional development. Furthermore it is estimated that approximately 32 hours go towards the work needed to finish and prepare a school year, 36 hours towards general teacher meetings, 36 hours towards teacher cooperation, 36 hours towards parent meetings, 18 hours towards information dissemination and 18 hours towards student supervision.

A total of 80 hours, based on 180 school days a year, are earmarked each year for the professional development of the teacher, to be used as he sees fit. In addition, teachers can apply for a non-paid leave for an appropriate time if a study or project opportunity arises in connection to their jobs. Teachers can apply to the Ministry of Education, Science and Culture for financial support related to continued education. The Ministry furthermore pays the equivalence of 0,22% of the regular salaries of teachers into a special educational fund and another 1,5% into another fund for development projects that include certain aspects of teachers professional development.

At the time of the writing of this report the development of a system of assessing individual teachers into the agreed on work criteria is being developed. According to the collective agreement a teacher's vote on the assessment system is to take place before the end of February 2015.

## The career structure of teachers

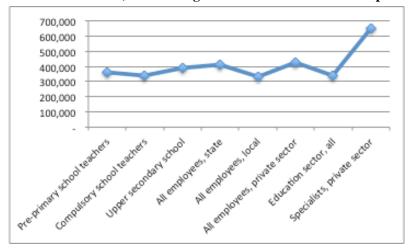
The career structure of teachers is not organized in a specific path. Teachers can however apply for, ask for or be asked to take on different roles and responsibilities in the schools in addition to their teaching duties, but there is no formal structure or paths for such arrangements. Those roles and responsibilities can be, for example, those of a department head or a project manager or relate to curriculum development, mentoring student teachers and new teachers, developing student and teacher timetables and a multitude of other tasks required to be undertaken in schools. Each of these different roles have their specific pay grade assigned, which the teacher receives.

#### The salaries of teachers

The teachers' salaries are determined in collective labour agreements between the state or the Icelandic Association of Local Authorities and the labour organizations of the teachers of the individual school levels. Salaries are as a rule paid in accordance to those labour agreements, whereby people are paid for the work they do and the hours worked, as described earlier. Since the beginning of the recession in the fall of 2008 overtime pay has been limited.

How the regular salaries of teachers compare to other occupations can be seen in the following table, with the underlying figures to be found in Annex 2:

Chart 11 Comparison of teachers' regular salaries to other occupations, 2013 – for preprimary, compulsory and secondary school teachers, all state employees, all employees of the local communities, all working in the duration sector and specialist in the private sector



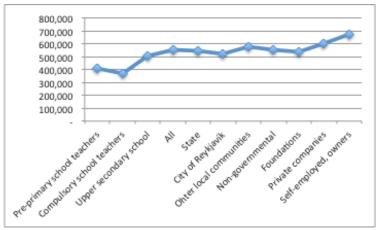
(Hagstofa Íslands, 2014n) (Hagstofa Íslands, 2014k) (Hagstofa Íslands, 2014m) (Icelandic Teachers's Union)

The data is compiled from the members' register of the Icelandic Teachers' Union as well as from different statistics from Statistics Iceland. It is for the year 2013. The figures are in IKR and show the average for all employees in the different categories compared. Compared is baseline salary for the teachers and regular salary for the other sectors. Regular salary means the average salary paid monthly for the agreed on working hours, whether daytime or on shift. Included are all payments, such as fixed overtime and incentive pay that is payable each month. No account is given to the educational background of each group. The information is therefore not fully comparable, but it is the best available at the time of the writing of the report and believed to give a fairly accurate picture. The data is furthermore from 2013, or prior to the latest collective agreements, which should have improved the status of teachers.

The figures show that the average baseline salaries of teachers at the three school levels were different, with compulsory school teachers receiving the lowest salary and upper secondary school teachers the highest, with the difference being 13%. Thus compulsory schools teachers earned a base salary that was 3% lower than the average regular salary earned by all employees of the local community, while the pre-primary schoolteachers earned a base salary that was 9% higher. The upper secondary school teachers' average base salary was 5% under the average regular salary for all state employees.

Comparing total salaries of teachers to other professions with a graduate degree the following can be seen:

Chart 12 Comparison of teachers' total salaries to other occupations with a graduate degree, 2013 - by pre-primary, compulsory and upper secondary school teachers, all, state employees, employees of the City of Reykjavík, other local communities, non-governmental, foundations, private companies and self-employed owners



(Icelandic Teachers' Union) (Bandalag háskólamanna, n.d.)

The data on total salaries is compiled from the members' register of the Icelandic Teachers' Union as well as a 2013 salary survey done by the Association of Academics, which is an organization of 26 trade unions for university educated professions and did all the unions participate in the survey. The figures are in IKR and show the average for all employees, in the different categories compared, with a graduate degree that is the educational requirements for teachers in Iceland. Compared is total salary for all the professions. Total salary covers the regular salary and in addition any and all irregular payments made, such as holiday and Christmas bonuses, one off payments and incentive bonuses earned. Benefits such as the use of a phone and transportation subsidies are not included. Again, the data is from prior to the latest collective agreements and not fully comparable but believed to give a fairly accurate account of the situation at the time.

Same as with the regular salary, the total salaries of teachers at the three school levels are different, with compulsory schoolteachers receiving the lowest salary and the upper secondary school teachers the highest, with the difference being 27%. Compulsory schoolteachers receive 67% of the total salaries received on the average by the comparison groups, pre-primary schoolteachers 74% and upper secondary schoolteachers 91%. Pre- primary school teachers receive 68% of the total salary of those working in the private sector, compulsory schoolteachers 61% and upper secondary schoolteachers 84%.

A new collective labour agreement for upper secondary school teachers was signed in April 2014, for the compulsory schoolteachers in May 2014 and for the pre-primary schoolteachers in June 2014. The one's for the compulsory and upper secondary school teachers are in two sections. The first section is on general pay increases and was fully agreed on when the agreements were signed. The second section was an agreement to redefine the work and working hours of the teachers. The results of that redefinition will be voted on in February 2015 and if agreed will lead to further salary increases for the teachers.

All the agreements however aim at restructuring the number of hours to be spent on the various roles and responsibilities of the teachers, recognizing the various tasks that have been added to the working day of the teachers in the recent past. The reasons for the change in how teachers use their

working days include the implementation of the policy on inclusive schools, the increased involvement of parents, increased emphasis on co-operation between teachers and the benefits and requirements that follow the development of technologies.

Statistics based on these new agreements are not available at the time of the writing of this report. However, work is currently underway to analyse the financial status of the different professional groups based on these and other collective labour agreements signed in 2014. The analysis is being done in a partnership between all the major labour unions and employers associations in the country. It is expected that a comprehensive report will be published in the first quarter of 2015, which should show better the status of teachers compared to other professional groups.

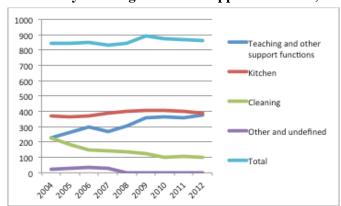
#### The support staff in schools

Among the support staff for teachers are school assistants at the pre-primary and compulsory school levels and support assistants in compulsory and upper secondary schools. An educational programme based on a national curriculum exists for those employee categories, the programmes are taught in the upper secondary schools and are from 36 to 62 credits. School assistants at the pre-primary level care for the students and work on their upbringing and education, guiding the students during play and work. The school assistants are also involved in the day-to-day work of the pre-primary schools, having various responsibilities such as the daily care for play and work areas and equipment. School assistants at the compulsory school level supervise, among other things, the students during study breaks and at meal times as well as supervising the school facilities. Support assistants at the compulsory and upper secondary school levels assist students with special needs, enabling the students to focus on their studies and attend school. (Mennamálaráðuneytið, 2009).

In addition there are likely to be specialized professionals in each school, according to the size and circumstances of each one. Those professionals may include special teachers, social pedagogues, sign language interpreters, librarians and educational and vocational counsellors. They support the teachers with advice, and are as weææ responsible for supporting and educating the students where appropriate. Finally, each school has its own policy but other staff may include ICT technicians and office administrators that support the teachers in their relevant fields. The larger a school, the more numerous and various the support group is likely to be.

Excluding the teachers and those in management functions in the schools, the number of all other staff is as follows, with the underlying figures available in Annexes 4 to 6:

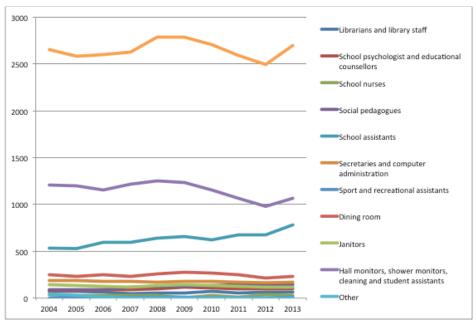
Chart 13 The number of pre-primary school staff, other than teaching and management, 2004 to 2012 – by teaching and other support functions, kitchen, cleaning, and other/undefined



(Hagstofa Íslands, 2013r)

The chart shows all pre-primary school employees, other than teachers and managers. Most numerous are those who work in the school kitchens and canteens, followed by those in support teaching functions, then cleaning and finally other support positions. The number of kitchen employees has stayed fairly stable, a drastic increase has been in the number of employees in support teaching functions while the number of employees in cleaning and other positions has declined.

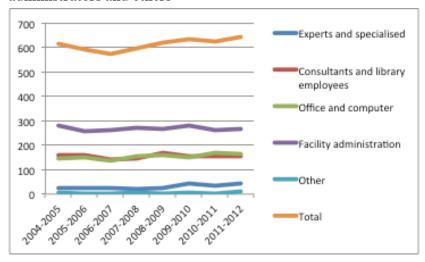
Chart 14 The number of compulsory school staff, other than teaching and management, 2004 to 2013 – by librarians / library staff, school psychologist and educational counsellors, school nurses, social pedagogues, school assistants, secretaries and computer administrators, sport and recreational assistants, dining room, janitors, hall monitors / shower monitors / cleaning assistants / student assistants and other



(Hagstofa íslands, 2014y)

The chart shows all employees in the compulsory schools other than teachers and managers. The most numerous are social monitor, shower monitors, cleaning staff and student assistants, followed by school assistants, dining room employees, secretaries and computer assistants and so on. The positions of school assistants and social pedagogues have increased the most while the total number of employees in other groups have stayed more stable.

