LITERACY IN ICELAND

COUNTRY REPORT

CHILDREN AND ADOLESCENTS

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1 Introduction

This report on the state of literacy in Iceland is one of a series produced in 2015 and 2016 by ELINET, the European Literacy Policy Network. ELINET was founded in February 2014 and has 78 partner organisations in 28 European countries[1]. ELINET aims to improve literacy policies in its member countries in order to reduce the number of children, young people and adults with low literacy skills. One major tool to achieve this aim is to produce a set of reliable, up-to-date and comprehensive reports on the state of literacy in each country where ELINET has one or more partners, and to provide guidance towards improving literacy policies in those countries. The reports are based (wherever possible) on available, internationally comparable performance data, as well as reliable national data provided (and translated) by our partners.

ELINET continues the work of the European Union High Level Group of Experts on Literacy (HLG) which was established by the European Commission in January 2011 and reported in September 2012[2]. All country reports produced by ELINET use a common theoretical framework which is described here: "ELINET Country Reports – Frame of Reference"[3].

The Country Reports about Children and Adolescents are organised around the three recommendations of the HLG´s literacy report:

- Creating a literate environment
- Improving the quality of teaching
- Increasing participation, inclusion (and equity[4]).

Within its two-year funding period ELINET has completed Literacy Country Reports for all 30 ELINET member countries. In most cases we published separate **Long Reports** for specific age groups (Children / Adolescents and Adults), in some cases comprehensive reports covering all age groups. Additionally, for all 30 countries, we published **Short Reports** covering all age groups, containing the summary of performance data and policy messages of the Long Reports. These reports are accompanied by a collection of good practice examples which cover all age groups and policy areas as well. These examples refer to the **European Framework of Good Practice in Raising Literacy Levels;** both are to be found in the section "Good Practice"[5].

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[1] For more information about the network and its activities see: www.eli-net.eu.
[2] In the following, the final report of the EU High Level Group of Experts on Literacy is referenced as "HLG report". This report can be downloaded under the following link: http://ec.europa.eu/education/policy/school/doc/ literacy-report_en.pdf.
[3] See: http://www.eli-net.eu/research/country-reports/.
[4] "Equity" was added by ELINET.
[5] See: http://www.eli-net.eu/good-practice/.

2 Executive Summary

LITERACY PERFORMANCE DATA

Iceland has participated in OECD's PISA (15 year-olds' reading literacy) since 2000. This means it is possible to describe the changes over time in average reading proficiency, according to different characteristics of the readers for that age group only.

In PISA 2012, Iceland performed slightly below the EU's average (483 vs 489 EU-average), showing a gradual decrease in reading: -7 score points between 2000 and 2009, - 18 score points between 2009 and 2012. The difference between 2000 and 2012 reaches 24 score-points, namely the equivalent of more than a half-year of schooling. Whereas Iceland performed better than EU countries on average in 2000 (507 vs 489) and in 2009 (500 vs 486), it fell under this very stable EU-mean during the 3rd cycle of the study.

The proportion of students who can be considered as low-performing readers was very close to the EU countries on average (21% vs 20%). These students can read simple texts, retrieve explicit information, or make straightforward inferences, but they are not able to deal with longer or more complex texts, and are unable to interpret beyond what is explicitly stated in the text. Consistent with the gradual decrease of the overall reading score, the proportion of low-performing readers gradually increased (by 6.5%) in Iceland between 2000 and 2012. This increase concerns girls to a lesser extent (+ 4%) than boys (+ 9.7%). A third of them scored below level 2 in 2012. The proportion of top-performing readers was slightly lower than in EU countries on average (5.6% vs 7%).

In PISA 2009, the gap according to the pupils' socioeconomic background was lower than the EU average (60 vs 89 on average). Conversely, the gap between native students and students with a migrant background was much higher than in EU countries on average (81 vs 38 in EU). The mean score difference between those who always spoke the language of the test at home, and those who spoke another language was higher (69 vs 54). It should be noticed that the proportion of students with a migrant status and of students who speak another language at home was rather low in Iceland, respectively 2% and 3%.

In Iceland, the gender gap (in favour of girls) was exactly the same in PISA 2009 as in the EU on average (44). Whereas girls have improved their performance on EU-average between 2000 and 2011 (+ 5 points), they show a decrease in Iceland (-20 score-points). Boys' performance also decreased even more drastically than girls (-29 points), which can be observed at the European level but to a lesser extent (-5 score points).

In conclusion, whereas Iceland performed better than EU-average mainly in 2000 and slightly less so in 2009, its score fell below the EU mean in 2012. Both girls and boys show a decrease of their performance whereas the European trend is a score improvement among girls. The proportion of low and top-performing readers is very close to EU countries on average in 2012 but the percentage of readers in difficulty gradually increased in Iceland since 2000 among girls but more drastically among boys. The gap according to socioeconomic status is lower than in the EU on average, which could indicate that the educational system in Iceland is more equitable than in the EU countries on average. Conversely, the gap according to migrant status and to language spoken at home is higher but the proportion of students with a migrant status and of students who speak another language at home is

rather low in Iceland, the results then must be taken with some caution. The decrease of the overall reading performance and the increase of the proportion of low-performing readers should be considered as a matter of concern in Iceland, even more so among boys.

KEY LITERACY POLICY AREAS FOR DEVELOPMENT (AGE-SPECIFIC AND ACROSS AGE-GROUPS)

Creating a Literate Environment

The EU High Level Group of Experts on Literacy stated the following in relation to **creating a more literate environment**:

> "Creating a more literate environment will help stimulate a culture of reading, i.e. where **reading for pleasure** is seen as the norm for all children and adults. Such a culture will fuel reading motivation and reading achievement: people who like to read, read more. Because they read more, they read better, and because they read better they read more: a virtuous circle which benefits individuals, families and society as a whole." (HLG report 2012, p. 41).

Parents play a central role in children's emergent literacy development. They are the first teachers, and shape children's language and communication abilities and attitudes to reading by being good reading role models, providing reading materials, and reading to the child.

Schools play an important role in offering a literate environment for students. Schools may foster reading motivation and reading for pleasure in many ways. However, schools do not have sole responsibility. A broad range of actors may shape literacy motivation, from parents and peers to libraries. Particularly this is true in adolescence as it is a crucial phase in life where young people develop long-term *identities and self-concepts* related to reading and media use (Cf. ELINET Country Reports, Frame of Reference, pp. 29ff, 45f.).

Pre-Primary Years

Creating a literate environment at home: The first 3-5 years of children's lives are of crucial importance for the prerequisites of Literacy, as language development, vocabulary, phonological awareness and the first attention of letters, sounds and text. A Literacy friendly home environment in the first years is the fundament of development of literacy competences (Brooks et al. 2012). The interaction between the child and their parents or other relatives or the work in kindergarten is very important for the language and literacy development of the child. Resources such as books, language games and songs are good support for the learning environment.

In Iceland, it is very common for parents to read to their young children and around 80% say they read often to their children (PIRLS 2006). Some start to read to children before they reach their first birthday. There is a long tradition of reading to children and help them to become aware of letters, words, stories and Icelandic homes are well equipped with resources such as children's books (PIRLS 2006). It is important to support the families and help them to understand how and in what way it is important, and encourage them to read to their children not only for the first years but as well when

they are able to read. It is as well important to provide information to parents to encourage them to read what their children are reading. This is important for discussion which supports comprehension.

PIRLS 2006 reports the percentages of students whose parents (often, never or almost never) engaged in literacy-relevant activities with them before the beginning of primary school (Appendix D, Table G4). Ten activities are considered: reading books, telling stories, singing songs, playing with alphabet toys, talking about things done, talking about things read, playing word games, writing letters or words, reading signs and labels aloud and visiting the library.

The data for Iceland are a composite score for all these activities below (for an overview of European countries see table G4 in Appendix D). In Iceland, 56.0% of students were categorised as high on the Early Literacy Activity Scale, just below the corresponding EU-21 average of 59.7%. Similar percentages in Iceland (9.1%) and on average across the EU-21 were categorised 'low' on the Early Literacy Activity Scale.

> **Challenges/need for action**: Since reading to the child is a predictor of future literacy achievement it is a matter of concern that there are differences between parents. There is a need for programmes **to raise awareness of all parents** that literacy is a key to learning and life chances and that the basis for good literacy achievement is laid in early childhood. In particular there is a need for more family literacy programmes with **a focus on supporting migrant parents** in understanding and fostering the literacy development of their children.
>
> There is a need for **further research** on literacy activities in homes. Pre-primary teachers, primary teachers and low secondary teachers must in their education get good knowledge on how **parents could be supported** for taking part in their children's literacy development. This work must be part of the teachers' work.

Children and Adolescents

Creating a literate environment in school: In Iceland, according to PISA 2009, 63% read for Pleasure and 37% not, which is around the OECD average. 48% of boys don´t or very seldom read for pleasure, but for girls, the corresponding figure is 28%. It could be difficult to see what exactly these figures say and how the students understand "reading for pleasure". Many reads texts on screen. Do they call this reading for pleasure?

We know from the PISA and other studies that there is a high correlation between reading for pleasure and reading performance. Therefore, schools, libraries, families and communities should do more in order to support reading motivation, reading habit and a stable self-concept as a reader among adolescents, not least boys.

There are school libraries in most schools in Iceland, large and small. The bigger schools have educated staff as school librarians. The libraries are widely used not only for reading for pleasure, but many of them are used as media for learning the particular subjects in collaboration between school librarians and teachers. It differs greatly how well school libraries are equipped with books and other resources. Quite a lot of small schools, with 15-50 children, are in the rural areas and their libraries have a much smaller collection of books and other resources than the libraries in bigger schools. In some places the public library is very close and used by schools (Hardardottir 2015[6])

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[6] See: http://www.slideshare.net/rosaharda/konnun.

Classroom libraries are common, especially in the first years of primary school. It is common for the children to have some time to read independently and choose a book from the bookshelves in the classroom. They visit the school library as well. In some schools, classes "borrow" books from the homes and schools could be found where the children use their classroom libraries and read to elderly people who visit the school[7]. Children visit as well their school libraries for books, magazines and use of digital devises. This is the situation in secondary classes, but normally they have fewer books in the classroom, except resources for the subject taught in the particular classroom.

Offering digital literacy learning opportunities in schools and other public spaces, e.g. libraries: Most classrooms have at least one computer which the teachers use, for instance when working with students by using a projector. Some school districts are providing schools with tablets and run courses for teachers on how to use tablets in teaching, and in some areas schools can get advisors for supporting teachers in developing teaching using digital devices. A study on practice in Icelandic schools (Óskarsdóttir, G et.al. 2014. pp 277-319) provides information on the situation. Computers are in many schools mostly used in ICT lessons, which is based on the national curriculum 2013. Teachers widely use computers when preparing teaching, but in their teaching they don´t use it very much. School librarians say computers are used for searching for information in the library but it seems not very much to be the case in the classroom. The reason could be lack of computers.

Digital environment of secondary students: Digital devices are in all schools and classrooms and the development is growing. Policy makers and the education field, as local educational authorities and schools are working in this area, are amongst other things connecting it to literacy (Notkun snjalltækja í skólastarfi, 2014). In upper secondary schools, almost all students have their own laptops or tablets. The use of digital devices very much depends on the individual teacher and his/her interest and the school community as a whole. Tablets are also used in quite a lot of schools. It is however uncertain what method or pedagogy is used. Some local authorities are providing tablets to both primary and lower secondary schools (compulsory education), and some are running courses and providing advisers for using this media in teaching.

Information technology is part of the national curriculum for adolescents (National Curriculum Guide for compulsory schools 2013). The support provided differs from school to school. There are ICT teachers and the schools provide access to computers. In some schools ICT is used amongst other things for literacy work, reading and writing and in special education. Some scholars are doing research in this field (Jakobsdóttir et.al. 2014). There are courses available for teachers, and school districts are providing tablets to their schools. This is mostly in lower secondary. Higher secondary students have their own computers or tablets, although many schools are well equipped with computers.

Strengthening the role of public libraries: Public libraries are an important agent in reading promotion. Cooperation between schools and libraries is common and school libraries are very important and much used in most schools, both as traditional libraries and resource centres but also as part of the school and its work, a place to learn new things.

The primary and lower secondary school is run by the local authorities and therefore it depends on each community, or local authority, how the situation in the school is. The situation is very different as there are many small communities and schools with very few students. Cooperation between schools,

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[7] See: http://www.dv.is/frettir/2015/9/9/eftirtektaverd-samfelagsverkefni-i-grafarvogi/.

families and libraries is common in most places. In some places huge effort has been put into promoting literacy by cooperating with families and others.

> **Challenges:** It is important to support public libraries to work with homes and schools. The aim must be to get children and their families used to visit libraries and feel the opportunity and support they get both for getting information and knowledge, and for pleasure.
>
> It is necessary to find ways for homes and schools in rural areas for similar service of public libraries as in the urban areas.
>
> Work in schools and use of libraries must be connected. It is an important part of helping children to become independent readers.