Chart 15 The number of upper secondary school staff, other than teaching and management, 2004 to 2012 – by experts and specialists, consultants and library, office and computer, facility administrators and others



(Hagstofa Íslands, 2012c)

The chart shows all employees in the upper secondary schools except teachers and managers. The most numerous are those in facility administration, followed by those who work in office and computer administration and as consultants and in libraries. The number of employees in all groups have stayed fairly stable during the time-period 2004 to 2012.

The only mechanism in place to target support staff to specific students is to those with disabilities. That includes the special teachers and support assistants.

# 5.4 Organization of school leadership

## Appointment and responsibilities of head teachers

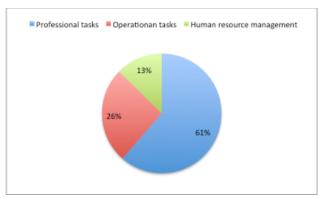
The legislation for the three school levels, pre-primary (Alþingi Íslands, 2008c), compulsory (Alþingi Íslands, 2008b) and upper secondary (Alþingi Íslands, 2008), stipulates that a head teacher shall be appointed and for the compulsory and upper secondary schools that the head teacher shall have a deputy that takes over the leadership in his or her absence. Otherwise the leadership roles and the division of tasks is the decision of each head teacher. The legislation for the compulsory schools states though that the Local Council shall approve the leadership arrangement in each school.

The responsibilities of head teachers are described in a M.Ed. thesis from 2010 (Frímannsson, 2010, pg. ii), which focuses on compulsory school head teachers: "...submits to all obligations and laws subject to primary school practice, he holds the power of decision over all fields of responsibility in the school and has to answer for all school practices. According to primary school laws, the principal's accountability only includes seeing to the implementation of statutory aspects of school practices, heeding to the rights and interests of all parties and managing practices in a professional manner. The school principal is responsible for school practices concerning the municipality, he manages the school and is its director...".

As to how head teachers spend their working day, one recent source was found that showed the proportion of time that compulsory school head teachers dedicated to the various activities that their

work consisted of. That source was a MPA thesis published in early 2013, which is based on a weeklong record keeping of five head teachers. Accordingly, the average proportion of time was used as follows on professional, operational and human resource related tasks:

Chart 16 The proportional time compulsory school head teachers spend on different tasks, 2013



(Ögmundsdóttir, 2013)

According to the individual records kept for the thesis the time spent can vary greatly between individuals, with one, for example, using less than 10% of his time on operational tasks and another over 50%. If a larger number of head teachers had participated in the project, the results might therefore have been different. No similar data was found for the head teachers of pre-primary and upper secondary schools.

The legislation for the pre-primary schools (Alþingi Íslands, 2008c) gives its head teachers similar function as the compulsory school head teachers, naming specifically the responsibility to manage the day to day operation of the school and ensuring that the operation is in accordance to the laws, regulations, national curriculum, school curriculum and other guidelines published. The legislation furthermore mentions the responsibility to ensure co-operation between parents, school employees and other specialists, on the basis of the child's welfare. For the upper secondary schools the legislation (Alþingi Íslands, 2008) also talks about the responsibility for day-to-day operations in accordance to the legislative framework, etc. However, for this school level a specific mention is made to the fiscal responsibility and the initiative to ensure the development of a school curriculum and reform plans for the school.

## The school leadership team

The school leadership teams in pre-primary and compulsory schools typically consist of a head teacher, an assistant head teacher if the school is large enough and department managers. In upper secondary schools the leadership at the minimum typically consists of a head teacher, an assistant head teacher and a finance and administration manager. In smaller schools those in leadership functions may use part of their working hours teaching the students. In the larger schools department and/or subject managers, along with heads of libraries and IT or computer system managers are often a part of the leadership team.

#### Professional support and development systems for school leaders

No common external support systems are in place to assist school leaders in their tasks, but most individual local communities provide financial or human resource assistance to pre-primary and compulsory school leaders. Furthermore, the Icelandic Association of Local Authorities and the

labour unions and professional associations of the head teachers at the different school levels, in cooperation with the Ministry of Education, Science and Culture, organize courses and seminars specifically around the leadership roles in schools. In addition compulsory school leaders can apply for a paid study leave after 10 years working as teachers or leaders in schools (Samband íslenskra sveitarfélaga, n.d.). The applicant is expected to finish a university study that is 60-credits or equivalent to fulfil the requirements of a full leave, and the study undertaken needs to be useful for the individual's job.

Many local communities have a similar paid study leave option for their employees, according to criteria that they set individually, as does the state as negotiated in the collective labour agreements for the various professions. State employees (upper secondary schools) apply directly to the head teachers for a leave. No collective data exists on the application or use of such leave.

No formal relevance is attributed to the professional development of school leaders.

#### The salaries and career structures of school leaders

The salaries of school leaders are determined in collective labour agreements. No information is available on how their salaries compare to occupations requiring similar qualifications.

No mechanisms are in place for school leaders that reward performance. In chapter 5.3 the salary structure of other school personnel is explained, and would participation in leadership activities be included in the "other" part of the salary structure.

The career structure of school leaders is not organized in a formal way. Typically though an individual would move from a teacher position to a department manager or assistant head teacher, and then to the role of head teacher. Many exceptions are to this path though. Few changes have been made recently to the school leaders career structure or working conditions.

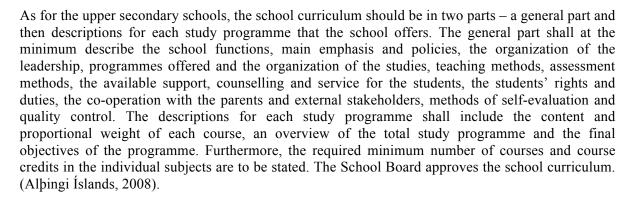
# 5.5 Teaching and learning environment within schools

#### National and school curricula

The Ministry of Education, Science and Culture develops and publishes national curricula guidelines for the pre-primary, compulsory and secondary schools. The national curricula set forward the educational objectives and the general arrangements of the schools' function, instruction guidelines and a reference for expected study requirements and progress. (Mennta- og menningarmálaráðuneytið, n.d.(e)).

Individual schools are required to develop and publish a school curriculum, according to the legislation for each school level. At the pre-primary level the school curriculum should include the school's educational policy and operational plan, the objectives decided and how those objectives shall be achieved. The curriculum also states the educational policy of the local community and the school's focus or speciality. The local School Board, following a review from the parents, approves the school's curriculum and operational plan. (Alþingi Íslands, 2008c).

At the compulsory school level the school curriculum, based on the national curriculum, develops further the educational objectives, the study content, student assessment, work practices and the assessment on the school's achievements and quality. Each school furthermore develops an operational plan where information on the organization of the school operation, the school calendar, student schedules, different policies and plans, etc. are to be found. (Alþingi Íslands, 2008b).



#### Student assessment criteria

The schools are fully responsible for setting the student assessment criteria, within the framework given in the national and school curricula. A national standardized test is given in Icelandic and math in all 4<sup>th</sup> and 7<sup>th</sup> grades in the compulsory schools. In the beginning of 10<sup>th</sup> grade the students take standardized tests in Icelandic, math and English. The test is submitted by a national assessment agency (www.namsmat.is) that is an institute of the Ministry of Education, Science and Culture.

#### Evaluation and monitoring

According to the legislation on the three school levels and subsequent regulations on evaluation and monitoring (Mennta- og menningarmálaráðuneytið, 2009c) (Mennta- og menningarmálaráðuneytið, 2010b), each school should do an internal self-evaluation and each local community should do an external evaluation of the pre-primary and compulsory schools. This is applicable to all schools, both publicly and privately operated. It is the responsibility of the local community to ensure follow-up reform actions for it's schools and to inform the Ministry of Education, Science and Culture of the evaluation and results upon request.

The Ministry of Education, Science and Culture is then responsible for monitoring schools at all three levels - only those upper secondary schools that receive state funding though - through the gathering, analysing and dissemination of information, external evaluations, surveys and research. The responsibility for the actual monitoring work has been delegated to The National Assessment Institute (www.namsmat.is).

According to the regulations the schools should publish information on the inner evaluations, the results and reform plans on their websites or other public media. The Ministry should also publish the school evaluations that it initiates on it's website. Publishing the information is an established practice. The evaluations do not monitor resource use by the schools to any extent.

All schools are supposed to have well-established self-evaluation practices, but audits by the Ministry of Education, Science and Culture indicate that the practices are less than well established in reality. Teachers are thus supposed to participate in internal and external evaluations for each school, but it is not typical for schools to have an internal teacher evaluation systems. As a part of the human resources policies of some local communities and upper secondary schools there is a tradition of an annual employee interview or evaluation.

#### Requirements for the learning environment

No legal framework exists for the upper secondary schools stipulating what constitutes an adequate learning environment, beyond the classroom. Regulations however stipulate the minimum requirements made to the school buildings, playgrounds and facilities of pre-primary (Menntamálaráðuneyti, 2009g) and compulsory schools (Menntamálaráðuneyti, 2009f). Both

regulations include the requirements made in regard to the health and safety of students and staff, including the use and size of the facilities, acoustics and lighting, design requirements for play grounds etc. The one for the pre-primary schools also covers the number of staff, the length of the school day, summer holidays and so on. One of the requirements of both regulations is furthermore that the local communities develop a safety manual for use in schools, which was done jointly in 2014 by the Ministry of Education, Science and Culture and the Icelandic Association of Local Authorities. Furthermore, as a part of developing the legally required school curriculum each schools addresses policies on issues such as bullying and discipline. Most schools additionally develop mottos around the well being of the students, which are meant to guide their day-to-day activities.

#### Links between schools and their local communities

In 2007 the Icelandic Association of Local Authorities, The Association of Teachers in Primary and Lower Secondary Schools and The Association of Head teachers developed and adopted a common vision for the compulsory schools for 2007 - 2020 (Pétursdóttir, 2007). The strategy developed has as a policy issue the active link between schools and their local communities. The objectives agreed on for this policy issue are:

- The mutual sharing of information between the school and the local community.
- To use nature and the community as active learning environments.
- To use the school facilities for services and operations outside of the school functions.

Each local community and each compulsory school is responsible for taking this policy and objectives, developing them further and setting guidelines for the implementation.

Some communities have an existing history though on the links between schools and their communities. An example is the City of Reykjavík who has had a policy on the issue since 1999. In a survey done on the compulsory schools in Reykjavík in 2011, 38% of teachers said they do lessons outside and during field trips and 62% of the teachers wanted to do more. Around 50% of teachers for grades 1 to 7 stated that they have visitors from the community at least once during the school year and 75% of the teachers for grades 8 to 10. (Óskarsdóttir, 2011).

The legislation on the upper secondary schools (Alþingi Íslands, 2008) specifies that an upper secondary school may be a partner in setting up and operating an adult education centre and can, with the approval of the Minister of Education, Science and Culture, offer courses and education for adults in partnership with labour unions, employers and other stakeholders. There are no other references to common policies on the link between individual upper secondary schools and their communities, with each school setting their own policy.

There are cases however, where businesses have supported upper secondary schools with equipment and facilities for vocational training and education. Other joint initiatives do also exist, such as "*The programmers of the future*" (www.forritarar.is) whereby businesses set up a special fund that has the role to strengthen education in computer programming and technical sciences in compulsory and upper secondary schools. The initiative was a response to a shortage in the employment sector of people with those backgrounds. Another example is an action plan established jointly by The Federation of Icelandic Industries, the Icelandic Association of Local Authorities and the Ministry of Education, Science and Culture, on increasing the interests of 10 to 15 year old students in sciences and technology (Samtök iðnaðarins, Mennta- og menningarmálaráðuneytið og Samband íslenskra sveitarfélaga, 2012). Each case is individual though, with no specific measures in place to increase employer engagement as a rule.



Policy schemes and incentive schemes that attempt to encourage cooperation among teachers and facilitate the development of professional learning communities in schools do not formally exist. None the less, teacher co-operation is often the focus of the design of new compulsory school buildings, with a recent research indicating that a team of teachers having a joint responsibility for a group of students is practiced in 30% of classes in the compulsory schools (Oskarsdóttir, Starfshættir í grunnskólum við upphaf 21. aldar, 2014). However, one of the criticism that teachers at all three school levels, pre-primary, compulsory and upper secondary, have had is that too little allowance is made during the working day for co-operation among teachers. This issue is being addressed in the collective labour agreements recently signed as described in chapter 5.3.

## 5.6 Use of school facilities and materials

#### Use of school facilities

Each local community and upper secondary school is responsible for developing its own guidelines or policies on whether school buildings and facilities are used beyond regular school hours. Some have developed such guidelines while others act based on tradition. The facilities of pre-primary schools are though typically not used for other functions than the schools, but the playgrounds are accessible and can therefore be used by the public outside of school hours.

Overall the local communities emphasise other parties using compulsory and upper secondary school buildings and facilities, as can be seen in their policies and planning phases for school buildings (Óskarsdóttir, Starfshættir í grunnskólum við upphaf 21. aldar, 2014). Thus many compulsory school buildings house after school clubs for children and young people, and in some cases recreational activities for adults and the elderly – both operated by the local community itself but also by nongovernmental organizations such as the scouts, chess-clubs and local choirs. Some compulsory and upper secondary school buildings in the rural areas function as tourist accommodation during the summer season, and the school and local library are often one and the same. In addition many schools hire out their sport facilities to local sport groups and some - especially the upper secondary school buildings – are used for adult evening classes.

#### ICT use

Quite a focus has been on the use if ICT in schools for the last 15 years or so. The impact of that focus can be seen in a study on the use of ICT in compulsory schools done in 2013 (Samband íslenskra sveitarfélaga í samstarfi við Samtök áhugafólks um skólaþróun, 2013), which showed that:

- 92% of schools had stationary computers for the use of the students, while the remaining 8% had invested in laptops or smart tablets. 32% of the schools had between 1 and 15 stationary computers for student use, 39% 16 to 30 computers and 14% 31 to 45 computers. A certain correlation could be seen between the number of students and the number of computers, as more than half of the schools that owned 1 to 15 computers had between 1 and 50 students.
- 67% of schools had laptops for student use. 27% had 1 to 10 laptops and 18% had 11 to 20 laptops. There was not a clear correlation between the number of students and the number of laptops available.
- 48% of schools owned smart tablets, 23% owned 1-5 pieces and 11% owned 6-10 pieces. There was not a clear correlation between the number of students and the number of smart tables available.

- The average number of students per stationary computer / laptop was 4,6 and for the smart tablets 33,2%
- 61% of the responding schools did not have smart boards in their facilities and a further 24% only had 1-2 boards.
- 96% of the schools had projectors, and thereof 40% had between 1-5 projectors.
- Of the younger half of the schools computer equipment 43% was 1- 2 years old, 31% was 3 to 4 years old and the remainder older. In total the average age of the computer equipment was 3 to 4 years.
- Of the older half of the schools computer equipment 30% was 7 to 8 years old, 46% was 5 to 6 years old and 12% was 3 to 4 years old. The remainder was older than 7 years. In total the average age of the computer equipment was 6 to 7 years.
- 66% of schools had a budget for ITC equipment purchase for the year 2013. A third of the schools planned to prioritize the purchase of smart tables for the students, followed by those with no specific plans in place as to what the budget would be used for, with the setup of a wireless network being in third place.
- Out of the 107 schools that responded to the survey 63 stated that peer education was the teachers support, in 48 schools teachers attended courses of their own choice and initiative and in 35 schools teachers attended courses organized by the school or the community.

No data was found on the status of ICT equipment that is available for the pre-primary and upper secondary schools. However, in upper secondary schools it is quite common for students to have and use their personal laptops for studying.

The most extensive source available is a chapter on the use of ICT in compulsory schools in a research published 2014, (Óskarsdóttir, Starfshættir í grunnskólum við upphaf 21. aldar, 2014). There it is stated that access to ICT related equipment varied greatly between schools, with many having limited and old equipment and little expectation of great improvements in the immediate future. Most teachers, however, used the Internet extensively while preparing lessons – although a third of respondents stated that they only use the Internet 2-3 times a month or less. In 5-34% cases the research observers noticed computers being used during lessons, with the highest number of incidents being in the older student groups. Computers were present in 78% of the classrooms but only used in 30% of cases observed, projectors were in less than half the class rooms, and smart boards were present in only 2% of classrooms. In 36% of cases where the observers had marked computer use, the description of the lesson did not indicate any actual use – with the possible explanation that the computer use was limited enough that it did not really impact the lesson. The computer was furthermore often used to support studies in 55-60% of incidents and in 5-10% of cases to widen the lessons.

The research also asked teachers about the use of teaching software and student use of computers – the responses showed very limited use, with 18% of teachers stating they never use such equipment, 26% less than once a month, around 20% one to three times a month and around 25% once to twice a week. Further details on the use of smart boards, projectors, the Internet, and so on can be found in the report from the research.

Some further sources are available that show the extent of use of ICT in schools and the improvements ICT has brought to the daily teaching and learning activities. If a study done by the town of Kópavogur in 2012, as a part of formulating their strategy in ICT use in the pre-primary schools, is applicable across the country, then there is a lack of hardware in the schools, there is a lack of knowledge of how to use ICT and there is a lack of educational material in Icelandic. (Porvaldsdóttir, Friðriksson, & Bjarnadóttir, 2012). According to an article published in 2013 (Reynisdóttir & Jóhannesson, 2013), interviews with 12 teachers in four upper secondary schools indicate that the student use of ICT has lead to more various teaching methods, with fewer lectures, more group work, more independent student work and easier access to various information sources. The teachers also stated that ICT allows for more visual representation of the teaching material. At the same time the teachers felt that students took more liberty in their use of sources and were under a constant distracting stimuli.

## 5.7 Organization of education governance

There are three administrative levels for education in Iceland, the state, the local communities and individual schools.

#### The organization at state level

At the state level an education and science office exists at Ministry of Education, Science and Culture. The office is responsible for issues related to the pre-primary schools, compulsory schools and upper secondary schools, the development of the national curricula and adult education. The office covers also issues related to tertiary education and general public administration regarding science, research and development. The office prepares policies in the field of tertiary education and supervises their enforcement. The office is also responsible for developing a high level policy in it's fields of responsibility, supervising the execution of that policy and handling related public administration. The office furthermore takes initiatives in school development, for instance in areas of information technology, distance learning and study material. The office finally prepares and advises in regard to policy making which is the responsibility of the Science and Technology Council, oversees the work of the Science and Technology Council and ensures the integration of science, research and innovation in the making and execution of educational policy.

The education and science office is managed by one head of office and divided into four departments: a department for pre-primary and compulsory schools which employs three people, a department for upper secondary schools with six people, a department of policy and development with three people, a department for further education and vocational training employing three people and a department for tertiary education and science employing four people. In addition two people work at the office itself, making the total number of staff 21.

The Ministry of Education, Science and Culture furthermore has an office for assessment and analysis, which is responsible for monitoring and evaluation for all the school levels. In addition the office works in partnership with other offices of the ministry in gathering and processing data that allows an overview in the different policy fields of the ministry. The office employs three people.

There are three service institutions in the field of education that fall under the Ministry of Education, Science and Culture: the Icelandic Student Loan Fund (www.lin.is) and two institution's on publication of educational materials on one hand and a national assessment centre on the other, that will merge into one in July 2015 – with the working name of Stjórnsýslustofnun á sviði menntamála - Menntamálastofnun.