Improving literate environments for children and adolescents: Programmes, initiatives and examples: Some communities, school districts, schools and libraries have made brochures or booklets to improve the literate environment and promote children's and adolescent's literacy, as well as providing parents and teachers with information on literacy development. Íslenska lestrarfélagið, the Icelandic Reading Association, has published and distributed two brochures for parents on the importance of reading and improving literacy, i.e. *Viltu lesa fyrir mig Read to me please* (Árnadóttir et.al. 1993) and *Það er gaman að lesa*, *It is fun to read* (Árnadóttir et.al.1998). They proved to be very popular and were distributed to schools and Health care centres all over the country.

Some schools have asked parents and others to donate children's books that they are no longer using to their school libraries and classroom libraries.

It is very common to hold reading campaigns in individual schools, school districts or even all over the country. Sometimes schools and classrooms "collect" read books and it ends with celebrating the classroom or school who read the most books or even pages.

In 2014, an interesting programme was held nationwide, *Allir lesa* (All are reading)[8]. People of all ages could take part by sending in to a website the title of a book they have read. It was well advertised on TV and other media available and became popular. The outcome was published at the end of the programme and people discussed for instance which books were most popular etc. This is the only programme in Iceland which was for all, children as well.

The association of writers are playing a very important role in motivating students (and adults) for reading. They are visiting schools and reading from their books, not least the books which are coming out. It is popular and teachers say the result is very positive[9].

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[8] See: http://www.allirlesa.is/.
[9] See: https://rsi.is/hofundamidstod/skald-i-skolum/.

Improving the Quality of Teaching

Pre-Primary Years

Improving the quality of preschool education: According to the Icelandic National Curriculum Guide for Preschools (2011), literacy is incorporated in the context of communication skills. Under this notion, children should be given opportunities to develop literacy in its broad sense, express themselves and communicate, use various materials to acquire information and understand the functions of written language (Ministry of Education, Science and Culture 2011, p. 42-43).

Providing a literacy-rich environment: The learning environment constitutes one fundamental factor in children's learning and development. As for literacy, the Icelandic National Curriculum Guide for Preschools (2011) anticipates: a) the provision of various materials in order for children to obtain information and express themselves and b) children's acquaintance with various literacy genres, such as stories, poems and fairy tales (Ministry of Education, Culture 2011, p.34, 43).

Children and Adolescents

Improving Literacy Curricula and Reading instruction in schools: In a new National Curriculum (2013), literacy is the no 1 fundamental pillar for learning and teaching. Literacy is much discussed in the education sector, and most schools have written their school curriculum based on the new national curriculum. Literacy is now more in the frontline of teaching and although it is seen as part of the mother tongue teaching it could be seen as a subject on teaching plans called literacy (Læsi in Icelandic).

According to the analysis of steering documents by Eurydice (2011, p60, figure 1.4) the following reading strategies are mentioned in literacy curricula in Iceland: Summarising text, making connections between parts of a text, constructing visual representations. Not mentioned are: Drawing inferences, Using background knowledge, Monitoring own comprehension, Pupils reflect on own reading process.

Challenges:
- It is important to develop literacy learning from the primary years to the secondary years of schooling.
- Reading comprehension in all subjects must be an important part in teacher education and in-service education of teachers.
- In the classroom, the students must learn how to use important strategies in their reading and writing and be able to choose appropriate strategies. This helps them to become independent, critical readers and writers who develop their literacy abilities when they have finished their schooling.
- It is of crucial importance that authorities have this policy and support schools to develop their literacy education.

Digital literacy as part of the curriculum for primary and secondary schools: In the National Curriculum for primary and secondary education, there are special chapters with competence descriptions on use of ICT in schools, and what competences students shall gain from the education. There are competences which could be grouped under the use of digital devices and as well as important skills which are under literacy, such as being able to search for information and use critical

reading (Ministry of Education and Culture, 2011; 2013). Being able to collect references suitable for the topic they are working on, being able to use interactive learning material and being able to use ICT when organising and writing text are also included. ICT is supposed to be included into every subject and used as a way of learning where critical reading and critical thinking is an important part.

Early identification of and support for struggling literacy learners: A small number of diagnostic tests are in use for students of compulsory school age in Iceland. They are used almost exclusively by special education teachers to diagnose reading difficulties and identify areas of teaching emphasis for individual students with serious reading problems. It is fairly common for students, starting in first grade, to be given a general screening test to identify which of them are likely to have learning difficulties (Kennedy et al. 2007, p. 183). There are as well screening tests which teachers use in the first and second grade. The aim is to find the children who are in danger of having reading difficulties. Education authorities as well as teachers and headmasters put great emphasis on early intervention.

Improving the quality of pre-service and in-service teacher training: The requirements for becoming a teacher are Master´s level (5 years) for lower and upper secondary teachers; Teachers of vocational schools who are qualified in the subject have to have 60 ECTs (Lög um menntun og ráðningu kennara og skólastjórnenda í leikskólum, grunnskólum og framhaldsskólum no 87 2008). This came fully into effect 2013 (European Commission/EACEA/Eurydice, 2013. Key Data on Teachers and School Leaders in Europe).

No data are available concerning the participation rate of teachers in literacy-related professional development, with one exemption: In PIRLS 2006 teachers were asked how much time they had spent on reading professional development in the past two years before the study. The data for Iceland and for the EU-21 average are given in table 28. The table shows that 37.5% of students in Iceland were taught by teachers who had allocated 16 hours or more to professional development, compared to 21.3% on average across the EU-21. Furthermore, just under 20% of students in Iceland (compared to 30% on average across the participating EU-21 countries) were taught by teachers who had allocated no time to professional development in reading. However, the average reading score of their students (509.7) was actually slightly better than of the students of teachers who had spent more than 35 hours on professional development (503.0) (see Appendix D, Table I.1). Students of teachers who had spent between 6-15 hours on reading-related professional development appeared to benefit most (512.8).

Table 28: Percentages of Students whose Teachers Reported Spending Varying Amounts of Time on Professional Development in Past Two Years – Iceland and EU-21 averages

	More than 35 hours	16-35 hours	6-15 hours	Less than 6 hours	No time
Iceland	21.1	16.4	24.7	18.1	19.6
EU-21	9.1	12.2	24.3	24.1	30.3

Source: ELINET PIRLS Data base Appendix D (Table I.1.).

There are no data available which provide information on how much of the time that is spent on professional development is for literacy.

Improving the quality of literacy instruction: Programmes, initiatives and examples: There has been a growing interest in departments of education at universities for improving literacy instruction, especially for the first years of primary education. There have been general programmes for teaching which are now used in most classes of the country. One is "Way to literacy" the other "Beginning

literacy". There is research work going on for investigating the outcome of these programmes. The work is in process and will be published in 2016.

Increasing Participation, Inclusion and Equity

Pre-Primary Years

Encouraging preschool attendance, especially for disadvantaged children: All children have the right to go to kindergarten. It is not a question of if they are disadvantaged or not. The number of children from disadvantaged groups who are not attending preschools is not available.

Identification of and support for preschool children with language difficulties: In Iceland, children with special needs get support in mainstream kindergartens by teachers educated in special education, speech therapists and other qualified members of staff. In smaller kindergarten schools which don´t have qualified staff, they normally get support from local education authorities.

Compensating socio-economic and cultural background factors: School staff are normally very well aware of different social and cultural backgrounds. The schools have access to people with a special educational background. In the bigger schools they are part of the permanent staff, but in smaller schools they could ask for support from people outside the school. There is a growing awareness and work concerning the fast increasing number of children with other languages and cultural background than Icelandic. For instance, teachers go on courses and could ask for advice. Parents must pay for their children in kindergarten. There is some support available, as if there are 2 children from the same home the sum is lower for the second child. If there are serious financial problems the social service of the local authorities could intervene.

Children and Adolescents

Support for children with special needs: In teacher education and in-service education, courses are very much pointed at early intervention and importance of finding children with difficulties, or if there are difficulties which could lead to reading and writing problems. Teachers use screening tests to find children with difficulties and special education teachers use diagnostic tests to diagnose difficulties. They and the class teachers provide support for children with special needs.

The number of students in elementary schools who need and get special education has increased enormously since 1999. Then, 15% of students attended special education. There were 21% 2005 and 26% 2010. These figures are based on report from Reykjavik city (Svavarsdóttir, et.al. 2011). Most special education was carried out outside the **classroom**, which seems not to be in accordance with some theories on inclusion for instance.

Challenges: It is important to find out why so many students need special education and base the reaction on the findings. Kindergarten and primary education years are important for early intervention.

Create Interest, appropriate teaching and learning methods, create confidence and feeling of importance for one's own learning.

Support for migrant children and adolescents whose home language is not the language of school: Pupils whose mother tongue is not Icelandic are entitled to learn Icelandic as a second language in compulsory schools. There are also provisions in the general curricula that students whose native language is not Icelandic may be exempted from learning a particular subject. Compulsory schools may recognise pupils' skills in their mother language as part of the compulsory education. There are no specific central provisions on mother language education for students of foreign origin, but according to a survey conducted a few years ago almost half of the students of foreign origin received some mother tongue education at compulsory school level (Eurydice, 2012).

Challenges: The fast growing number of children with other languages than Icelandic put heavy demands on schools and individual teachers. It is very important to support teachers and provide information and in-service courses for teaching in multicultural classrooms.

Children with other languages and cultures must get support, but not special education. It is important to find their strengths and abilities in the classroom and give them the opportunity to share it in the work of the class.

It is very important to form a policy and action aimed at helping parents to support their children and keep them informed of the work, aims and objectives in the school, as well as it is important for the school staff to learn about their culture and former education.

It is important to learn the "new" language, but it is also important to help the children to learn the subjects other children have to learn. Otherwise the child will be behind their classmates which is not good for their wellbeing and self-esteem.

Preventing early school leaving: According to the OECD report on strategy for preventing students from dropping out of school in Iceland (2012), education is a priority in Iceland. It is one of the OECD countries which invests most in its education system and emphasises equity and inclusion for all of its students. However, the high dropout rate in secondary education is worrying. Successful completion of upper secondary education within four years was 45%, while the OECD average is 68%. However, some recover with adult learning opportunities.

In Iceland, the Ministry of Education, Science and Culture has developed a kind of risk detector to prevent ESL from upper secondary schools (Hvítbok um umbætur í menntamálum (2014)[10]. The aim of this is to provide school counsellors with a systematic approach to identify students at risk of dropping out based on factors that could predict school failure, according to research and practice. The risk detector is mainly a questionnaire for students enrolled from the 10th grade up to the 1st year in upper secondary school. The main categories of the questionnaire include: Student background, family factors, previous school experience, school engagement and attitude towards education, psychological adjustment and working while at school, friends at school and friends' school engagement. The risk detector was initially tested in three schools with high ESL rates and received very positive feedback from all school counsellors. The Ministry has now decided to expand the programme to 18 out of 32 upper secondary schools (European Commission, 2013, p. 38).

The minister of education and culture has published a white paper with aims of the coming years in the educational system (*Hvítbók – um umbætur I menntun*, 2014).

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[10] See: https://www.menntamalaraduneyti.is/media/frettir/Hvitbik_Umbaetur_i_menntun.pdf.

3 General Information on the Iceland Education System

Figure 1: Structure of the Iceland School System[11]
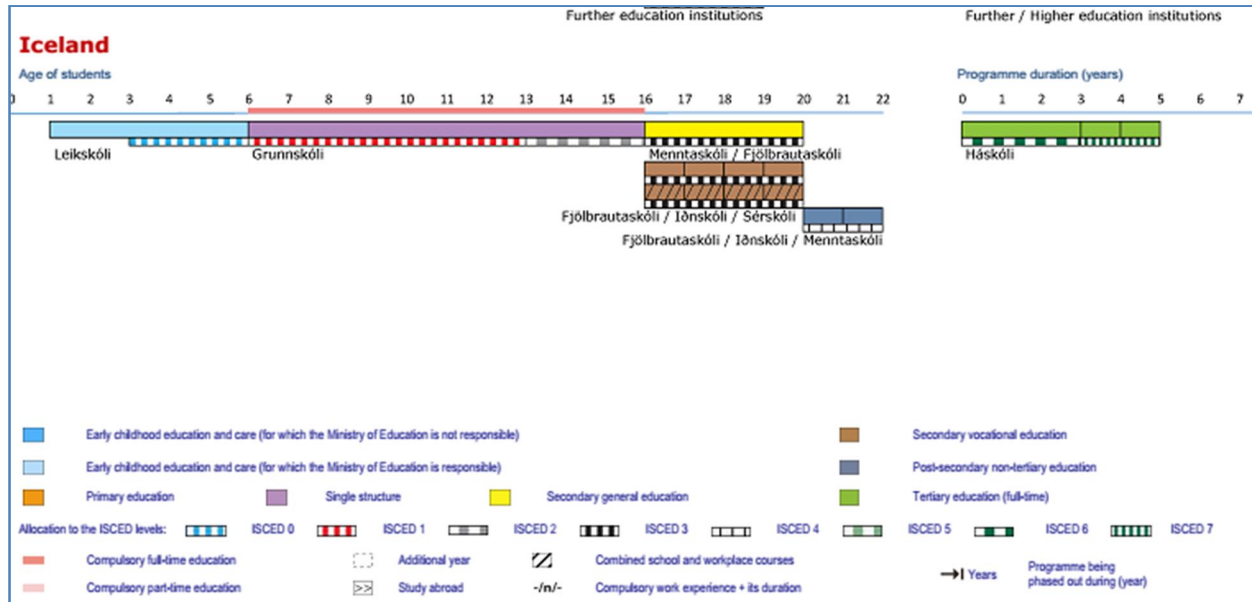
The Icelandic school system is divided into four sections according to age.