At the local level each community organizes the education administration as suits their needs and circumstances, while fulfilling legal requirements. In small communities the local mayor may for example function as the direct supervisor of the head teacher. Alternatively, and typically practiced in the larger communities, there is a special administrator responsible for the educational operations of the community and that administrator may have a staffed office to work with or not, according to the size and financial standing of the community. In addition each community has the responsibility for operating expert support services for the pre-primary and compulsory schools, which service the schools when it comes to assessments, inspections, diagnosis and consultation for students with special needs, consultation to parents and school employees, etc. How the local communities organize those service functions is left to them, so that some include the service function in the operations of the schools themselves, others set up special service units and yet others partner and operate a joint service unit.

### Responsibilities

National curriculum development is the responsibility of the state but school curriculum of the individual schools and the local communities. Assessment and inspection, as well as statistics and analysis are the responsibility of both the state and the local communities.

#### Education administrators

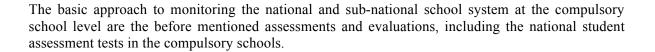
No data exists that shows the typical background of staff in the education administration at state or local level. However, experience indicates that they are typically university educated, in the respective field in which they work – whether education, psychology or statistics. Those working in the education administration are typically employees of the state or local community, depending on the administrative level where they work.

As for initiatives undertaken to develop capacities of education administrators, then the local administrators have a joint national platform whereby they meet twice a year to discuss common issues. Administrators at both the local and state level would in most cases have the opportunity for a year paid study leave according to their respective collective labour agreements or human resources policies. Other initiatives are the responsibility of the individual administrative units.

#### School and student evaluations

Schools and students are evaluated as described in chapter 5.5. In addition, the City of Reykjavík has conducted a 360-degree assessment of it's schools since 2007. Furthermore, following the adoption of a new legislation for the pre-primary and compulsory schools in 2008 the Ministry of Education, Science and Culture, The Local Governments' Equalization Fund and the Icelandic Association of Local Authorities have jointly developed recommendations for a regular and systematic evaluation of school management, internal assessments and educational methods. (Faghópur um ytra mat á grunnskólum, 2011). The intent of any such assessments is to encourage improvements and the continued development of the educational system and its subsystems, not to sanction the individual educational institutions

There is not, however, a tradition for the evaluation of individual school leaders and teachers in a national context and no result oriented reward or sanction is available according to the collective labour agreements. Capacity building and technical leadership is not an important function of the education administration, e.g. limited national frameworks exist as well as guidance materials and tools for the use of school agents.



# 5.8 Main challenges

There are several issues related to the utilisation of resources that are currently being challenged and/or are in disagreement between education stakeholders. Those include:

- Parents, teachers and researchers have pointed out that there is a certain repetition of study content between the older age sections of the compulsory schools and the upper secondary schools, resulting in an unnecessary cost as well as student time not being used to the maximum.
- Ministers of Education, Science and Culture have, on a regular basis for the past 20 years, had the vision and intend to decrease the number of years needed to finish the upper secondary school, referring to neighbourhood countries with fewer school years and equal or better student assessment results. This is a controversial policy that has especially been opposed by the Association of Teachers in Upper Secondary Schools, which claim that individual students have different needs and that there is sufficient flexibility within the system already for students to finish at their own pace.
- The policy on inclusive schools is debated. While there is a general agreement that the policy itself is justified, school administrators and staff feel that the implementation of the policy is not sufficiently managed. The local authorities claim that funding has not followed from the state to cover the cost of implementation at the compulsory school level, in keeping with the policy development and therefore increased demands on the local communities. The state has the position that although the policy was formally legalized in 2008 it has a history since prior to the transference of the compulsory schools from the state to the local communities in 1996 and that therefore the cost of the implementation at that time-point was included in the original calculations of funding. In any case, there are increased demands on the school system because of the policy on inclusive schools, shown in the increased need for cooperation between the education and welfare systems and that inclusive schools have become a human rights issue, for example.
- The proportion of students that attend academic vs. vocational studies at the upper secondary level is considered by most stakeholders to be uneconomical for the country, as more people are needed with vocational skills.
- Early leave or dropout from the upper secondary school is considered by all stakeholders to be a real concern and a waste to the school system as well as the country.
- Following the adoption of the new school legislations in 2008 the following issues have been debated:
  - The implementation of the article stating that older compulsory school students can take courses in the upper secondary schools. The local communities are thus required by law to ensure that compulsory school students are able to take courses in upper secondary schools. At the same time the state is responsible for upper secondary school education and therefore the funding to cover the teaching cost of compulsory school students taking upper secondary school courses. However, since

the economic crises of 2008 funding to the upper secondary schools has been cut, with the result that they do not deem it possible to fund the compulsory school students. The local communities, who then either have to fund the students themselves or not fulfill their legal obligation, criticize this situation.

- The requirement that all compulsory schools offer students the opportunity to participate in a social and recreational pastimes.
- O The five-year education requirement for schoolteachers, where some teachers and interested students feel that the higher educational requirement was not followed through with a sufficient raise in the teachers salaries. This situation is believed by some to have been instrumental in decreasing the interest for teachers' studies at the universities. An increase in applications for teacher degree courses for the fall of 2014, following new collective labour agreements signed in spring 2014 which raised the salaries, may support that believe or not. The local communities and the Icelandic Association of Local Authorities in particular criticized the lengthening of the studies of the pre-primary school teachers, expressing the believe that the longer studies would negatively impact recruitment to the profession. They have also pointed out that a longer study is not the same as a better study.
- The ideology and designs of newer school facilities are often centered on changed teaching methods, related to meeting individual student needs, using ICT and encouraging teaching across subjects. The designs are thus focused on flexibility, flow, openness, communication and teamwork with clusters of school rooms, open spaces, transparent and movable boundaries and public spaces for multiple use having replaced the hallway with traditional classrooms along the sides (Hjartarson & Sigurðardóttir, 2011). These design decisions have been taken by the education administrations, sometimes in opposition to teachers who view these changes as putting demands on them without the needed support or working hours being provided.



This chapter is concerned with how resources are managed at all levels of the school system. It addresses capacity building for resource management; the monitoring of resource use; transparency and reporting; and incentives for the effective use of resources.

# 6.1 Capacity building for resource management

#### Guaranteeing expertise in the management of resources

There exist no formal programmes or processes that guarantee expertise in the management of resources in the school system. A specific policy that attempts to ensure capacity to effectively manage resources does not exist either. However, the Icelandic Association of Local Authorities gathers annually data and statistics on the pre-primary and compulsory schools, their operation and basic resource use (Samband íslenskra sveitarfélaga, 2013b). The local communities and the individual schools are encouraged to use that information to compare their status to that of others, with the aim to improve both operations and efficiency.

In legislation no. 87/2008 on the education and hiring of teachers and school leadership for the preprimary, compulsory and upper secondary schools (Alþingi Íslands, 2008d) it is stipulated that in order to be hired as a head teacher or assistant head teacher the applicant needs to have formal qualifications as a teacher for the school level in question and additional education in management or experience working as a teacher at the school level. How this is carried out in hiring practices is up to the individual local community for the pre-primary and compulsory schools. No information is available centrally regarding the actual background of the upper secondary school leadership.

Once those in school leadership positions, and other actors in the educational system, have been hired it is up to them to develop further competencies to ensure the effective management of resources. In the legislation for the different school levels, each school is targeted with annually making plans for the further education of all the employees of the school. The collective agreements state furthermore that time should be allowed within the working year for further education. How this is implemented varies between the local communities for the pre-primary and compulsory schools, in regard to both the funding provided in order to carry out further education for the employees and the monitoring of the actual implementation. The financial status of the state also varies the amount of funding that the upper secondary schools receive for this purpose, and the state does not monitor the implementation.

#### Support in the task of managing resources

Limited support is given to schools and their leadership in the task of managing resources, when it comes to advice, sharing of resources and expertise within the school networks. Where possible the school departments at the administrative level of the local communities may provide some support and the Icelandic Association of Local Authorities provides general advised when requested. No regional or national agencies provide such support to the upper secondary schools, but they can seek support from the ministries of finance and education.

Limited initiatives exist at the system and sub-system levels to build up a knowledge base. Thus no tools exist for planning resource use or guidelines for school leaders and education administrators to report on resource use, and all schools have total discretion in their choice of education materials. The following does exist though:



- All schools have access to IT systems for budgeting and accounting practices, at the initiative of the state and the respective local communities.
- Instructions for purchasing education materials and establishing contracts are to be found in legislation no. 84/2007 on public procurement (Alþingi Íslands, 2007b). The State Trading Centre (www.rikiskaup.is) furthermore published a Procurement Policy on November 15 2002 (Fjármálaráðuneytið, 2002) as a guideline for all state operated institutions, and some local communities have publish additional instructions for their institutions as well.

# 6.2 Monitoring of resource use

#### Local level

The pre-primary and compulsory schools are responsible for their finances to the respective local community. A specific chapter on finance is in the legislation for the local communities no. 138/2011 (Alþingi Íslands, 2011c) requiring annual finance plans and annual finance reports for the institutions of the communities, as well as an audit by an independent accounting professional. How the local communities work within the law is up them. Each local community is thus responsible for its finance, but in addition there is a monitoring board established by the state that monitors that the local communities handle their finance in accordance to laws and regulations (Innanríkisráðuneytið, 2012).

There is not a great deal of importance placed on monitoring the equity of resource use across student groups and regions of the country. The Local Governments' Equalizations Fund does for example not specifically monitor the actual use of the funds distributed, nor does the Ministry of Education, Science and Culture. A few of the larger local communities do some monitoring though, as individually determined by each of them.

#### State level

The upper secondary schools are responsible for their finances to the Ministry of Education, Science and Culture. The Ministry signs a contract with each school stating how the school will fulfil its legal obligations, the main objectives, school curriculum, study programmes on offer, etc. The implementation of those contracts is monitored by the Ministry, which also does external audits regularly.

In addition the Icelandic National Audit Office (<u>www.rikisendurskodun.is</u>), which is an independent body operating under the auspices of the Icelandic Parliament, is responsible for auditing the financial statements of individual upper secondary schools, as well as monitoring and promoting improvements in the financial management of the state and in the use of public funds. The Office functions in accordance to the National Audit Act no. 86/1997 (Ríkisendurskoðun, 1997).