The first stage, pre-school begins at some point between the ages of one and six years. Pre-schools are run by local communities. The pre-school starting age differs from one county to the next. In the whole country the number of children in each year group is 4500-4700 children. In the year 2014 number of children attending pre-school in Iceland were 1791 one-year-olds, 4357 3-year-olds and 4646 5-year-olds. Not all communities provide primary education for children from the age of one[12].

Parents have to ask for a place in kindergarten schools and they have to pay monthly fees for their child. However they don´t pay the whole cost.

The Ministry of Education publishes a national curriculum for pre-school education.

Compulsory education starts at 6 and last for 10 years. It provides primary education and low secondary. Schools are run by local authorities and are free. The students gets all their textbooks and other learning devices free of charge.

The Ministry of Education publishes the national curriculum for compulsory education, where teachers, parents and other involved can read about general policy of the education and competences which the students are supposed to gain. There are chapters on students with other languages than Icelandic and deaf students.

Top secondary education starts at the age of 16 and lasts for four years. Now the Ministry of Education is gradually changing this secondary education into 3 years. At this school level, students get different

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[11] See http://eacea.ec.europa.eu/education/eurydice/documents/facts_and_figures/education_structures_EN.pdf
[12] See: Hagstofa Islands, http://www.statice.is/, Oct. 2015.

types of education, as vocational education and education are supposed to prepare students for higher education. The vast majority of young people attend this school stage. There are however dropouts, which worries educational authorities. The education is run by the state and is free but students have to buy their books and other learning materials.

The Ministry of Education publishes the national curriculum where teachers and others involved in education at this stage can read about national policy and competences which the education is aiming at.

Students can move to the university level when they have fulfilled the requirements of the university, i.e. passed the high secondary level or have equivalent education. Some departments require students to pass a special test. In 2012 71% of people aged 25-64 have finished top secondary education, which has increased by 8% since 2000 (OECD Education at glance 2014).

There are 3 universities in Iceland, University of Iceland, Reykjavik University and University of Akureyri. There are as well colleges at university level, with a few departments and focusing on special subjects, such as agriculture. The education is free except the students have to pay an enrolment fee, which is rather low.

It is quite common for Icelandic university students to go abroad for further education, such as PhD and master's, but in many subject areas they could get higher degrees from the Icelandic universities.

According to OECD Education at glance 2014 in 2012, 35% of Icelanders aged 25-64 have finished university, 28% of males and 44% of females.

4 Literacy Performance Data for Children and Adolescents

4.1 Performance Data for Primary Children

The performance data for primary children are derived from the IEA´s PIRLS studies (Mullis et.al. 2007).

Inaugurated in 2001 and conducted every 5 years, **PIRLS (Progress in International Reading Literacy Study)** is an assessment of pupils' reading achievement at fourth grade organized by the Association for the Evaluation of Educational Achievement (IEA). The survey was administered in 35 countries in 2001, 45 education systems in 2006, and 50 in 2011. PIRLS assesses different purposes for reading (literary and informational) and different reading processes (retrieve explicit information, make inferences, interpret and integrate ideas and information, examine and evaluate content, language, and textual elements). Both multiple choice and open-ended questions are used.

Iceland took part in PIRLS in 2006 but not in 2011. Therefore no data are available for Iceland in 2011.

For all PIRLS data used in this report, detailed tables with data for all participating countries in ELINET are provided, together with the EU averages (see Appendix D: ELINET PIRLS 2006 Data).

4.1.1 Performance and variation in reading: proportion of low and high performing readers in 2006

In 2006, students in Iceland achieved a mean score of 511 on the PIRLS overall reading scale. This was significantly lower than the EU-21 average of 534. The performance of students in Iceland was relatively stronger when reading for literary purposes than for informational purposes, and when engaging in basic comprehension processes (Retrieve & Infer) compared with more higher-level processes (Interpret, Integrate & Evaluate) (Appendix Tables A.2-A.5).

Table 1: Overall Performance on PIRLS 2006 – Iceland and EU-21 Average

	Overall Reading – Mean Score
Iceland	**510.6**
EU-21 Avg.	534.4

Significant difference (relative to the EU-21 Average) shown in **bold**.

Performance in Iceland on the PIRLS overall scale in 2006 was two points lower than in 2001, however this difference was not statistically significant (Table 2).

Table 2: Trends in Performance 2001-2006 (Overall Scale) – Iceland and EU-14 Average

	2001	2006	Change (2006-2001)
Iceland	512.4	510.6	-1.8
EU-14 Avg.	536.7	535.8	-0.9

Significant differences in **bold.** (EU-14 average refers only to those EU countries that took part in both 2001 and 2006)

In Iceland, 28% of students performed below the Low benchmark on overall reading. This is higher than the EU-21 average of 19% (Table 3). Iceland's standing relative to most EU countries on this indicator is weak (see Appendix Table A.6). In Iceland, only 3% of students achieve at the Advanced Benchmark. This is below the EU-21 average (9%), behind almost all EU countries, with the exception of Belgium (French) (2.7%).

Table 3: Performance by Overall PIRLS Reading Benchmarks 2006 - Percentages of Pupils in Iceland and on Average across the EU-21

	Below 400 Below Low	400-475 Low	475-550 Intermediate	550-625 High	Above 625 Advanced
Iceland	6.8	21.0	43.0	25.8	3.4
EU-21 Avg.	4.4	14.7	37.0	34.8	9.0

Significant differences are shown in **bold.**

The standard deviation for overall reading in Iceland is 68. This is similar to the corresponding EU-21 average of 70 (Table 4). In Iceland, the difference between the 90th and 10th percentiles is 177 points. This is the same as the corresponding EU-21 average of 177.

Table 4: Spread of Achievement – Standard Deviation, 10th, 90th Percentiles, and Difference between 90th and 10th Percentiles on Overall Reading – Iceland and EU-21 Average

	Standard Deviation	10th Percentile	90th Percentile	90th-10th
Iceland	68.1	416.7	594.0	**177.3**
EU-21	69.7	442.1	619.5	**177.4**

Significant differences in **bold**

Despite the spread in achievement between the 10th and 90th percentiles in Iceland (177) being the same as the EU-21 average, the scores of students in Iceland at the 10th and 90th percentiles are lower than the corresponding EU-21 averages. At the 10th and 90th percentiles, students in Iceland achieve 25 points less than on average across the EU-21.

4.1.2 Gaps in reading in 2006

As in every European country, there are achievement gaps between different groups.

Parents' educational achievement

In Iceland, students whose parents have completed a university degree achieved a mean score on the PIRLS overall reading scale of 536, which is 69 points higher than those whose parents have completed some primary, lower secondary or no schooling (467 points) (Table 5). This is below the EU-21 average of 98, indicating a weaker association between parental educational achievement and PIRLS reading performance in Iceland (Figure 1).

Table 5: Percentages of Parents Whose Highest Level of Education was Lower Secondary or Below and Percentage who Finished University or Higher – Iceland and EU-21 Average

Level of Education	Lower Secondary or Below		University or Higher		Difference
	%	Mean	%	Mean	
Iceland	10.7	482.2	45.1	536.3	**54.2**
EU-24	18.1	497.3	25.2	574.1	**76.8**

 Statistically significant mean score differences in **bold**.

Primary language spoken at home different from language used at school

In Iceland, 64% of pupils reported that they always spoke the language of the PIRLS test at home, while 36% reported that they did so sometimes or never (Table 6). A negligible difference was found between those students who reported that they always spoke the language of the test at home and those who did so 'sometimes or never'. This is considerably below the corresponding EU-21 average difference (13) (Figure 1).

Table 6: Percentage of Students who Always Spoke the Language of the PIRLS Test At Home and Percentage who Spoke the Language Sometimes or Never – Iceland and EU-21 Average

Language of Test At Home	Sometimes/Never		Always		Difference
	%	Mean	%	Mean	
Iceland	36.1	513.1	63.9	512.2	-0.9
EU-21	29.6	528.6	70.4	541.7	**13.1**

Statistically significant mean score differences in **bold**.

Gender

In 2006, the gender difference in Iceland on the PIRLS overall reading scale was 19 score points in favour of girls (Table 7). This is higher than the EU Average difference of 15 score points (Figure 2). This indicates a slightly higher association between gender and achievement in Iceland, in favour of girls, compared to on average across the EU. The gender difference in Iceland in 2006 was the same as had been reported in 2001.

Table 7: Trends in Performance by Gender 2001-2006 (Overall Scale) – Iceland and EU-14 Average

	2001			2006		
	Girls	Boys	Girls-Boys	Girls	Boys	Girls-Boys
Iceland	522.0	503.0	**19.0**	520.0	501.2	**18.8**
EU-14 average	545.2	528.3	**17.0**	543.3	528.7	**14.6**

Significant differences in **bold** (EU-14 average refers only to those EU countries that took part in both 2001 and 2006).

Figure 2: Performance Gaps – Gender, Education and Language Spoken at Home

Performance Gaps - Parental Education, Language Spoken at Home and Gender - Germany & EU-24 (PIRLS 2011)
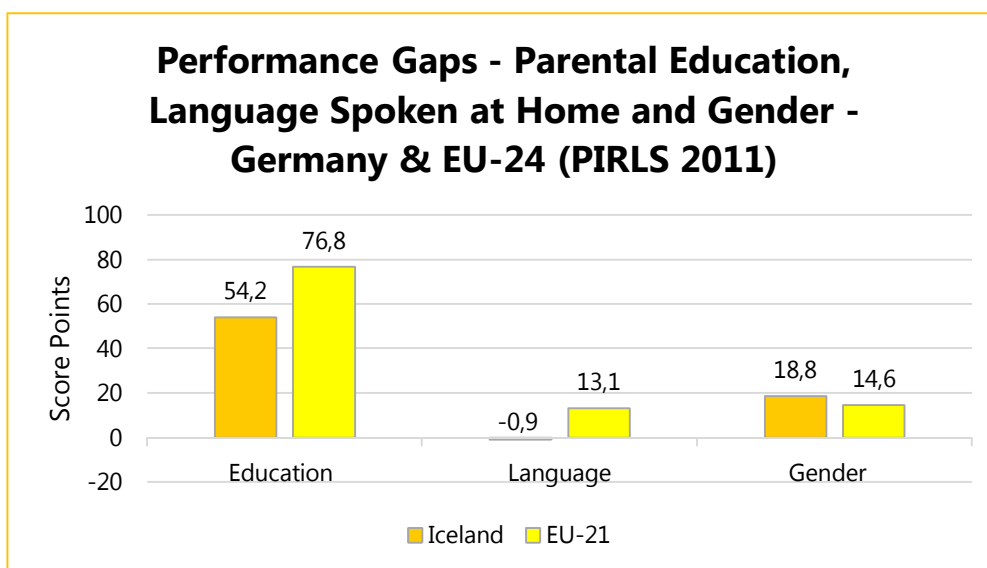
Education: Parent has University vs. Lower Secondary/Primary education; Language: Student speaks language of the test at home always vs. sometimes/never; Gender: Girls vs. boys.

Attitudes to Reading

In Iceland, the difference in mean reading score between students who scored high in *Students' Attitudes Towards Reading* (SATR) and those who scored low was 50 score points. This difference is about the same as the corresponding average across the EU-21 (48 score points) (Table 8). More students on average across the EU-21 (44%) had a high SATR score, compared with Iceland (44%. On the other hand, fewer students in Iceland (7%) than on average across the EU-21 (10%) had low SATR scores

Table 8: Mean Overall Reading Scores of Students in High and Low of the PIRLS Students' Attitudes Towards Reading (SATR) Scale – Iceland and EU-21 Average

SATR	High	Low	Difference
Iceland	533.4	483.5	**49.9**
EU-21	556.0	508.0	**48.0**

Statistically significant mean score differences in **bold**.

A similar, but stronger, association was found between mean reading score and Students' Reading Self-Concept, where students in Iceland who had a high Reading Self-Concept performed significantly better on the overall reading scale than those who had a low Reading Self-Concept (Table 9). The mean score difference between students high and low in Reading Self-Concept was 110 score points, which is higher than the corresponding EU-21 average of 88, indicating a stronger relationship between Reading Self-Concept and performance in Iceland than on average across EU-21 countries. More students in Iceland (58%) than on average across the EU-21 (51%) had a high self-concept. On the other hand, fewer students in Iceland (2%) than on average across the EU-21 (4%) had a low self-concept.

Table 9: Mean Overall Reading Scores of Students who scored High and Low on the PIRLS Reading Self-Concept Scale – Iceland and EU-21 Average

Reading Self-Concept	High	Low	Difference
Iceland	533.6	423.8	**109.9**
EU-21	559.2	471.0	**88.2**

Statistically significant mean score differences in **bold.**

4.2 Performance Data for Adolescents

The performance data are derived from the OECD PISA study.

The Programme for International Student Assessment (PISA) led by OECD[13] **assesses the skills and knowledge of 15-year-old students every three years in all OECD countries and** in a number of partner countries.

Since 2000, PISA has been testing students in reading, mathematics and science. The OECD assessment also collects information on students' backgrounds and on practices, motivational attributes and metacognitive strategies related to reading.