The Office performs public administration audits that are focused on the use of public funds and how improvements can be made. The process of the audit is as follows (Ríkisendurskoðun, n.d.):

- 1. A decision is taken to do a preliminary benefits survey, along with the auditors.
- 2. The benefits of an audit are explored.
- 3. If it is agreed that a audit will be beneficial, the audit is formally started, an audit plan approved and the relevant ministry/institution informed of the pending audit.
- 4. For the duration of the audit the progress is regularly reported within the Audit office and subsequently the audit plan can change or a decision be made to cancel the audit.
- 5. Audit data is gathered and processed.

- 6. A draft report is written.
- 7. A review group goes through the draft report.
- 8. The draft report is made ready for commenting.
- 9. The draft report is sent to the relevant institution, ministry and other stakeholders with a request for written comments.
- 10. The comments received are processed and the report is made ready for publishing.
- 11. The report is approved for publishing.
- 12. The report is publishes on the website of the Audit Office and the relevant ministry/institution are notified.
- 13. The audit is reviewed by the Audit Office for improvement purposes.
- 14. Three years after the publishing of the report, a follow up is done to identify how recommended improvements have been followed up.
- 15. A report on the follow-up is sent for commenting and then published.

The Office furthermore audits individual institutions to ensure compliance with the Budget Act, and it is responsible for all annual accounting audits. The Office has the authority to audit where and what it wishes but a parliamentary committee can also request an audit at its own initiative or the request of parliamentarians, as long as the subject is within the legal framework of the Office. As such the Office has done an audit on the financial situation of the upper secondary schools and the model used to calculate their funding, the use of specific funds, the approach of the Ministry of Education, Science and Culture towards projects and contracted operations of third party institutions such as on continued education.

The department of assessment and analysis at the Ministry of Education, Science and Culture is responsible for assessing and monitoring quality within the school system as a whole. The department thus is responsible for PISA, standardized national exams, TALIS and plans for external audits done by the ministry. With the exception of student performance audits at the compulsory school level, there is not a tradition for regular student performance audits by the national system.

The department of assessment and analysis at the Ministry of Education, Science and Culture does also perform occasional programme and policy evaluations. Some of the latest include an audit on the arrangement and execution of the school support services of the local communities, the reasons for drop-out from the upper secondary schools and the implementation of regulation no. 140/2011 on the roles and responsibilities of stakeholders in the compulsory schools. Furthermore, as this report is written a working group is on going tasked with evaluating the implementation of inclusive schools. The members of that working group are from the Ministry of Education, Science and Culture, the Ministry of Welfare, The Association of Teachers in Primary and Lower Secondary Schools and The Association of Headteachers.

Evaluations of individual resource managers, and/or finance and resource management as an area, are not a part of the performance evaluations of individuals who perform duties as resource managers in or related to the schools.

Assessing the effectiveness of different school policies and targeted programmes is not done as a part of a predesigned process, or as a rule.

# 6.3 Transparency and reporting

Schools, and the education administration, are not required to publicly communicate information on how resources are used or to provide evidence of their impact on learning. According to the Acts for the different school levels, the type of information publicly published includes the schools curricula,

reports on self-assessments, external assessment reports and annual working plans. Most schools comply with the legal requirements. Regulation no. 658/2009 on the assessment and monitoring in compulsory schools and the information local communities are required to provide (Mennta- og menningarmálaráðuneytið, 2009c) does not mention resource use. Thus the education administration for each local community determines what information on resource use schools are required to provide.

The education administration at the state level does not require the local communities, pre-primary or compulsory schools, to provide information on a regular basis related to the use of resources. However, in different surveys - such as on the expert support services provided to the pre-primary and compulsory schools or on the application of regulation no. 1040/2011 on the responsibilities and duties of education stakeholders in compulsory schools (Mennta-og menningarmálaráðuneytið, 2011) – information on the implementation of school operations and therefore indirectly on resource use is sought.

## 6.4 Incentives for the effective use of resources

For the pre-primary and compulsory schools there are no formal links between future resources of individual schools or local authorities and past educational performance. The funding to upper secondary schools is however tied to the number of students that go through the final exams, as a part of the comprehensive funding model that the Ministry of Education, Science and Culture uses to determine the funding needs of each upper secondary school. No evidence on the effect of this practice on the use of resources at the school level is available.

It depends on the individual local community whether the schools at pre-primary and compulsory level, in part or full, retain benefits of any improved efficiency. Each local community is an independent financial authority and so determines the discretion of the individual head of school in deciding the use of the funding received, within the requirements of laws and regulation. Thus some heads of school can use the funding as they see fit as long as they remain within the total budget provided, while others cannot transfer funding between different cost areas without approval from the local community. In the same way, in some local communities surplus or loss is transferred to the next financial year and in others not.

In a survey done in 2006 (Hansen, Jóhannsson, Lárusdóttir, & Helga, 2010), 58% of the responding compulsory schools head teachers felt that they had some operational independence, while 20% stated that they had a lot of independence. However, 75% of respondents felt that it was important to increase the operational independence of the schools. Looking at the background of the respondents the head teachers of schools in the more rural areas felt they had more independence than those in the capital area.

As for the upper secondary schools, which are under the financial authority of the state, Art. 37 in legislation no. 88/1997 on the state finances stipulates that with the consent of a minister of state institutions are authorized to carry unused funding and debt from one financial year to the next (Alþingi Íslands, 1997). Based on the procedures that the state has established this transference of unused funding and debt is generally allowed (Fjármálaráðuneytið, n.d.).

No evidence is available on the impact of these approaches.

Schools at any level are not generally sanctioned for decreased resource use efficiencies. However, since the national financial crisis that started in 2008 the budgets to most schools have been cut, in some cases quite considerably.



At the local level, for the pre-primary and compulsory schools, there may be issues related to resource management that are being challenged within each local community. The following issues related to the resource management are currently being challenged nationwide, and/or are in disagreement between education stakeholders:

- According to a master's thesis published in 2008 (Sigurðsson, 2008), school leaders are in general of the opinion that the funding model for the upper secondary schools is an asset. However, they also criticize that:
  - The transparency of the model has become less over time particularly as changes have been made to the model without consultation with school leaders but also as politicians have changed the assumptions of the model when they want to change the funding to the schools.
  - Salaries are entered into the model based on general principles but not actual salary costs of each school and thus schools with experienced and well-educated staff are not being recognized.
  - The model rewards schools that have less physical space but punishes schools with more space, something the school leaders have no control over.
  - The cost figures that are used for certain calculations in the model are not matching actual cost. This applies to building cost, salary cost, etc. Thus the model does not represent the actual cost of the schools, but is rather the means to divide limited and often too low funding between the schools.
  - The model is being used to drive performance, as the assumptions only account for students that attend final exams while there is considerable cost for students that do not finish courses.
- The organization of the teachers work time is fixed in the collective labour agreements, which is perceived as a necessity by the teachers but viewed as a hindrance to the flexibility of the schoolwork by the head teachers and those responsible for operating the schools. This has been an on-going disagreement for over two decades, with little progress being made towards a model both parties would approve of.
- There is a certain amount of tension due to the insistance of many of the local communities to allocate funding for special education support only to those students that have a formal diagnosis. This practice creates a demand for formal diagnosis, with the impact that students often have to wait for a long time until they can get the needed support. In addition, the limited funding available is then going into the diagnostic work at the cost of the actual support actions.



Alþingi Íslands. (2009, November 3). 138 löggjafaring 2009-2010, þskj 152 139. mál. Retrieved July 14, 2014 from Alþingi Íslands: www.althingi.is

Alþingi Íslands. (2007). Frumvarp til laga um menntun og ráðningu kennara og skólastjórnenda við leikskóla, grunnskóla og framhaldsskóla, þskj. 322 - 288 mál. Retrieved December 14, 2014 from Alþingi Íslands: www.althingi.is

Alþingi Íslands. (2014). *Konur á alþingi*. Retrieved September 22, 2014 from Alþingi Íslands: www.althingi.is

Alþingi Íslands. (1992, June 1). *Lög um almenna fullorðinsfræðslu*, *nr. 47/1992*. Retrieved December 3, 2014 from Alþingi Íslands: www.althingi.is

Alþingi Íslands. (1991, March 27). Lög um félagsþjónustu sveitarfélaga nr. 40/1991. Retrieved December 3, 2014 from Alþingi Íslands: www.althingi.is

Alþingi Íslands. (1997, May 27). Lög um fjárreiður ríkisins nr. 88/1997. Reykjavík. Retrieved April 3, 2014

Alþingi Íslands. (2008, June 12). Lög um framhaldsskóla nr. 92/2008. Reykjavík.

Alþingi Íslands. (2008b, June 12). Lög um grunnskóla nr. 91/2008. Reykjavík.

Alþingi Íslands. (2006, June 13). *Lög um háskóla nr. 63/2006*. Retrieved September 22, 2014 from Alþingi Íslands: www.althingi.is

Alþingi Íslands. (2008c, June 12). Lög um leikskóla nr. 90 /2008. Reykjavík.

Alþingi Íslands. (1992b, June 2). *Lög um málefni fatlaðs fólks nr. 59/1992*. Retrieved May 8, 2014 from Alþingi Íslands: www.althingi.is

Alþingi Íslands. (2008d, June 12). Lög um menntun og ráðningu kennara og skólastjórnenda við leikskóla, grunnskóla og framhaldsskóla nr. 87/2008. Retrieved May 2, 2014 from Alþingi Íslands: www.althingi.is

Alþingi Íslands. (2007c, March 28). *Lög um námsgögn nr. 71/2008*. Retrieved May 1, 2014 from Alþingi Íslands: www.althingi.is

Alþingi Íslands. (2007b, March 30). *Lög um opinber innkaup nr. 84/2007*. Retrieved July 31, 2014 from Alþingi Íslands: www.althingi.is

Alþingi Íslands. (1996, June 11). Lög um réttindi og skyldur starfsmanna ríkisins nr. 70/1996. Reykjavík.

Alþingi Íslands. (2011, June 7). Lög um stöðu íslenskrar tungu og íslensks táknmáls nr. 61/2011. Reykjavík.

Alþingi Íslands. (2011b, September 23). *Lög um Stjórnarráð Íslands nr. 115/2011*. Retrieved December 10, 2014 from Alþingi Íslands: www.althingi.is

Alþingi Íslands. (1995, January 30). Lög um tekjustofna sveitarfélaga 4/1995. Reykjavík. Retrieved March 27, 2014 from Alþingi Íslands: http://www.althingi.is/lagas/nuna/1995004.html

Alþingi Íslands. (2012, June 11). Parliamentary Resolution on a Plan of Action on Disabled Persons' Affairs until 2014. Retrieved September 1, 2014 from Velferðarráðuneyti: www.velferdarraduneyti.is

Alþingi Íslands. (2011c, September 28). Sveitarstjórnarlög 138/2011. Reykjavík. Retrieved March 31, 2014 from Alþingi Íslands: www.althingi.is

Alþingi Íslands. (2009b). www.alþingi.is.

Alþingi Íslands. (2013, October 3). *Pingsályktunartillaga nr. 5/143 um leikskóla að loknu fæðingarorlofi*. Retrieved December 6, 2014 from Alþingi Íslands: www.althingi.is

Arnardóttir, G., & Sigurjónsson, Ó. (2014, September 17). Sýn stjórnvalda í menntamálum, aftur til fortíðar. *Fréttablaðið*.

Bandalag háskólamanna. (n.d.). *Kjarakönnun 2013*. Retrieved May 30, 2014 from Bandalag háskólamanna: www.bhm.is

BSRB; BHM; Samband íslenskra sveitarfélaga; SNR; ASÍ; KI,;SA. (2013). *Í aðdraganda kjarasamninga - Efnahagsumhverfi og launaþróun*. Reykjavík: Samstarfsnefnd um launaupplýingar og efnahagsforsendur kjarasamninga og .

Capacent Gallup. (2013). Könnun meðal sveitarstjóra á fyrirkomulagi og framkvæmd sérfræðiþjónustu í leik- og grunnskólum . Reykjavík: Mennta- og menningarmálaráðuneytið.

Davíðsdóttir, S., Guðbjörnsdóttir, G., Siguðardóttir, A. K., Jónsdóttir, A. H., Hansen, B., Jóhannsson, Ó. H., et al. (2012, December 21). Efnahagshrunið og skólastarf í tveimur íslenskum sveitarfélögum - Skólakreppa? *Ráðstefnurit Netlu - Menntakvika 2012*.

Eurostat. (n.d.). File: Gross domestic expenditure on R&D, 2002-2012 (% of GDP) YB14.png. Retrieved September 22, 2014 from Eureopan Commission - Eurostat: www.epp.eurostat.ec.europa.eu

Faghópur um ytra mat á grunnskólum. (2011). Ytra mat á grunnskólum: Tillögur til mennta- og menningarmálaráðherra og skólamálafnendar Sambands íslenskra sveitarfélaga um tilhöfun á ytra mati í grunnskólum. Reykjavík: Samband íslenskra sveitarfélaga, mennta- og menningarmálaráðuenyti og Jöfnunarstjóður sveitarfélaga.

Fjármálaráðuneytið and Kennarasamband Íslands. (2014, April 4). Samkomulag um breytingar og framlengingu á kjarasamningi aðila. Retrieved May 23, 2014 from Kennarasamband Íslands: www.ki.is

Fjármálaráðuneytið. (2013, June 19). *Auglýsing um reikningsskil sveitarfélaga nr. 790/2001*. Retrieved April 3, 2014 from brunnur.stjr.is/IRR/Netbok\_RoU.nsf/0/863E94F1B05A429100257A0800350459

Fjármálaráðuneytið. (2002). Innkaupastefna ríkisins - Hagkvæmni, samkeppni, ábyrgð og gagnsæi. Reykjavík: Fjármálaráðuneytið.

Fjármálaráðuneytið. (n.d.). *Kynningarrit um rammafjárlagagerð*. Retrieved April 3, 2014 from Fjárlagavefurinn: hamar.stjr.is/Fjarlagaverur-Hluti-II/Greinargerdirog Raedur/RitogSkyrslur/KRit-Rammafjarlagagerd/Hluti-I.htm

Forsætisráðuneytið. (2014, June 24). *A-539/2014*. Úrskurður frá 24. júní 2014. Retrieved August 26, 2014 from Forsætisráðuneyfið: www.ursk.forsaetisraduneyti.is

Frímannsson, K. (2010). Ábyrgð skólastjóra grunnskóla. Akureyri: Háskólinn á Akureyri.

Giudice, M. D. (2008). Power Struggle. National Geographic.

Hagstofa íslands. (2014y, April 15). *Starfsfólk í grunnskólum eftir starfssviðum og kyni 1998-2013*. Retrieved May 30, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2014æ, September 23). Útgjöld hins opinbera eftir hagrænni flokkun og málaflokkum 1998-2013. Retrieved December 9, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2014, March 7). 3,3% hagvöxtur árið 2013, frétt nr. 40/2014. Retrieved September 22, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2013b, September 26). *Alþingis- og forsetakosningar 1874-2013*. Retrieved September 22, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2014b, August 13). Atvinnuþátttaka, atvinnuleysi, vinnutími og fjöldi starfandi eftir ársfjórðungum 2003-2014. Retrieved September 22, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2014c, May 8). Atvinnulausir eftir lengd atvinnuleitar 2003 - 2014. Retrieved August 9, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2013c, May 16). Börn í leikskólum sem nutu sérstaks stuðnings 1998-2012. Retrieved May 5, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2014c, February 3). *Búferlaflutningar milli landa eftir kyni, löndum og ríkisfangi 1986-2013*. Retrieved September 22, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2013d, May 27). Brautskráningar á framhaldsskólastigi eftir próftegund, aldursflokki og kyni 1995 - 2011. Retrieved April 3, 2014 from Hagstofa íslands: hagstofa.is/Hagtolur/Skolamal/Framhaldsskolar

Hagstofa Íslands. (2012, April 2). *Brautskráningarhlutfall og brottfall af framhaldsskólastigi*. Retrieved September 1, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2014z, September 5). Brautskráningarhlutfall og brottfall af framhaldsskólastiginu 1995-2011. Retrieved December 11, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2013e, March 19). *Erlendir ríkisborgarar 1950-2013*. Retrieved September 22, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2014d, April 15). *Fjöldi nemenda á hvern kennara 1998 - 2013*. Retrieved May 21, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2014e, August 20). *Fjöldi nemenda að hausti eftir skólastigi 1997-2013*. Retrieved September 1, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2014g, July 10). *Frjósemi og fólksfjölgunarhlutfall 1853 - 2013*. Retrieved September 22, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2013f, October 09). *Hagræn flokkun fræðsluútgjalda hins opinbera 1998 - 2011 eftir skólastigum, á föstu verði 2011*. Retrieved April 16, 2014 from Hagstofa Íslands: www.hagstofa.is/Hagtolur/Thjodhasreikningar/Fjarmal-hins-opinbera

Hagstofa Íslands. (2014x, September 23). *Heildarútgjöld hins opinbera eftir málaflokkum í mestri sundurliðun* 1998 - 2012. Retrieved September 23, 2014 from Hagstofa Íslands: hagstofa.is/Hagtolur/Thjodhagsreikningar/Fjarmal-hins-opinbera

Hagstofa Íslands. (2013h, October 09). *Heildarútgjöld ríkissjóðs eftir málaflokkum í mestri sundurliðun 1998-2012*. Retrieved April 10, 2014 from Hagstofa Íslands: hagstofa.is/Hagtolur/thjodhagsreikningar/Fjarmal-hins-opinbera

Hagstofa Íslands. (2013i, October 09). *Heildarútgjöld sveitarfélaga eftir málaflokkum í mestri sundurlilðun 1998-2012*. Retrieved April 10, 2104 from Hagstofa Íslands: hagstofa.is/Hagtolur/Thjodhagsreikningar/Fjarmal-hins-opinbera

Hagstofa Íslands. (2014i, March 4). *Kjarnafjölskyldur eftir sveitarfélögum og fjölskyldugerð 1998 - 2014*. Retrieved September 22, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2014y, September 26). Kosningaþáttaka eftir kyni, aldri og stærð sveitarfélags 2014. From Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2014j, April 12). *Landsframleiðsla og opinber búskapur*. Retrieved May 8, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2014k, May 8). *Laun á almennum vinnumarkaði eftir starfsstétt og kyni 1998-2013*. Retrieved May 23, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2014m, May 8). *Laun eftir atvinnugrein (ÍSAT08) og kyni 2008 - 2013*. Retrieved May 23, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2014n, May 8). *Laun eftir launþegahópi og kyni 2008-2013*. Retrieved May 23, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2014o, March). *Lykiltölur mannfjöldans 1703 - 2014*. Retrieved September 22, 2014 from Hagstofa íslands: www.hagstofa.is

Hagstofa Íslands. (2013j, March 19). *Mannfjöldi eftir bakgrunni, kyni, aldri og ríkisfangi 1996-2013*. Retrieved September 22, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2013k, March 19). *Mannfjöldi eftir fæðingarlandi, kyni og aldri 1998 - 2013*. Retrieved September 22, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2014p, March 4). *Mannfjöldi eftir kyni og aldri 1841 - 2014*. Retrieved September 22, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2014q, March 4). *Mannfjöldi eftir kyni, aldri og sveitarfélögum 1998-2014 - Sveitarfélagaskipan 1. janúar 2014*. Retrieved May 5, 2014 from Hgstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2013m, October 1). *Mannfjöldi eftir menntunarstöðu 2003 - 2012*, *hlutfallsleg skipting*. Retrieved September 1, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2014s, March 4). *Mannfjöldi eftir trúfélögum og lífsskoðunarfélögum 1998-2014*. Retrieved August 8, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2014t, July 24). *Mannfjöldinn á 2. ársfjórðungi 2014, frétt nr. 137/2014*. Retrieved July 26, 2014 from Hagstofa Íslands: http://www.hagstofa.is/