The PISA tests assess different aspects of reading literacy – retrieve information, interpret, reflect and evaluate on texts – and use a variety of texts – continuous (prose) and non-continuous (texts including graphs, tables, maps...). About half of the questions are multiple-choice, the other half open-ended (short or constructed answers). Results are reported on scales defining different levels of proficiency ranging from 1 (low performing) to 6 (high performing). Level 2 is considered as the level all 15 year-olds should reach, and will enable them to participate effectively in society. Since 2015, PISA has been administered on computers only in most participating countries.

The follow-up of students who were assessed by PISA in 2000 as part of the Canadian Youth in Transition Survey has shown that students scoring below Level 2 face a disproportionately higher risk of poor post-secondary participation or low labor-market outcomes at age 19, and even more so at age 21, the latest age for which data from this longitudinal study are currently available. For example, of students who performed below Level 2 in PISA reading in 2000, over 60% did not go on to any post-school education by the age of 21; by contrast, more than half of the students (55%) whose highest level was Level 2 attended college or university (OECD 2010, S. 52).

4.2.1 Performance and variation in reading; proportion of low and high performing readers

Iceland performed 6 score points below the EU-average in PISA 2012 (Table 10). Students from Iceland achieved a mean score in 2012 that was significantly lower than that of 2000, indicating performance has worsened in the interim (Table 11).

Table 10: Reading performance in PISA 2012

	Mean	S.E.
Iceland	**483**	(1.8)
EU-27	489	(0.6)

S. E. = Standard Error; Significant differences between the country and the EU average are shown in **bold**

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[13] See: http://www.pisa.OECD.org.

Table 11: Trends in reading performance - PISA 2000-2012

	2000		2009		2012		Change 2000–2009		Change 2009–2012		Change 2000–2012	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
Iceland	507	(1.5)	500	(1.4)	483	(1.8)	-7	(5.3)	**-18**	(3.5)	**-24**	(6.4)
EU-27	489*	(0.7)	486**	(0.6)	489***	(0.6)	-3*	(5.0)	**5****	(2.7)	3*	(6.0)

Significant differences between assessment cycles in **bold** *EU21 **EU26 ***EU27

In Iceland, the spread of achievement (the difference between the 10th and 90th percentiles) is similar to the corresponding score difference in the EU countries on average (Table 12).

Table 12: Spread of achievement. Difference between 10th and 90th percentiles on the reading scale, all students and by gender – PISA 2012

	Difference 90th–10th for all students		Difference 90th–10th for girls		Difference 90th–10th for boys	
	Score diff.	S.E.	Score diff.	S.E.	Score diff.	S.E.
Iceland	250	(4.8)	221	(6.8)	258	(8.2)
EU-27	251	(1.3)	230	(1.2)	259	(1.6)

Significant differences between the country and EU in **bold**

However, Iceland and the EU countries on average show variations in the proportions of students performing at high and low levels. Iceland has slightly more low-performing students and significantly fewer top-performing students than on average across the EU countries (Table 13).

Table 13: Percentage of low-performing (below level 2) and high-performing (levels 5 and 6) students - PISA 2012

	Below level 2		Levels 5 and 6	
	%	S.E.	%	S.E.
Iceland	21.0	(0.7)	**5,8**	(0.5)
EU-27	19.7	(0.2)	7.0	(0.1)

Significant differences between the country and EU in **bold.**

Between 2000 and 2012, the proportion of low-performing readers has increased significantly in Iceland. Among boys, a significant 10% increase in low-performers was found, while among girls an increase of 4% was observed (Table 14).

Table 14: Trends in the proportion of low-performers (below level 2) in reading, all students, and by gender – PISA 2000-2012

	Proportion of students below level 2 in reading					
	All students		Girls		Boys	
	%	S.E.	%	S.E.	%	S.E.
2000	14.5	(0.7)	8.0	(0.8)	20.1	(1.1)
2009	**16.8**	(0.6)	9.9	(0.8)	**23.8**	(1.1)
2012	**21.0**	(0.7)	12.0	(0.8)	**29.8**	(1.3)

Significant differences between assessment cycles in **bold.**

4.2.2 Gaps in reading performance

Socio-economic status

In Iceland, the gap in reading performance according to the students' socio-economic background is lower than the corresponding gap in the EU countries on average (Table 15). This indicates that the association between economic, social and cultural status and achievement is weaker than on average across the EU.

Table 15: Difference in reading performance between bottom and top national quarters of the PISA index of economic, social and cultural status – PISA 2009

	Difference between bottom and top national quarters of the PISA index of economic, social and cultural status	
	Score diff.	S.E.
Iceland	**64**	(4.2)
EU-26	**93**	(1.1)

Significant differences between in **bold.**

Migration

In Iceland, the percentage of students with an immigrant background is 2.4% lower than on average across the EU countries (Table 16). The gap between native students and those with an immigrant background is 81 score points, this is considerably higher than the corresponding EU-26 average. However, the relatively low percentage of students with an immigrant background limits the inferences which can be drawn from this result.

Table 16: Percentage of students and reading performance by immigrant status – PISA 2009

	Native students			Students with an immigrant background (first- or second-generation)			Difference in reading performance between native and students with an immigrant background	
	Percentage of students	S.E.	Performance on the reading scale	Percentage of students	S.E.	Performance on the reading scale	Score dif.	S.E.
			Mean	S.E.			Mean	S.E.		
Iceland	97.6	(0.2)	504	(1.4)	2.4	(0.2)	423	(12.4)	**81**	(12.5)
EU-26	91.7	(0.02)	490	(0.4)	8.3	(0.02)	452	(6.4)	**38.5**	(6.4)

Significant differences between in **bold**

Language spoken at home

In Iceland, the difference in reading achievement between students who speak the language of the test at home and those who do not is 69 score points, compared to the EU average difference of 54 score points (Table 17). This indicates that the gap between those who speak the test language and those who speak another language at home is wider than on average across the EU. However, the

proportion in Iceland speaking another language (3.1% is lower than on average across the EU-27 (13%).

Table 17: Percentage of students and reading performance by language spoken at home – PISA 2012

| | Speak test language at home | | | | Speak another language at home | | | | Difference in reading according to language spoken at home | |
| | Percentage of students | S.E | Performance on the reading scale | | Percentage of students | S.E. | Performance on the reading scale | | | |
			Mean	S.E.			Mean	S.E.	Score diff.	S.E.
Iceland	96.8	(0.3)	504	(1.4)	3.1	(0.3)	435	(10.7)	**69**	(12.7)
EU-27	86.7	(0.02)	494	(0.4)	13.3	(0.02)	441	(5.4)	**54**	(5.4)

Significant differences between in **bold**

Gender

The gender difference in reading performance in Iceland is the same as that found on average across the participating EU countries (Table 18).

Table 18: Mean reading performance by gender and gender differences – PISA 2009

| | Boys | | Girls | | Difference (B – G) | |
	Mean	S.E.	Mean	S.E.	Score diff.	S.E.
Iceland	478	(2.1)	522	(1.9)	**-44**	(2.8)
EU-26	463	(0.5)	506	(0.4)	**-44**	(0.5)

Significant differences between in **bold**

Performance in reading decreased between 2000 and 2012, by 20 score points among girls and 31 score points among boys (Table 19). These results indicate that performance has declined at a steeper rate among boys than girls. This trend shows some similarities to the corresponding EU averages. Between 2000 and 2012 boys' performance decreased by 5 score points, while the girls' increased by the same value.

Table 19: Trends in reading performance by gender – PISA 2000-2012

| | Iceland | | | | EU-27 | | | |
| | Girls | | Boys | | Girls | | Boys | |
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
2000	528	(2.1)	488	(2.1)	506*	(0.8)	473*	(0.9)
2009	522	(1.9)	478	(2.1)	507**	(0.7)	464**	(0.8)
2012	**508**	(2.6)	**457**	(2.4)	511***	(0.6)	468***	(0.8)

Significant differences between assessment cycles in **bold** *EU21 **EU26 ***EU27

The gaps for Iceland and the EU-27 on socio-econimic status, migration, language and gender are shown in Figure 3.

Figure 3: Performance Gaps – Gender, Education and Language Spoken at Home – PISA 2009, 2012

Performance Gaps - Socio-economic Status (SES), Migration, Language Spoken at Home and Gender - Iceland & EU Average (PISA 2009, 2012)
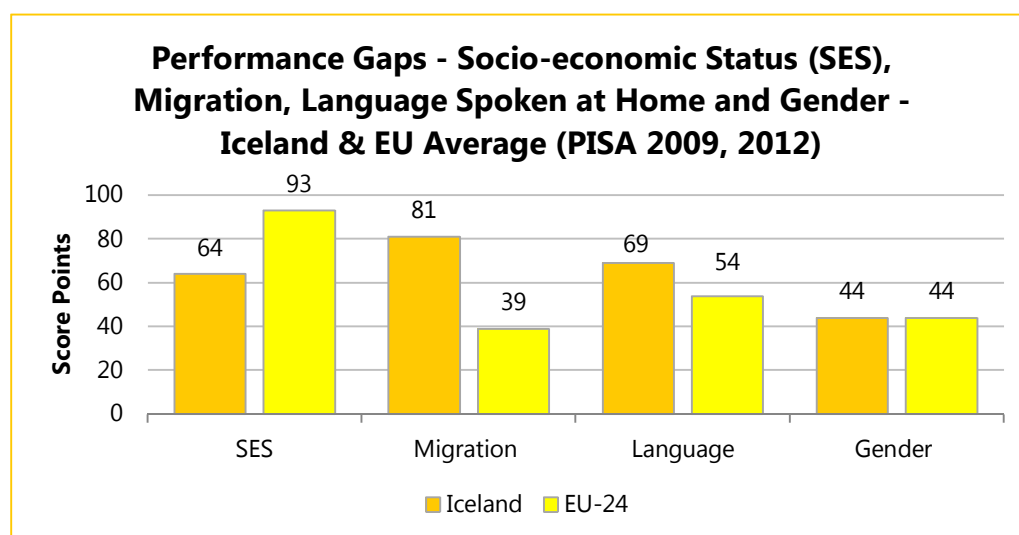
SES: Top vs. Bottom Quartiles of PISA ESCS scale; Migration: Native vs. First or Second Generation Immigrant; Language: Student speaks language of the test at home vs. other language; Gender: Girls vs. boys.

Engagement and metacognition

In Iceland, there is a gap of 117 score points between the students reporting being highly engaged (top quarter) and poorly engaged (bottom quarter) in reading (Table 20). Not surprisingly, those students who reported being highly engaged in reading performed better in the PISA test. The association between reading engagement and performance was found to be stronger in Iceland than on average across the EU countries.

Table 20: Mean reading scores between students poorly engaged and highly engaged in reading – PISA 2009

	Bottom quarter		Top quarter		Difference
	Mean	S.E.	Mean	S.E.	
Iceland	447	(2.5)	563	(2.4)	**117**
EU-26	444	(0.8)	543	(0.8)	**99**

Significant differences between in **bold.**

In Iceland, there is a gap of 82 score points between the students who know which strategies are the most efficient to understand and remember a text, and those who have a limited knowledge of these metacognitive activities. On average in the EU, the gap is somewhat higher (98 score points), indicating understanding and remembering strategies may be slightly less influential in reading performance in Iceland.

Table 21: Mean reading scores between students in low and top quarters of understanding and remembering strategies - PISA 2009

	Low quarter		Top quarter		Difference
	Mean	S.E.	Mean	S.E.	
Iceland	461	(2.4)	543	(3.0)	**82**
EU-26	433	(0.8)	531	(0.8)	**98**

Significant differences between in **bold.**

However, the association between students' ability to summarise a text and performance appears to be somewhat stronger in Iceland than across the participating EU countries. In Iceland the difference between those students who are most and least efficient at summarising a text is 99 score points, compared to the EU average of 90 score points.

Table 22: Mean reading scores between students in low and top quarters of summarizing strategies – PISA 2009

	Low quarter		Top quarter		Difference
	Mean	S.E.	Mean	S.E.	
Iceland	442	(2.3)	541	(2.4)	**99**
EU-26	440	(0.8)	530	(0.7)	**90**

Significant differences between in **bold**

5 Policy areas

The High Level Group of Experts on Literacy (2012, p. 38) recommended that all EU Member States should focus on the following areas as they craft their own literacy solutions:

1) Creating a more literate environment
2) Improving the quality of teaching
3) Increasing participation, inclusion and equity (the term "equity" was added by ELINET).

The following parts refer to these three key issues, however some overlapping may occur.

In order to achieve as much comparability as possible across countries, quantitative and qualitative indicators for which information from international data are available are reported. Appendix A provides more information on criteria for the choice of indicators and the chosen indicators for the pre-primary age group. For each of these indicators Appendix B contains a table with numbers of the European countries participating in ELINET. Appendix C has been created using the international database for PIRLS 2011 – and contains separate tables for all information reported. If countries did not participate in PIRLS 2011, data for PIRLS 2006 are referred to. Appendix D offers this information for the PIRLS 2006 data.