Hagstofa Íslands. (2014u, July 16). *Meðalævilengd og eftirlifendatala 1971-2013*. Retrieved September 22, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2013n, October 17). *Nemendur sem njóta sérkennslu eða stuðnings 2004-2013*. Retrieved May 5, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2012b, January 27). Skráðir nemendur í framhalds- og háskólum eftir námsbraut og kyni 2007 - 2011. Retrieved April 3, 2014 from Hagstofa Íslands: hagstofa.is/Hagtolur/Skolamal/yfirlit

Hagstofa Íslands. (2013o, October 17). *Skóladagar 1999-2013*. Retrieved May 21, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2013p, December 4). *Skólasókn á framhaldsskólastigi eftir kyni, aldri og landsvæðum 1999-2012*. Retrieved April 23, 2014 from Hagstofa Íslands: http://hagstofa.is/Hagtolur/Skolamal/Yfirlit

Hagstofa Íslands. (2013q, December 4). *Skólasókn eftir kyni, aldri og landsvæðum 19991-2012*. Retrieved September 1, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2012c, December 17). Starfsfólk eftir kyni, starfsheiti, tegund og aðsetri skóla 1999-2012. Retrieved May 30, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2013r, May 16). *Starfsfólk í leikskólum eftir kyni, starfssviðum og rekstaraðilum 1998- 2012*. Retrieved May 30, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2012e, September 6). *Starfstími framhaldsskóla 2001- 2012*. Retrieved April 23, 2014 from Hagstofa Íslands: http://www.hagstofa.is/Hagtolur/Skolamal/Framhaldsskolar

Hagstofa Íslands. (2013s, May 16). *Starfstími leikskóla eftir landsvæðum 1998-2012*. Retrieved May 21, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2014w, July 16). *Ungbarnadauði og andvana fædd börn 1951-2013*. Retrieved September 22, 2014 from Hagstofa Íslands: www.hagstofa.is

Hagstofa Íslands. (2014x, July 24). *Vinnuafl, starfandi, atvinnulausir og vinnustundir - Mæling - Mánðarlegar tölur 2003 - 2014*. Retrieved August 8, 2014 from Hagstofa Íslands: www.hagstofa.is

Halldórsson, A. M., Ólafsson, R. F., & Björnsson, J. K. (2012). *Helstu niðurstöður PISA 2012 - Læsi nemenda á stærðfræði og náttúrufræði og lesskilningur*. Reykjavík: Námsmatsstofnun.

Hansen, B., Jóhannsson, Ó. H., Lárusdóttir, & Helga, S. (2010). Faglegt sjálfstæði grunnskóla - viðhorf skólastjóra. *Iceandic Journal of Education*, 1-2 (19), 51-70.

Hausmann, R., Tyson, L. D., & Zahidi, S. (2012). *The Global Gender Gap Report 2012*. Geneva: World Economic Forum.

Hjartarson, T., & Sigurðardóttir, A. K. (2011). Hönnun skólabygginga í deiglu nýrra kennsluhátta - Íslenskar grunnskólabyggingar við upphaf 21. aldar. *Journal of Education Research (Iceland)*, 60-79.

Innanríkisráðuneytið. (2012, June 11). Reglugerð um fjárhagsleg viðmið og eftirlit með fjármálum sveitarfélaga nr. 502/2012. Retrieved August 4, 2014 from Reglugerðasafn: www.reglugerd.is

Innanríkisráðuneytið. (2010, December 08). *Reglugerð um Jöfnunarsjóð sveitarfélaga nr. 960/2010*. Retrieved March 28, 2014 from Stjórnarráðið: www.reglugerd.is

Jöfnunarsjóður sveitarfélaga. (2013, October 26). Drög að greiðslu- og rekstraráætlun 2014. Reykjavík: Jöfnunarsjóður sveitarfélaga.

Kennarasamband Íslands. (2014, May 6). Aldur og kyn skólastjórnenda í leik-, grunn- og frsk. maí 2014. Reykjavík: Unpublished.

Mennamálaráðuneytið. (2009). Aðalnámskrá framhaldsskóla - Námsbrautir fyrir aðstoðarfólk í leikog grunnskólum: leikskólaliða, skólaliða og stuðningsfulltrúa í grunnskólum. Reykjavík: Menntamálaráðuneytið.

Mennta- og menningarmálaráðuneyti. (2012, February 14). *Reglugerð um nemendur með sérþarfir í framhaldsskólum nr.* 230/2012. Retrieved May 8, 2014 from Reglugerðasafn: www.reglugerd.is

Mennta- og menningarmálaráðuneyti. (2010, June 28). Reglugerð um nemendur með sérþarfir í grunnskóla. Retrieved May 8, 2014 from Reglugerðasafn: www.reglugerd.is

Mennta- og menningarmálaráðuneyti. (1999, May 7). *Reglugerð um reiknilíkan til að reikna út kennslukostnað framhaldsskóla nr. 335/1999*. Retrieved April 15, 2014 from Reglugerðasafn: www.reglugerd.is

Mennta- og menningarmálaráðuneyti. (n.d.). Sérkennsla í framhaldsskólum. Retrieved May 8, 2014 from Mennta- og menningarmálaráðuneyti: www.menntamalaraduneyti.is

Mennta- og menningarmálaráðuneytið. (2001, January 8). Auglýsing nr. 4/2001 um almennt hlutfall námseininga og kennslustunda, hópstærðir og breytileg viðmið kennslustunda í framhaldsskólum. Retrieved May 7, 2014 from Mennta- og menningarmálaráðuneytið: www.menntamalaraduneyti.is

Mennta- og menningarmálaráðuneytið. (n.d.(b)). *Framhaldsskólastig*. Retrieved May 21, 2014 from Mennta- og menningarmálaráðuneytið: www.menntamalaraduneyti.is

Mennta- og menningarmálaráðuneytið. (2014). *Hvítbók um umbætur í menntun*. Reykjavík: Mennta- og menningarmálaráðuneytið.

Mennta- og menningarmálaráðuneytið. (n.d.(c)). *Nám er vinnandi vegur*. Retrieved September 4, 2014 from Menntamálráðuneyti: www.menntamalaraduneyti

Mennta- og menningarmálaráðuneytið. (n.d.(d)). *Námsgagnasjóður*. Retrieved May 1, 2014 from Mennta - og menningarmálaráðuneytið: www.menntamalaraduneyti.is/afgreidsla/sjodir-og-eydublöd/menntamal/nr/4558

Mennta- og menningarmálaráðuneytið. (n.d.(e)). *Námskrár*. Retrieved June 5, 2014 from Mennta- og menningarmálaráðuneytið: www.menntamalaraduneyti.is

Mennta- og menningarmálaráðuneytið. (2009b, October 23). *Reglugerð um inntak menntunar leik-, grunn- og framhaldsskólakennara nr. 872/2009*. Retrieved May 2, 2014 from Reglugerðarsafn: www.reglugerd.is

Mennta- og menningarmálaráðuneytið. (2010b, August 24). Reglugerð um mat og eftirlit í framhaldsskólum nr. 700/2010. Retrieved June 5, 2014 from Reglugerðasafn: www.reglugerd.is

Mennta- og menningarmálaráðuneytið. (2009c, July 1). Reglugerð um mat og eftirlit í grunnskólum og upplýsingaskyldu sveitarstjórna um skólahald nr. 658/2009. Retrieved June 5, 2014 from Reglugerðasafn: www.reglugerd.is

Mennta- og menningarmálaráðuneytið. (2009d, October 22). Reglugerð um mat og eftirlit í leikskólum og upplýsingaskyldu sveitarstjórna um skólahald nr. 893/2009. Retrieved June 5, 2014 from Reglugerðasafn: www.reglugerd.is

Mennta- og menningarmálaráðuneytið. (2010c, June 25). Reglugerð um sérfræðiþjónustu sveitarfélaga við leik- og grunnskóla og nemendaverndarráð í grunnskólum nr 584/2010. Retrieved September 1, 2014 from Reglugerðarsafn: www.reglugerd.is

Mennta- og menningarmálaráðuneytið. (2012b, June 5). *Reglugerð um skólagöngu fósturbarna í grunnskólum nr. 547/2012*. Retrieved September 1, 2014 from Reglugerðarsafn: www.reglugerd.is

Mennta- og menningarmálaráðuneytið. (2009e, December 1). Reglugerð um viðurkenningu grunnskóla sem reknir eru af öðrum en sveitarfélögum nr. 980/2009. Retrieved August 26, 2014 from Reglugerðasafn: www.reglugerd.is

Mennta- og menningarmálaráðuneytið. (n.d.). *The structure of the Ministry of Education, Science and Culture*. Retrieved December 10, 2014 from Ministry of Education, Science and Culture: www.eng.menntamalaraduneyti.is

Menntamálaráðuneyti. (2009f, July 3). *Reglugerð um gerð og búnað grunnskólahúsnæðis og skólalóða nr. 657/2009*. Retrieved April 28, 2014 from Reglugerðasafn: www.reglugerd.is

Menntamálaráðuneyti. (2009g, July 3). *Reglugerð um starfsumhverfi leikskóla nr. 655/2009*. Retrieved April 28, 2014 from Reglugerðir: www.reglugerd.is

Menntamálaráðuneytið. (2008, December 19). *Reglugerð um innritun nemenda í framhaldsskóla*. Retrieved May 21, 2014 from Reglugerðasafn: www.reglugerd.is

Menntamálaráðuneytið. (1998, June 9). *Reglugerð um kennslu fatlaðra nemenda í framhaldsskólum nr. 372/1998*. Retrieved May 8, 2014 from Reglugerðasafn: www.reglugerd.is

Mennta-og menningarmálaráðuneytið. (2011, October 21). Reglugerð um ábyrgð og skyldur aðila skólasamfélagsins í grunnskólum nr. 1040/2011. Retrieved December 30, 2014 from Reglugerðasafn: www.reglugerd.is

Ministry of Education, Science and Culture. (n.d.). *The Icelandic Natinoal Curriculum Guide for Upper Secondary Schools - General Section*. Retrieved May 21, 2014 from Menntamálaráðuneytið: www.menntamalaraduneyti.is

MMR. (2014). Brotthvarf úr framhaldsskólum: Haust 2013. Reykjavík: Mennta- og menningarmálaráðuneytið.