5.1 Creating a literate environment for children and adolescents

The EU High Level Group of Experts on Literacy stated the following in relation to **creating a more literate environment**:

> "Creating a more literate environment will help stimulate a culture of reading, i.e. where **reading for pleasure** is seen as the norm for all children and adults. Such a culture will fuel reading motivation and reading achievement: people who like to read, read more. Because they read more, they read better, and because they read better they read more: a virtuous circle which benefits individuals, families and society as a whole." (HLG report 2012, p. 41)

Parents play a central role in children's emergent literacy development. They are the first teachers, and shape children's language and communication abilities and attitudes to reading by being good reading role models, providing reading materials, and reading to the child.

Schools play an important role in offering a literate environment for students. Schools may foster reading motivation and reading for pleasure by establishing school and classroom libraries, offering a wide variety of books and other reading material in different genres, providing sheltered and comfortable spaces for individual reading activities (like reading clubs), and not forcing children into having to express and exchange their individual (intimate) reading experiences.

However, schools do not have sole responsibility. A broad range of actors may shape literacy motivation, from parents and peers to libraries. Parents may provide role models and influence children's attitudes towards literacy practices. Also, libraries have a vital role if they offer free books, especially for families who cannot afford to buy books. Regional or national campaigns may inspire children and their parents to engage in reading activities. (Cf. ELINET Country Reports, Frame of Reference, pp. 29ff.)

Adolescence is a crucial phase in life where young people develop long-term *identities and self-concepts* which include media preferences and practices (*media identity*). From this perspective, it is of great importance that families, schools and communities offer young people rich opportunities to encounter the *culture of reading* and develop a stable *self-concept as a reader/writer* and member of a literary culture. This includes access to a broad variety of reading materials (in print and electronic forms) and stimulating literate environments in and outside of schools; it also includes opportunities to get actively involved in engaging with texts, and communicating, reflecting on and exchanging ideas about texts with peers and ´competent others´, such as teachers or parents (Ibid., pp. 45f) .

5.1.1 Providing a literate environment at home

The **home learning environment**, particularly in the first three years, is extremely important (Brooks et al. 2012). It determines the quantity and quality of interactions between the infant and the primary caregivers, who are the most powerful agents of language development, both receptive and expressive, in the context of everyday activities and experiences. During these years, experience-dependent creation of synapses is maximal. We know that the more words the children are exposed to, the more they can learn. Caregiver-child relations in their turn strongly influence the ability to learn, by influencing self-esteem, general knowledge and motivation.

Several indicators are used to describe the literate home environment of very young children in this report, drawing on data from international sources (PIRLS) that are comparable across countries. It is important to acknowledge that some of the PIRLS data are self-reported and may be biased by social desirability and the ways in which questions are interpreted by parents within countries.

Parental attitudes to reading

In PIRLS 2006, parents indicated their agreement with a number of statements about their own attitudes to reading, including "I read only if I have to", "I like talking about books with other people", "I like to spend my spare time reading", "I read only if I need information", and "reading is an important activity in my home". On the resulting Parent Attitudes Towards Reading (PATR) scale, 63.7% of students in Iceland had parents with a 'high' score on the scale, while 4.9% had a 'low' score. The achievement of students whose parents had a high score was 526.1, while, for students whose parents had a low score, it was 486.0. Hence, there is a sizeable gap (40 points) between students of parents with high and low scores. On average across EU countries, where 58% of students had parents with a high score, and 7% had parents with a low score, the difference was 44 points (Appendix D, Table G3).

Home Educational Resources

On an index of home educational resources in PIRLS 2006, 24% of students in Iceland were categorised as having high resources. The remainder had 'medium' resource, with no students having 'low' resources (Table 23). On average across the EU-21, 13% had high educational resources, and 5% had low resources.

Table 23: Percentages of Pupils Who Scored High and Low on Index of Home Education Resources, and Corresponding Mean Overall Reading Scores – Iceland and EU-21 Average

Index of Home Education Resources	Low		High		Difference (High-Low)
	%	Mean	%	Mean	
Iceland*	0.0	--	24	550	--
EU-21	5	466	13	583	**117**

*The item response rate is below 85 percent. *No students were found to be in the low category for Iceland

Statistically significant mean score differences in **bold**.

Number of books in the home

In Iceland, students with few/no books at home achieved a mean score that was 61 points lower than the mean score of students who reported having many books at home. This is slightly less than the average difference across the participating EU countries (Table 23). This indicates that students in Iceland with few/no books at home perform significantly worse than those students with many books at home, although this association is slightly weaker in Iceland than the EU average. However, only 4% of students in Iceland reported to have fewer than 10 books at home, which is below the EU average of 11%.

Table 24: Percentages of Students with Many or Few/None Books in Students' Homes and Corresponding Mean Overall Reading Scores – Iceland and EU-21 Average

Books in Students' Homes	None or Few (<10)		Many (200+)		Difference (Many – None/Few)
	%	Mean	%	Mean	
Iceland	4.0	462.7	19.0	524.0	**61.3**
EU-21	11.0	483.9	16.0	559.9	**76.0**

Statistically significant mean score differences in **bold**.

Early Literacy Activity Scale

PIRLS 2006 reports the percentages of students whose parents (often, never or almost never) engaged in literacy-relevant activities with them before the beginning of primary school (Appendix D, Table G4). Ten activities are considered: reading books, telling stories, singing songs, playing with alphabet toys, talking about things done, talking about things read, playing word games, writing letters or words, reading signs and labels aloud and visiting the library.

The data for Iceland are composite scores for all these activities below (for an overview of European countries see table G4 in Appendix D). In Iceland, 56.0% of students were categorised as high on the Early Literacy Activity Scale, just below the corresponding EU-21 average of 59.7%. Similar percentages in Iceland (9.1%) and on average across the EU-21 were categorised 'low' on the Early Literacy Activity Scale.

The Early Literacy Activity Scale correlates with later reading performance in grade 4. The average reading score in Grade 4 of students in Iceland who often engaged in these activities with their parents before the beginning of primary school (i.e., those categorised as 'high') was 527.0, as compared with 506.0 for pupils who were categorised as 'medium', and 492.1 for those categorised as 'low'. These

data demonstrate an association between literacy-related activities in early childhood and achievement in grade 4.

While the Early Literacy Activity Index gives overall categorical scales, it is of interest to look at single items. If only the category "often" is considered, the percentages of students in Iceland whose parents engaged in literacy-related activities with them before the beginning of primary compared with the European average:

- Read books to them often: 79.2% (European average 56.4 %)
- Told stories to them often: 40.7% (European average 51.2%)
- Sang songs to them often: 59.4% (European average 48.3%)
- Played word games with them often: 19.4% (European average 21.0%).
  (For more details and an overview of European countries see Appendix D).

> **Challenge:** Since reading to the child is a predictor of future literacy achievement it is a matter of concern that there are differences between parents. There is a need for programmes **to raise awareness of all parents** that literacy is a key to learning and life chances and that the basis for good literacy achievement is laid in early childhood. In particular there is a need for more family literacy programmes with **a focus on supporting migrant parents** in understanding and fostering the literacy development of their children.

5.1.2 Providing a literate environment in school

> **Challenge/Need for Action:** In Iceland according PISA 2009, 63% read for pleasure and 37% do not, which is around the OECD average. 48% boys don´t or very seldom read for pleasure, but 28% of girls do. It could be difficult to see what exactly these figures say and how the students understand "reading for pleasure". Many read texts on screen. Do they call this reading for pleasure?
>
> We know from the PISA and other studies that there is a high correlation between reading for pleasure and reading performance. Therefore, schools, libraries, families and communities should do more in order to support reading motivation, reading habits and a stable self-concept as a reader among adolescents, not least boys.

Availability and use of classroom library

There are school libraries in most schools in Iceland, large and small. The bigger schools have school librarians. The libraries are widely used not only for reading for pleasure, but many of them are used as media for learning the particular subjects in collaboration between school librarians and teachers. It differs greatly how well school libraries are equipped with books and other resources. Quite a lot of small schools are in the country and therefore their libraries have fewer books than the libraries in bigger schools. In some places the public library is very close to the school and there it serves as the school library as well.

Classroom libraries are common, especially in the first years of the primary school. It is common for the children to have some time to read independently and choose books from the bookshelves in the classroom. They visit the school library, too. There are many fewer books found in the secondary classrooms and the students use the school library instead.

> **Challenge:** It is thought of crucial importance for children to get to know and use libraries. It not just helps with learning the school subjects but is of importance for developing readers. It is therefore

necessary to enable the libraries to buy books and other resources and update their stock. It is as well important to find ways of helping the small schools to have a good variety of books, maybe through borrowing from other libraries.

5.1.3 Providing a digital environment

Digital environment of primary students

Many but not all classrooms have at least one computer which the teachers use, for instance when working with students by using a projector. An example of this is when the students as a group make up a story, or suggest answers to a question which is discussed by a group. Some school districts are providing schools with quite a lot of tablets. These are schools at compulsory level, primary and secondary. There are also courses on how to use tablets in teaching and in some areas they have advisers supporting teachers. This is however not common yet. A study on practice in Icelandic schools (Óskarsdóttir, 2014. pp 277-319) provides information on the situation. Computers are in many schools mostly used in ICT lessons, which are based on the national curriculum (2013). Teachers widely use computers when preparing teaching, but in their teaching they don´t use it very much. School librarians say computers are used for searching for information in the library but it seems not very much to be the case in the classroom. The reason could be lack of computers.

Digital environment of secondary students

Digital devices are in all schools and classrooms. In upper secondary schools, almost all students have their own laptops. The use of digital devices very much depends on the individual teacher and his/her interest and the school community as a whole. Tablets are also used in some schools and growing. It is however uncertain what methods or pedagogy is used. Some local authorities are providing tablets to both primary and lower secondary schools (compulsory education) and some are running courses and providing advisers for using this media in teaching. There was no information found on use of computers in the teaching of 16-19 years students (top secondary).

Challenge: Computers are widely used in the Icelandic society. Around 95% of the population have access to a computer and most of them are connected to the internet. There are different papers on policy of ICT in education, but there is a need for more accuracy in transferring the policy into teaching and learning. There is a need for more devices, such as computers, and good internet connection, advice and in-service education for teachers, and wider use of ICT for independent learning.

5.1.4 The role of public libraries in reading promotion

Public libraries are an important agent in reading promotion. Cooperation between schools and libraries is common, and school libraries are very important and much used in most schools both as traditional libraries and resource centres but also as part of the school and its work, a place to learn new things. Often school libraries serve as a place where digital devices are used.

The primary and lower secondary school is run by the local authorities and therefore it depends on each community, or local authority, how the situation in the school is. The situation is very different as there are many small communities and schools with very few students. Cooperation between schools, families and libraries is common in most places. In some places huge effort has been put into promoting literacy by cooperating with families and others.

Cooperation between secondary schools, families, libraries and other agents in literacy promotion for adolescents

> **Challenge:** There is no information available on cooperation between secondary schools, families, libraries and other agents in literacy promotion, but lower secondary schools follow what is done in general in compulsory education and mentioned in this report. It is however of importance to promote literacy in secondary education more widely. Most students are using their computers and there they use reading and writing. Most of the texts seems to be short and often just a few lines of information. In secondary they are reading longer texts and for instance literature. It is important to motivate all reading and especially develop the students as independent readers and teach them to use different methods of reading for understanding. It is also important to inform their families on the importance of literacy and maybe the schools could run short courses for families where they could learn some of the important methods for reading and writing that their teenagers are learning.

5.1.5 Improving literate environments for children and adolescents: Programmes, initiatives and examples

Some communities, school districts, schools and libraries have made brochures or booklets to improve the literate environment and promote children's and adolescent's literacy, as well as providing parents and teachers with information on literacy development. Íslenska lestrarfélagið, Icelandic Reading Association, has published and distributed two brochures for parents on the importance of reading and improving literacy, i.e. *Read to me please* and *It is fun to read*. They proved to be very popular and are distributed to schools and Health care centres all over the country.

Some schools have asked parents and others to donate children's books that they are no longer using to their school and classroom libraries.

It is very common to hold reading campaigns in individual schools, school districts or even all over the country. Sometimes schools and classrooms "collect" read books and it ends with celebrating the classroom or school who read the most books or even pages.

In 2014 an interesting programme was held nationwide, *Allir lesa* (All are reading). People of all ages were invited to send to a website the title of a book they have read. It was well advertised on TV and other media available and became popular. The outcome was published at the end of the program and people discussed for instance which books were most popular etc. This is the only program in Iceland which was for all, children as well as adults.

The association of writers are playing a very important role in motivating students (and adults) to read. They are visiting schools and reading from their books, not least the books which are coming out. It is popular and teachers say the result is very positive.

The big reading aloud competition is held every year in most 12 year-olds' classrooms in the country. The children practise reading aloud and in every local area there is a gathering where the children who have been chosen as the winner of their school read for many people gathering to listen. In the end one winner is chosen as the best reader.

The Ministry of Education and Culture is promoting literacy with the aim of getting better results of reading competence. The minister of education and culture is visiting most areas in the country to motivate teachers, parents and local authority to do all that is needed to improve literacy.

Public libraries and school libraries are constantly trying to interest people of all ages in reading. There are for instance meetings with writers or exhibitions, discussion groups and some interesting things like asking children to read to dogs.

Organisations such as the Associations of publishers, book sellers, writers and some official institutions have supported campaigns for literacy.