Námsmatsstofnun. (n.d.). *Innritun í framhaldsskóla, kynning fyrir foreldra*. Retrieved August 26, 2014 from Námsmatsstofnun: www.namsmat.is

OECD. (2013). Education at a glance. Paris: OECD.

OECD. (2013a). OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools (School Resources Review): Guidelines for Country Background Reports. Retrieved January 5, 2014 from OECD: http://www.oecd.org/edu/school/School-Resources\_Review-CBR-Guidelines.pdf

OECD. (2013b). OECD Skills Outlook 2013 - First results from the Survey of Adult Skills. Paris: OECD.

Óskarsdóttir, G. G. (Ed.). (2014). *Starfshættir í grunnskólum við upphaf 21. aldar*. Reykjavík: Háskólaútgáfan.

Óskarsdóttir, G. G. (2011). Tengsl skóla og grenndarsamfélags. *Ráðstefna Samtaka áhugafólks um skólaþróun og Rannsóknastofu um þróun skólastarfs*. Reykjavík: Háskóli Íslands.

Pétursdóttir, H. (2007). Sameiginleg framtíðarsýn fyrir grunnskólastarfið 2007 - 2020. Reykjavík: Félag grunnskólakennara, Samband íslenskra sveitarfélaga and Skólastjórafélag Íslands.

Ragnarsson, G. K. (2006). Nýir tímar - Saga Íslands. Reykjavík: Forlagið.

Reykjavíkurborg. (2011). Framkvæmd sérkennslu í almennum grunnskólum. Reykjavík: Reykjavíkurborg.

Reynisdóttir, Á. H., & Jóhannesson, I. Á. (2013, October 3). Fleiri vindar blása, viðhorf reyndra framhaldsskólakennara til breytinga í skólastarfsi 1986-2012. *Netla - Veftímarit um uppeldi og menntun*.

Ríkisendurskoðun. (2008). Jöfnunarsjóður sveitarfélaga og grunnskólinn - Stjórnsýsluúttekt. Reykjavík: Ríkisendurskoðun.

Ríkisendurskoðun. (n.d.). *Stjórnsýsluendurskoðun*. Retrieved December 17, 2014 from Ríkisendurskoðun; www.rikisendurskodun.is

Ríkisendurskoðun. (1997, May 27). *The National Audit Act nr* 86, 27 May 1997. Retrieved July 31, 2014 from Ríkisendurskoðun: www.rikisendurskodun.is/index.php?id=183

Samband íslenskra sveitarfélag. (2014, April 8). Útgjöld leik og grunn 2004-2012 frá sambandinu, unpublished. *Útgjöld leik og grunn 2004 - 2012 frá sambandinu, unpublished*. Reykjavík: Samband íslenskra sveitarfélaga.

Samband íslenskra sveitarfélaga í samstarfi við Samtök áhugafólks um skólaþróun. (2013). *Microsoft Upplýsingatækni í grunnskólum*. Reykjavík: Samband íslenskra sveitarfélaga.

Samband íslenskra sveitarfélaga. (n.d.). *Námsleyfasjóður kennara og stjórnenda grunnskóla*. Retrieved June 4, 2014 from Samband íslenskra sveitarfélaga: www.samband.is

Samband íslenskra sveitarfélaga og Félag leikskólakennara. (2014c, June 16). *Framlenging á samningi FL og SIS. Gildir 1. júní 2014 til 31. maí*. Retrieved July 29, 2014 from Kennarasamband Íslands: www.ki.is

Samband íslenskra sveitarfélaga og Kennarasamband Íslands vegna Félags grunnskólakennara. (2014b, May 20). *Félag grunnskólakennara*. Retrieved July 29, 2014 from Kennarasamband Íslands: www.ki.is

Samband íslenskra sveitarfélaga og Kennarasamband Íslands vegna Félags leikskólakennara. (2011, August 20). *Kjarasamningur KÍ vegna Félags leikskólakennara, með breytingum frá 23. ágúst 2012*. Retrieved July 29, 2014 from Kennarasamband Íslands: www.ki.is

Samband íslenskra sveitarfélaga. (n.d.(a)). *Rekstrarkostnaður leikskóla 2012*, *eftir stærð skóla*. Retrieved April 24, 2014 from www.samband.is/verkefnin/rekstur-sveitarfelaga/talnaefni/

Samband íslenskra sveitarfélaga. (n.d.(b)). *Rekstur-per-nem-2012*. Retrieved April 23, 2014 from Samband íslenskra sveitarfélaga: www.samband.is/verkefnin/rekstur-sveitarfelaga/talnaefni/

Samband íslenskra sveitarfélaga. (2008, February 22). Skólamálastefna Sambands íslenskra sveitarfélaga. *Skólamálastefna Sambands íslenskra sveitarfélaga*. Reykjavík: Samband íslenskra sveitarfélaga.

Samband íslenskra sveitarfélaga. (2013b). *Skólaskýrsla 2013*. Reykjavík: Samband íslenskra sveitarfélaga.

Samtök iðnaðarins, Mennta- og menningarmálaráðuneytið og Samband íslenskra sveitarfélaga. (2012). *Grunnmenntun efld í raunvísindum og tækni*. Reykjavík: Samtök iðnaðarins, Mennta- og menningarmálaráðuneytið og Samband íslenskra sveitarfélaga.

Sigurðsson, Ó. (2008). Reiknilíkan framhaldsskólanna. Reykjavík: Háskóli Íslands.

Skúlason, F. A. (2013). *Rit 1 2013 - Niðurstöður samræmdra könnunarprófa í grunnskólum 2013*. Retrieved September 1, 2014 from Námsmatsstofnun: www.namsmat.is

The Ministry of Education, Science and Culture. (2014, March). *The Icelandic national curriculum guide for compulsory schools - with Subject Areas*. Retrieved May 21, 2014 from Menntamálaráðuneytið: www.menntamalaraduneyti

Umhverfisráðuneytið. (2010, October 12). Reglugerð um hollustuhætti á sund- og baðstöðum nr. 814/2010. Retrieved May 6, 2012 from Reglugerðasafn: www.reglugerd.is

UNESCO Institute of Statistics. (n.d.). *Pupil-teacher ratio in upper secondary education (headcount basis)*. Retrieved October 21, 2014 from UNESCO Institute of Statistics: www.data.uis.unesco/org

Vinnumálastofnun. (2014, August). *Atvinnuleysi frá 1980 mánaðarlegt*. Retrieved September 23, 2014 from Vinnumálastofnun: www.vinnumálastofnun

Porvaldsdóttir, F., Friðriksson, I. P., & Bjarnadóttir, S. (2012). *Stefnumótun í upplýsingatækni í leikskólum Kópavogs - Skýrsla starfshóps, fylgiskjal 2*. Kópavogur: Kópavogur.

Ögmundsdóttir, R. H. (2013). Skólastjórinn - hlutverk hans og dagleg störf. Reykjavík: Háskóli Íslands.

# Annex 1 Trends in the number of public and private schools, 1998 to 2012

	Pre-primary	schools	Compulsory	schools
Year	Public	Private	Public	Private
1998	223	26	191	5
1999	230	22	186	6
2000	231	22	184	6
2001	237	24	187	6
2002	237	25	186	6
2002	237	30	179	8
2004	234	28	171	7
2005	234	28	170	7
2006	236	31	166	7
2007	234	36	165	9
2008	238	37	165	9
2009	244	37	165	10
2010	238	39	162	10
2011	228	27	161	10
2012	222	41	157	10

# Annex 2 Comparison of teachers' regular salaries to other occupations, 2013

Group	Regular salary, IKR
Pre-primary school teachers	361.369
Compulsory school teachers	342.520
Upper secondary school teachers	392.556
All employees, state	414.000
All employees, local communities	331.000
All employees, private sector	429.000
Education sector, all	341.000
Specialists, private sector	651.000

# Annex 3 Comparison of teachers' total salaries to other occupations with a graduate degree, 2013

Group	Total salary, IKR
Pre-primary school teachers	410.095
Compulsory school teachers	368.970
Upper secondary school teachers	503.108
All	552.000
State	543.000
City of Reykjavík	519.000
Ohter local communities	573.000
Non-governmental organizations	553.000
Foundations	534.000
Private companies	601.000
Self-employed, owners	670.000



	2004	2005	2006	2007	2008	2009	2010	2011	2012
Teaching and other support functions	228	263	298	268	305	358	364	361	374
Kitchen	370	363	373	391	402	409	408	401	390
Cleaning	224	187	148	145	139	126	101	108	98
Other and undefined	24	30	32	28	0	0	0	0	0
Total	846	843	851	832	846	893	873	870	862



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Librarians and library staff	70	73	62	48	56	56	68	53	63	60
School psychologist and educational counsellors	85	80	89	86	102	114	110	101	99	100
School nurses	36	27	31	27	32	4	32	11	33	28
Social pedagogues	90	91	93	113	125	124	132	142	144	140
School assistants	536	529	596	594	643	655	626	678	675	779
Secretaries and computer administration	186	184	178	183	174	175	176	168	164	166
Sport and recreational assistants	4	8	5	8	9	6	5	2	5	10
Dining room	254	229	253	230	257	273	268	251	211	234
Janitors	141	136	128	121	135	145	134	125	117	119
Hall monitors, shower monitors, cleaning and student assistants	1205	1200	1158	1217	1250	1233	1152	1063	980	1062
Other	47	26	11	0	0	0	0	0	4	0
Total	2654	2583	2604	2627	2783	2785	2703	2594	2495	2698

# Annex 6 Upper secondary school staff, other than teaching and management, 2004 - 2012

	2004 - 2005	2005 - 2006	2006 - 2007	2007 - 2008	2008 - 2009	2009 - 2010	2010 - 2011	2011 - 2012
Experts and specialised	25	23	27	21	26	45	36	44
Consultants and library employees	158	160	142	145	167	154	154	157
Office and computer	148	149	137	153	158	150	168	164
Facility administration	280	257	263	272	269	282	263	269
Other	6	3	3	6	2	4	3	11
Total	617	592	572	597	622	635	624	645