Fostering digital literacy in and outside schools

The Icelandic nation is well aware of the importance of being literate. There are discussions in media, the work place and many homes on books, what is written in the media, and what is published in Iceland and even in other countries, especially if there are Icelandic authors. Many titles are published every year and a book is very often given as Christmas present, both to children and adults. Less reading in the society is however often discussed, and it seems to be that people, not least the younger generations, borrow not as many books from libraries on average than before. Many families have a lot of books in their homes and reading books in digital format seems to be growing. Schools are presenting literature and the students are supposed to read both classics and new literature. Every year there are discussions, "propaganda" and information given on literacy, but as can be seen, Icelandic schools, families and authorities could do better.

5.2 Improving the quality of teaching

To improve the quality of teaching, important aspects need to be considered:

- The quality of preschool
- coherent literacy curricula
- high-quality reading instruction,
- early identification of and support for struggling literacy learners
- highly qualified teachers (cf. Frame of Reference for ELINET Country Reports).

Especially crucial is the quality of teaching and of teachers, as the McKinsey report "How the world best performing school systems come out on top" (McKinsey et al. 2007) states: "The quality of an education system cannot exceed the quality of its teachers" (McKinsey et al. 2007).

5.2.1 Quality of preschool

While early childhood education has long been neglected as a public issue, nowadays early childhood education and care (ECEC) has been recognised as important for "better child well-being and learning outcomes as a foundation for lifelong learning; more equitable child outcomes and reduction of poverty; increased intergenerational social mobility; more female labor market participation; increased fertility rates; and better social and economic development for the society at large" (OECD 2012 *Starting Strong III,* p. 9). In all European countries, pre-primary education is an important part of political reflection and action.

The EU High Level Group of Experts on Literacy stated:

> "Increasing investment in high-quality ECEC is one of the best investments Member States can make in Europe's future human capital. 'High quality' means highly-qualified staff and a curriculum focused on language development through play with an emphasis on language, psychomotor and social development, and emerging literacy skills, building on children's natural developmental stages." (High Level Group Report, 2012a, p. 59).

While there is no international or Europe-wide agreed concept of ECEC quality, there is agreement that quality is a complex concept and has different dimensions which are interrelated. In this report we focus on *structural quality* which refers to characteristics of the whole system, e.g. the financing of pre-primary education, the relation of staff to children, regulations for the qualifications and training of the staff, and the design of the curriculum. There are some data concerning structural quality, but there is a lack of research and data about process quality, practices in ECEC institutions, the relation between children and teachers, and what children actually experience in their institutions and programs.

Annual expenditure on pre-primary education

Source: Eurostat (2014, Figure D3).

No data are available for Iceland; for an overview of European countries see table D1 in Appendix B

Ratio of children to teachers in pre-primary school

According to Education at a Glance 2014 (OECD 2014, p. 451) the student/teacher ratio in pre-primary schools for children at the age of four in Iceland is 5.8 to one. For the other European countries, the OECD (2014 p.324) provides information about the student/teacher ratio in pre-primary schools (for an overview of European countries see table D2 in Appendix B).

Percentage of males among preschool teachers (taken from early childhood doc)

No data are available for Iceland. (For an overview of European countries see table D3 in Appendix B.)

Preschool teachers' qualifications (taken from early childhood doc)

The minimum required level to become a qualified teacher is Master level (ISCED 5). Length of training is 5 years (European Commission/ EACEA/Eurydice/Eurostat 2014, p. 101).

> **Challenge:** In 2011 the Ministry of Education and Culture published a new curriculum plan for kindergarten schools. Literacy is one of the main fundamental pillars of the curriculum. Some teachers of primary children say that they now get better prepared children from the kindergarten when it comes to some of the fundaments of literacy as knowledge (emergent literacy). Kindergarten schools are different from one area to the next, and the number of educated teachers varies a lot. It is a challenge for local education authorities to get a higher proportion of educated staff and provide good in-service education which is both theoretical and practical. It is as well a challenge to create good information on literacy for parents and help them to learn and understand their important role in their children's homes.

Preschool language and literacy curriculum

The design of the kindergarten curriculum is an important aspect of quality. Therefore it is included in this section and not in the next section "Literacy curricula in schools". It also takes into consideration that young children have learning needs than are sometimes different to those of school children. Pre-school programmes should focus on developing children's emergent literacy skills through playful experience rather than systematic training in phonics or teaching the alphabet. There is no evidence that systematic instruction of reading in preschool has any benefit for future learning (Suggate 2013).

Fostering the development of emergent literacy skills through playful activities is an important function of pre-school institutions, providing a basis for formal literacy instruction in primary school.

We consider the following to be key components: oral language development, including vocabulary learning and grammar, familiarisation with the language of books (e.g. through hearing stories read and told), being engaged and motivated in literacy-related activities, experiencing a literacy-rich environment, developing concepts of print, and language awareness (for more information see the frame text of country reports).

Engaging and motivating children in literacy-related activities

According to the Icelandic National Curriculum Guide for Preschools (2011), literacy is incorporated in the context of communication skills. Under this notion, children should be given opportunities to develop literacy in its broad sense, express themselves and communicate, use various materials to acquire information and understand the functions of written language (Ministry of Education, Science and Culture 2011, p. 42-43).

Providing a literacy-rich environment

The learning environment constitutes one fundamental factor in children's learning and development. As for literacy the Icelandic National Curriculum Guide for Preschools (2011) anticipates: a) the provision of various materials in order for children to obtain information and express themselves and b) children's acquaintance with various literacy genres, such as stories, poems and fairy tales (Ministry of Education, Science and Culture 2011, p.34, 43).

Concepts of print

Children should have the opportunities to know the direction of reading and to be involved in reading and writing activities (Eurydice 2011, p. 55).

Language awareness

Children should play with language, use nonsense words and rhyming, break down speech into small units and blend syllables or sounds in sounds (Eurydice 2011, 55).

Improving early language and literacy screening and training

Assessment and evaluation are strongly emphasized in the national curriculum for kindergarten. Pupils, parents, teachers and other personnel have to be able to understand the outcome of assessment in a similar way. This is said to be a prerequisite for information to be used to improve learning and teaching. Teachers are asked to use different assessment methods and they must be reliable, impartial, honest and fair.

Screening tests are available for testing important factors as phonic awareness, but there is a need for more and general support for teachers.

5.2.2 Literacy curricula in schools

Curricula provide a normative framework for teachers and a guideline for their teaching aims, methods, materials and activities. However one should keep in mind that there is a difference between the intended curriculum, as outlined in official documents, and the implemented curriculum – what actually happens in the schools.

Primary schools curricula

Among the European countries participating in PIRLS 2006, only two countries had a national curriculum specifically for reading, namely Netherland and Sweden (also Canada and Russian Federation). In all other countries, including Iceland, reading usually is taught as part of the national language curriculum that also includes writing and other communication skills (Kennedy et al., 2007, table 4, p. 14).

Reading and writing are taught as part of Icelandic. The National Curriculum Guide for Icelandic outlines final objectives in reading and writing that should be reached by the end of compulsory school (Kennedy et al. 2007, p. 179).

In a new curriculum (2013) literacy is now one fundamental pillar for learning and teaching. Literacy is much discussed in the education sector and most schools have written their school curriculum based on the new national curriculum. Literacy is now more in the frontline of teaching and although it is seen as part of the mother tongue teaching it could be seen as a subject on teaching plans called literacy and sometimes given title based on the material used or the teaching methods, as "Way to literacy" or "Beginning literacy".

Contents of literacy curricula

The Eurydice report "Teaching Reading in Europe" offers a broad range of information about the content of reading literacy curricula and official guidelines (European Commission/EACEA/ Eurydice 2011). In order not to duplicate this work only two aspects were addressed in the ELINET country reports whose importance might not yet be acknowledged and therefore might be missing in the literacy curricula and official guidelines: explicit instruction of grapheme-phoneme correspondences (phonics) and explicit teaching of reading strategies.

Explicit instruction of grapheme-phoneme correspondences

While the former curriculum in Iceland included one of six indicators of knowledge of word identification/recognition (enriching vocabulary) and no indicators for knowledge of phonics during primary years (European Commission/EACEA/Eurydice 2011, Figure 1.2, p. 56), in the new curriculum from 2013 grapheme-phoneme correspondence is thought to be important as well as using vocabulary, knowledge and experience for understanding a text.

Teaching of reading strategies

While literacy instruction in the early years is more focused on code-based skills, in later stages it is important to develop and foster a wide range of comprehension strategies with all children. Explicit teaching of comprehension strategies is effective for improving reading comprehension among readers with different levels of ability. These strategies include:

- Drawing inferences or interpretations while reading text and graphic data
- Summarising text and focusing selectively on the most important information
- Making connections between different parts of a text
- Using background knowledge
- Checking/monitoring own comprehension
- Constructing visual representations
- Pupils reflecting on their own reading process (Eurydice 2011, p. 55).

According to the analysis of steering documents by Eurydice (2011) the following reading strategies are mentioned in literacy curricula in Iceland: Summarising text, making connections between parts of a text, constructing visual representations. Not mentioned are: Drawing inferences, Using background knowledge, Monitoring own comprehension, Pupils reflect on own reading process. However in the new curriculum from 2013 the students are supposed to learn and use reading strategies, such as to analyse and discuss the main points and topics of texts and use different methods for reading and understanding texts. The curriculum puts weight on developing readers who are able and motivated to choose material for reading for pleasure and present to others the effects the text has had on them.

Literacy curricula in secondary schools

In Iceland there are two curriculum plans published, one for primary and lower secondary schools (age 6-15) and one for upper secondary (age 16-19). There are vocational schools included as well as schools preparing students for higher education.

A new curriculum for upper secondary was published 2011 (The Icelandic Curriculum Guide for Upper Secondary Schools, English wersion and for primary and lower secondary in 2013 (The Icelandic Curriculum Guide for Compulsory Schools, English wersion). The policy in these two curriculum plans is based on six fundamental pillars, i.e. literacy, sustainability, health and welfare, democracy and human rights, equality and creativity. The fundamental pillars refer to social, cultural, environmental and ecological literacy „so that children and youth may develop mentally and physically, thrive in society and cooperate with others the fundamental pillars also refer to a vision of the future, ability and will to influence and be active in maintaining society, change it and develop". The same pillars are for both curriculum plans. Literacy is a very central concept in the curriculum for secondary education and it is supposed to be an important part of education across the curriculum. This can be seen in competence descriptions in subjects like foreign languages and natural sciences.

Reading and writing, i.e. literacy education, is under the mother tongue chapter in lower secondary but is supposed to be woven into all subjects in secondary education for 16-19 years of age (as well as for lower secondary). This could be seen in higher secondary in the definition on concepts, i.e. knowledge, skill, and competence. There are all sorts of competences listed, amongst others skills and competences in literacy, as well as advanced literacy

In the curriculum for lower secondary, each subject is supposed to have certain amount of time per week. Icelandic (literacy instruction inclusive) has 18% of total time per week. It is not possible to see how much time is for literacy in Icelandic or other subjects. In secondary schools for students aged 16-19 it is not possible to see the amount of time for literacy, there each subject course is allocated a certain amount of time.

Challenge: The new curriculum in Iceland for primary and secondary education is based on competences instead of aims. It is of importance to implement this new approach into the school system.

The literacy instruction must lead to the development of independent readers, who can develop their competences in life after school. The independent reader must be able to choose material for reading according to their needs or interests and, in this way, increase knowledge and pleasure. The reader must be able to use what they read for sharing (writing) and discussion.

Parents must get more information on literacy and teaching of reading and writing, and how they can motivate and support their children.

Teacher education must go with the times and provide strong professional and practical education in literacy, not only in language courses but in other subjects, too, not only for teaching in primary, but for students in secondary school, too.

Icelandic authorities must support stronger and more fruitful literacy education for teachers, and provide schools with what they need for literacy education. One of the most crucial things is to build up strong and free in-service education for teachers.

Authorities must support research in the field of literacy, and universities and other institutions involved should publish and interpret their findings and make it usable for education in schools.

Around 20% of young people leaving compulsory school do not have the competence in reading which is thought to be acceptable in our society. It is very important to improve the literacy competence of this group, and run courses for adults dealing with reading difficulties.

5.2.3 Reading Instruction

While most literacy researchers have clear concepts about effective literacy instruction, we do not know much about what is actually going on in classrooms in Iceland or other European countries. In order to describe the practice of reading instruction we would need extensive observational studies. There is a noteworthy shortage of data on actual reading instruction in school. Only PIRLS offer some data for primary schools, albeit based on self-reports by teachers (PIRLS) which might not be valid and may be biased by social desirability.

In PIRLS 2006, fourth-grade reading teachers reported about instructional materials, strategies and activities. In a latent class analysis Lankes and Carstensen (2007) identified 5 types of instruction:

- Type 1: Teacher-directed instruction in the whole class without individual support
- Type 2: Individualised child-centered instruction, seldom whole-class instruction
- Type 3: Whole-class instruction with little cognitive stimulation and little variety in methods, without individual support
- Type 4: Variety of methods with high individual support
- Type 5: Highly stimulating whole-class instruction with didactic materials.

There were significant differences between countries concerning these types of instruction (Lankes and Carstensen 2007). Also, the analysis of PIRLS 2011 teacher self-reports revealed differences between the approaches to reading instruction in European countries (Mullis et al. 2012a, Tarelli et al. 2012). However Iceland was not part of this study.

In PIRLS 2006, principals and teachers provided some information on language and reading instruction. Concerning the **instructional time spent on language and reading,** the following results are of interest (see Kennedy et al., 2007, Exhibit 5.10):

- The intended time allocated to instruction was 27 hours per week, while teachers reported that 28 hours were allocated.
- The intended allocation to language and reading instruction was 22% of total instructional time per week, while teachers reported allocating 30%.
- Teachers reported spending 16% of instructional time on reading (though this is also included in the estimate for language and reading instruction).

In PIRLS 2006, teachers in a small number of European countries indicated that they allocated a greater percentage of instructional time to language than teachers in Iceland. These included Austria (38%, France (38%), Norway (36%) and Bulgaria (33%).

No comparable data are available for secondary schools.

Activities of teachers to develop student's comprehension skills and to engage them

As pointed out above (4.2.2), among adolescents there are remarkable gaps in reading achievement between students with good knowledge of reading strategies and those who have a limited knowledge of strategies, including metacognitive ones. There is a similar gap concerning the level of engagement. In view of these results it is of interest to look at the reports of teachers concerning reading strategies and engagement.

In PIRLS teachers were asked which activities they use to develop students' reading comprehension skills. These are the figures based on the report of reading teachers in PIRLS 2006:

Percent of students whose teachers ask them to do the following daily or almost daily:

- Identify main ideas of what they had read: 11.8% (EU avg. = 49.3%)
- Explain their support or understanding of what they have read: 17.7% (EU avg. = 54.7%)
- Compare texts with experiences they have had: 5.2% (EU avg. = 27.0%)
- Compare texts with other things they have read: 0.5% (EU avg. = 16.5%)
- Make predictions about what will happen next in the text: 2.6% (EU avg. = 15.4%)
- Make generalisations and draw inferences: 4.0% (EU avg. = 29.5%)
- Describe the style or structure of the text: 1.4% (EU avg. = 15.2%)
  Source: ELINET Appendix D, Table H.1.

Teachers in Iceland – at least about 10 years ago - appeared to utilise literacy strategies much less frequently than on average across the participating EU countries. The percentage of students in Iceland engaged in these reading comprehension strategies is less than half of the corresponding EU-averages. Some strategies, in particular comparing texts with other things they have read, describing the style or structure of the text and making predictions about what will happen next in the text, are practised by extremely low proportions of students. Overall, relatively few students in Iceland were engaged in reading comprehension strategies by their teachers on a daily or almost daily basis.

It is well documented in research studies that explicit teaching of comprehension strategies may improve reading comprehension among readers with different levels of ability. While there are no data available for secondary schools, some PISA data also suggest that there is a need for explicit instruction of reading strategies: As reported above, in Iceland, there is a gap of 82 score points between the students who know which strategies are the most efficient to understand and remember a text, and those who have a limited knowledge of these metacognitive activities. This difference reflects the close relation between reading proficiency and awareness of efficient reading.

Challenge: Teachers in Iceland appear to utilise literacy strategies much less frequently than on average across the participating EU countries. It is important to get more information on how teaching for comprehension is carried out in schools. Teacher education (pre-service and in-service) is of crucial importance for improving the situation and help schools and individual teachers to improve their teaching for comprehension.

Digital literacy part of the curriculum for primary and secondary schools

In the National Curriculum for primary and secondary education there are special chapters with competence descriptions on use of ICT in schools and what competences students shall gain from the education. There are competences which could be grouped under the use of digital devices, as well as important skills which are under literacy, such as being able to search for information and use critical reading. Being able to collect references suitable for the topic they are working on, being able to use interactive learning material and being able to use ICT when organising and writing text are also included. ICT is supposed to be included into every subject and used as a way of learning where critical reading and critical thinking is an important part.

5.2.4 Early identification of and support for struggling literacy learners

Effective assessment tools upon entry to primary school will help teachers identify literacy skills from the very beginning of formal education. Regular formative assessment throughout primary school will ensure that literacy problems do not continue to go unrecognised, and that students receive the support they need through education that matches their learning needs. This should prevent children leaving school with unrecognised literacy problems (EU High Level Group of Experts on Literacy 2012a, p. 67).

Standards as basis of assessment of reading difficulties

Standards of reading achievement allowing teachers, parents and school leaders to understand the rate of progress of learners and to identify individual strengths and needs should be integrated in the curriculum and should be the basis of assessments. The High Level Group pointed out that there is a need to establish minimal standards of literacy achievement (benchmarks) for each grade, and to administer regular tests based on these standards, to allow for identification of struggling readers/writers (EU High Level Group of Experts on Literacy 2012a, p. 43).

All EU countries have defined learning objectives in reading to be reached at the end of primary and secondary education cycles. However, only a few Member States have detailed standards (benchmarks) at each grade (school year) which form the basis of assessments allowing for early identification of reading difficulties and subsequent allocation of attention and resources. These standard-based assessments allow teachers and school leaders to judge children's progress and to target additional reading support.

In the new National Curriculum there is a clear description of assessment and standards. The main objective of assessment in Icelandic and Icelandic Sign Language is to examine the pupils' status, use the outcome to guide them through their studies and adjust teaching to their needs. Assessment has to be carried out constantly and should be an inseparable part of the studies and teaching. Assessment has to be closely related to the competence criteria of the *National Curriculum Guide* and the school curriculum guide, and be fashioned to benefit the pupils, their parents, teachers and the school administration. It is important that pupils are informed about the prerequisites of the assessment, what is expected of them and how it is assessed. The assessment criteria are only obligatory for Grade 10 where they support assessment at the completion of compulsory school. Schools are expected to define assessment criteria for other grades and describe them in the school curriculum guide.

All pupils in the 4th and 7th grades of compulsory school shall undergo national examinations in Icelandic and mathematics. Pupils in the first semester of 10th grade shall undergo national examinations in Icelandic, mathematics and English. The Ministry of Education, Culture and Science shall implement other examinations as appropriate (Lög um grunnskóla - Compulsory School Act, 2008: Art. 39).

School should also have access to diagnostic tests and other assessment forms which facilitate scrutiny of specific aspects of study and teaching, for they can prove to be very useful in diagnosing problems at an early stage. Standardised examinations include: reading tests, mathematics tests, motor development tests, screening tests to predict potential reading difficulties, standardised questionnaires, and other similar instruments can prove to be very useful aids in diagnosing problems at an early stage (Ministry of Education, Culture and Science, 2012).

How are struggling readers identified?

A small number of diagnostic tests are in use for students of compulsory school age in Iceland. They are used almost exclusively by special education teachers to diagnose reading difficulties and identify areas of teaching emphasis for individual students with serious reading problems. It is fairly common for students, starting in first grade, to be given a general screening test to identify which of them are likely to have learning difficulties (Kennedy et al. 2007, p. 183). There are also screening tests which teachers use in the first and second grade.

On a compulsory school level, there are special educators and guidance counsellors who provide counselling to teachers and parents on meeting and identifying the needs of pupils. Pupils can also be referred to the compulsory school specialist services of the municipality by teachers or parents. Furthermore, pupil protection committees can be established in schools to improve the collaboration between different professionals who are dealing with individual pupils who have special educational needs.

As for upper secondary schools, no specialist services exist on an area basis. There are, however, guidance counsellors, who deal with pupils' learning and individual problems. If necessary, they also direct pupils to specialised evaluation and other services outside the school.

Any diagnosis conducted at one school is not automatically transferred to the next, and parents get to decide what is in the best interests of the pupil concerning the issue (European Agency for Special Needs and Inclusive Education, 2010a).

Teachers also assess pupils regularly through various measures (Ministry of Education, Culture and Science, 2012), which likely eases identification.

Challenges: Over the last years, there is growing awareness of the importance of early intervention. Teacher education stresses the importance of dealing with reading difficulty and dyslexia as soon as possible. There is however a need for more skilled manpower in this field and therefore there are students who are dealing with reading difficulty at both primary and secondary stages who have not got the help they need.

Monitoring primary students´ progress in reading

In PIRLS 2006, teachers were asked how much emphasis they placed on specified assessment tools to monitor students' progress in reading. The greatest percentage of teachers in Iceland placed a major

emphasis on their own professional judgement to monitor students' progress in reading. The results showed that teachers of 61% students in Iceland placed a major emphasis on their own professional judgement, less than on average across the participating EU countries (70%). Additionally, fewer students in Iceland were taught by teachers who placed a major emphasis on use of classroom tests, diagnostic tests and national tests compared with the corresponding EU-21 averages. Only 9% of students in Iceland were taught by teachers who placed a major emphasis on use of national achievement tests, and 35% were taught by teachers who placed little or no emphasis on use of such tests.

Table 25: Percentages of Students with Teachers Reported Placing Varying Levels of Emphasis on the Use of Specified Tools to Monitor Students' Progress in Reading – Iceland and EU-21 Average

	Iceland			EU-21		
	Major Emphasis	Some Emphasis	Little/No Emphasis	Major Emphasis	Some Emphasis	Little/No Emphasis
Classroom tests	18.0	50.0	31.0	49.0	44.0	7.0
Diagnostic tests	34.0	50.0	16.0	43.0	47.0	9.0
National tests	9.0	55.0	35.0	26.0	51.0	23.0
Teacher Judgement	61.0	36.0	3.0	70.0	29.0	1.0

Source: ELINET PIRLS 2006 Appendix (Table H2)

According to PIRLS 2006, examinations and assessments, other than the national examinations, are usually written and carried out by individual teachers and schools in Iceland. The way in which reports on students' progress are compiled varies greatly. The assessment can be in the form of a numerical or letter grade or an oral or written commentary (Kennedy et al. 2007, p. 185). From the basis of the above-mentioned source, it can be said that teachers in Iceland use formative assessment. In the new curriculum for primary and secondary education (2011, 2013) schools are however supposed to use a letter grade which is defined in the curriculum.

Number of struggling readers receiving remedial instruction

PIRLS offers some data concerning issues of remedial instruction in primary schools. One question was whether all pupils receive remedial instruction when needed. There is some evidence that not all children in need of remedial support in reading receive such support when they need it. In PIRLS 2006, teachers in Iceland estimated that 17% of students were in need of remedial instruction in reading, while it was estimated that 15% received remedial instruction when they needed it (ELINET Appendix D, Table J.1). However, as noted earlier, 28% of students in Iceland scored below the Low PIRLS benchmark indicating a greater need than is evident in the responses of teachers.

Kinds of support offered

It is crucial that teachers provide support measures to help struggling readers. European Countries differ widely in their approaches, from in-class support with additional support staff (reading specialists, teaching assistants or other adults) working in the classroom together with a teacher, to out-of-class support where speech therapists or (educational) psychologists offer guidance and support for students with reading difficulties.

PIRLS 2006 provides information about additional staff and availability of support persons for reading. Based on teacher responses to a series of questions in PIRLS 2006, 35% of students in Iceland are in classes where there is always access to specialised professionals to work with students who have difficulty with reading, while 59% are in classes where there is access sometimes (Table 26). The corresponding EU-21 averages are 13% and 34% respectively, indicating that there is increased accessibility to professional support persons in Iceland compared to the participating EU-21 countries on average. Similarly, access to teacher aides is higher in Iceland than on average across the EU-21, with 14% and 5% of students always having access to Teacher aides, respectively.

Table 26: Percentages of Students in Classrooms with Access to Additional Personnel to Work with Children with Reading Difficulties, Iceland and EU 21 Average

Access to…	Iceland			EU-21 Average		
	Always	Sometimes	Never	Always	Sometimes	Never
Specialised Professional	35.0	59.0	6.0	13.0	34.0	53.0
Teacher Aide	14.0	53.0	33.0	5.0	23.0	72.0

Source: ELINET PIRLS 2006 Appendix (Tables J.2-J.3).

Based on responses provided by teachers in PIRLS 2006, 83% of students in Iceland are in classes where the teacher arranges for students falling behind in reading to work with a Specialised Reading Professional in a remedial reading classroom (e.g., a reading specialist or a speech therapist) (Table 27). This is well above the EU-21 average of 39%. A similar pattern is found for the percentage of students taught by teachers who would have them work with a Teacher Aide if they fell behind in reading (Iceland 50%; EU-21 average 19%). The percentage of students in Iceland who are referred to a Specialised Reading Professional in the classroom is much lower at 17%, and closer to that of the EU-21 average (12%). Fewer students in Iceland (27%) as on average across EU 24 countries (36%) have teachers who say that they wait for students who are falling behind in reading to mature. A majority of teachers in Iceland say they spend more time working individually with students who fall behind (79% of students), however this is below the EU-21 average (89% of students). Almost all students in Iceland are taught by teachers who ask the parents to help the students with reading (98%), this is slightly above the EU-21 average (96%).

Table 27: Percentages of Students in Classrooms Where Teachers Engage in Specified Activities to Support Students Who Begin to Fall Behind in Reading, Iceland and EU Average

	Iceland (Yes)	EU-21 Average (Yes)
I have student work with a Specialised Reading Professional in the Classroom	17.0	12.0
I have student work with a Specialised Reading Professional in a Remedial Reading Classroom	83.0	39.0
I have student work with a Teacher Aide	50.0	19.0
I wait to see if performance improves with maturation	27.0	36.0
I spend more time working individually with the student	79.0	89.0
I ask the parents to help the students with reading	98.0	96.0

Source: ELINET PIRLS 2006 Appendix (Tables J.4 -J.8).

Support for struggling readers – a legal right?

Yes. The Compulsory School Act 2008 (Art. 13) states that all compulsory school pupils have the right to appropriate instruction within an encouraging study environment in suitable facilities which takes into account their needs and general well-being.

Furthermore, it is stated that pupils have the right to have their special needs met regarding studies in compulsory school, without discrimination and regardless of their physical or mental attainment. Pupils who have difficulties studying because of specialised study problems, emotional or social problems and/or disabilities, pupils with dyslexia, pupils suffering from long term illnesses and pupils with health related special needs, have the right to special study support, according to evaluation of their special needs. (Art. 17).

Challenge: There are students at all stages who have reading and writing problems. It is important to strengthen remedial support.

5.2.5 Initial Teacher Education (ITE) and Continuous Professional Development (CPD) of Teachers

Entry requirements for Initial Teacher Education

Students have to finish upper secondary school, that is 13-14 years of schooling (primary and secondary) to get into university. These are the same requirements for teacher education. Good marks in Icelandic, English and Maths are a bonus.

Challenge: Over last years the number of students enrolled for teacher education have dropped. This year, however it seems to go up again. There is a need for good information to young people on the teacher profession.

Level of qualification and length of the required training for primary teachers

Length of required training of secondary teachers

Master´s level (5 years) for lower and upper secondary teachers; Teachers of vocational schools who are qualified in the subject have to have 60 ECTS credits (Lög um menntun og ráðningu kennara og skólastjórnenda í leikskólum, grunnskólum og framhaldsskólum no 87 2008)

"Teacher education for qualified teacher status should be at master's level. This came fully into effect 2013 (European Commission/EACEA/Eurydice, 2013. Key Data on Teachers and School Leaders in Europe).

The role of literacy expertise in Initial Teacher Training

Important teacher competences are a) the assessment of the strengths and weaknesses of each individual student they teach, b) selection of appropriate instructional methods and c) instruction in an effective and efficient manner. These topics should therefore be addressed in teacher training.

In PIRLS 2011, primary teachers were asked to indicate the level of emphasis given to a number of competences in this field. Iceland did not take part in PIRLS 2011.

Challenge: Initial teacher education needs a compulsory focus on developing literacy expertise among future primary and secondary teachers.

Continuing Professional Development (CPD)

Time frame and quality standards of CPD

Time spent on professional development related to literacy

No data are available concerning the participation rate of teachers in literacy-related professional development, with one exemption: In PIRLS 2006 teachers were asked how much time they had spent on reading professional development in the past two years before the study. The data for Iceland and for the EU-21 average are given in table 28. The table shows that 37.5% of students in Iceland were taught by teachers who had allocated 16 hours or more to professional development, compared to 21.3% on average across the EU-21. Furthermore, just under 20% of students in Iceland (compared to 30% on average across the participating EU-21 countries) were taught by teachers who had allocated no time to professional development in reading. However, the average reading score of their students (509.7) was actually slightly better that of the students of teachers who had spent more than 35 hours on professional development (503.0) (see Appendix D, Table I.1.). Students of teachers who had spent between 6-15 hours on reading-related professional development appeared to benefit most (512.8).

Table 28: Percentages of Students whose Teachers Reported Spending Varying Amounts of Time on Professional Development in Past Two Years – Iceland and EU-21 averages

	More than 35 hours	16-35 hours	6-15 hours	Less than 6 hours	No time
Iceland	21.1	16.4	24.7	18.1	19.6
EU-21	9.1	12.2	24.3	24.1	30.3

Source: ELINET PIRLS Data base Appendix D (Table I.1.).

In Iceland, more students were taught by teachers who read children's books at least weekly as part of their professional development (40.7%), compared with the corresponding EU-21 average (26.4%). Although the same rate of students in Iceland and on average across the participating EU-21 countries were taught by teachers who never or almost never read children's books (5.6% and 5.7% respectively). Similar to the pattern mentioned above, teachers' increased frequency of reading children's books was not found to be associated with improved student performance (see Appendix D Table I.2).

> **Challenge: Improving the quality and participation rates of continuing professional development targeted at building literacy expertise of teachers:** Icelandic teachers are supposed to spend around 4 weeks each year for CPD, generally speaking. It is necessary to look closely at what is available for professional development in literacy teaching at all stages of schooling, and improve and increase available courses or other means of CPD.

5.2.6 Improving the quality of literacy teaching for children and adolescents: Programmes, initiatives and examples

Improving the quality of preschool

There have been drastic changes in the education of pre-school teachers. Now they have 5 years of academic education. Primary teachers have told that at least some children seem now better prepared for literacy education in the early years of schooling than before. They mention amongst other things knowledge of letters and sounds. Shortage of staff in preschools with teacher education is however a

problem. Despite positive changes, it is important to provide more cognitively demanding literacy instruction in school. There is however need for more information.

Early identification of and support for children and adolescents with literacy difficulties

Teacher education and in-service education courses are very much pointed at early intervention and importance of finding children with difficulties, or if there are difficulties which could lead to reading and writing problems. Teachers use screening tests to find children with difficulties and special education teachers use diagnostic tests to diagnose difficulties. There are however still too many students in compulsory education who are dealing with difficulties and don´t get enough help.

5.3 Increasing participation, inclusion and equity

The High Level Group of Experts on Literacy drew attention to persistent gaps in literacy, namely the gender gap, the socio-economic gap, and the migrant gap (HLG Final report 2012, pp. 46–50). These gaps derive from the reading literacy studies that repeatedly show unequal distribution of results among groups of children and adolescents (PIRLS, PISA).

The socio-economic gap in literacy refers to the fact that children and adolescents from disadvantaged families have lower mean performance in reading than students from more advantaged families. However, the degree to which family background relates to the reading literacy performance varies from one country to another even in Europe. Family background measured as parents' educational level and/or occupation or measured as economic, social and cultural status is one of the most important predictors of reading literacy performance. Family background also explains some of the performance differences between schools.

The *migrant gap* refers to unequal distribution of learning outcomes between the native students and immigrant students who in most countries have lower levels of performance in reading than the native students. In many countries the migrant gap is associated with the socio-economic gap but this explains only a part of it, because the migrant gap is also associated with home language differing from the language of instruction at school which increases the risk of low performance in reading. It is noteworthy that even language minorities with high status in the society (and above-average socioeconomic background) show below average performance if the language of school is not supported at home, which signals the importance of a good command of the language used at school.

Another alarming gap in reading literacy in many countries is the *gender difference*, which is more vital for adolescents than for children. In all PISA studies, 15-year-old girls outperformed boys in reading in all the European countries, and boys are frequently overrepresented among the low performers. PISA 2009 results showed that these differences are associated with differences in student attitudes and behaviours that are related to gender, i.e. with reading engagement, and not gender as such. Therefore the gender gap is also related to growing up in a family or in a school environment that values reading and learning and considers reading as a meaningful activity.

To achieve fairer and more inclusive participation in literacy learning we need to close these gaps, which already start in early childhood, by supporting children, adolescents and adults "at risk". The groups of students "at risk" must have access to language screening and flexible language learning opportunities in school, tailored to individual needs. Furthermore early support for children and adolescents with special needs is necessary.

In the section below we address the following questions:

- Compensating socio-economic and cultural background factors
- Support for children with special needs
- Promoting preschool attendance, especially among disadvantaged children
- Provisions for preschool children with language difficulties
- Support for children and adolescents whose home language is not the language of school.
- Preventing early school leaving
- Addressing the gender gap among adolescents

This section refers to children and adolescents who out of different reasons can be considered as a group "at risk" (from disadvantaged homes, those whose home language is not the language of school, or those with "special needs"). The focus is on preventing literacy difficulties among members of these groups. There is a certain overlap with the topic "Identification of and support for struggling literacy learners", dealt with in the section, "Improving the quality of teaching", which is concerned with those who have already developed literacy difficulties (s. 5.2.4).

5.3.1 Compensating socio-economic and cultural background factors

The child's *socio-economic and cultural background* has a strong impact on literacy. Material poverty and educational level, particularly of the mother, are well-recognised main factors influencing literacy. Socio-economic background also influences biological risks to children, by determining early exposure to risk factors and increased susceptibility (Jednoróg et al. 2012). The primary language spoken at home also influences literacy development (Sylva et al. 2004).

In order to describe the socioeconomic and cultural factors that influence emergent literacy, several indicators were used which stem from international surveys, thus providing comparability across Europe.

Gini index

The Gini index is the most commonly used measure of inequality, and represents the income distribution of a nation's residents with values between 0% (maximum equality) and 100% (maximum inequality). In the European countries participating in ELINET the range is from 22.6% in Norway to 35% in Spain (for an overview of European countries see table A1 in Appendix B). With 24.0% Iceland is at the higher, positive end of the distribution.

Child poverty

An indicator of child poverty is the percentage of children living in a household in which disposable income, when adjusted for family size and composition, is less than 50% of the national median income (Adamson, 2012). At 4.7% Iceland has the lowest percentage of all European countries participating in ELINET. The range is from 4.7% in Iceland to 25.5% in Romania (for an overview of European countries see table A2 in Appendix B).

Mother's education level

The PIRLS 2011 database offers information about mothers' level of education referring to ISCED levels. No data are available for Iceland, for an overview of European countries see table A3 in Appendix B.

Teenage mothers

According to UNICEF (2001) the percentage of teenage mothers is 24.7 for Iceland. The range is from 5.5% in Switzerland to 30.8% in the United Kingdom (for an overview of European countries see table A4 in Appendix B).ý

Single parent

No data are available for Iceland, for an overview of European countries see table A5 in Appendix B.

Migrant parents

According to PIRLS 2006 (Mullis et al. 2007, Exhibit 3.12 – Students' Parents Born in Country), in Iceland the proportion of children with parents born outside the country (3%) or only one parent born outside the country (13%). For an overview about European countries see table A6 in Appendix B.

In 2013 8% of children aged 0-4 years born in Iceland had migrant parents (Ari Klængur Jónsson, 2013).

Primary language spoken at home different from language used at school

According to PIRLS 2006, in Iceland, 64% of pupils reported that they always spoke the language of the PIRLS test at home, while 36% reported that they did so sometimes or never. A negligible performance score difference was found between those who always spoke the language of test at home and those who did so 'sometimes or never'. This is much lower than the corresponding EU-24 average difference. (See Appendix D, Table F.1-F.2). Iceland did not take part in PIRLS 2011. There has been a fast growing number of migrants in Iceland over last 10 years. Therefore these figures are probably not right.

> **Challenge:** A fast growing number of students with other languages than Icelandic is causing rather new demands on schools and teachers for working in multicultural classrooms. In teacher education there has been education available for teachers and there is ongoing research in this field. There is a need for more teachers with this type of education.

5.3.2 Support for children with special needs

Not only children from culturally disadvantaged families are "at risk" in their literacy development but also those with very low birth weight and severe prematurity, factors that are associated with developmental disabilities, including reading and writing disabilities. Also cognitive and sensory disabilities must be considered.

Very low birth weight and severe prematurity

According to PERISTAT (2010, Figure 7.11, p.149) the percentage of live births with a birth weight under 2500 grams in Iceland was 3.0%. The range is from 3.0% in Iceland to 8.8% in Cyprus (for an overview of European countries see table E1 in Appendix B).

According to the same source, PERISTAT (2010, Figure 7.14, p.155) the percentage of live births with a gestational age <32 weeks is 0.7% in Iceland (with a range from 0.7% in Iceland to 1.4% in Hungary). The percentage of live births with a gestational age between 32 and 36 weeks was 4.6% (with a range from 4.5% in Lithuania to 7.5% in Hungary (for an overview of European countries see table E2 in Appendix B).

Cognitive or sensory disabilities

According to Eurypedia[14], in Iceland children with special needs get support in mainstream kindergarten. The Compulsory School Act 2008 (Art. 13) states that compulsory schools shall endeavour to organise their activities in such a way that pupils feel safe and are able to apply their talents to the fullest. Pupils have the right to receive educational and career guidance and counselling within the compulsory school by appropriate specialists, and each pupil shall have a supervisory teacher. Supervisory teachers follow closely their pupils' studies and their personal development, condition and general welfare; they shall guide their pupils in their studies and school work, provide assistance and advice regarding personal matters and thus strengthen the cooperation between school and home. Pupils have the right to express their opinion regarding their study environment, the organisation of studies and school activities, and other decisions that affect them. Their opinion shall be taken into account whenever possible.

Special education can be arranged in different ways:

- With special assistance in a mainstream class at the pupil's home school. The pupil stays in their regular with extra resources organised in the form of extra teaching in different subjects, reading, and mathematics or in the form of ADL assistance.
- By receiving differentiated education in a regular class – studying the same subject but in a different way.
- Through individual instruction outside the mainstream class or in a small group (part time or full time).
- In a special class within a mainstream school or in a special school.
- Elsewhere if that is the most appropriate provision, at home or in an institution. (European Agency for Special Needs and Inclusive Education, 2010b)

The National Curriculum Guide states that special needs and learning difficulties need to be taken into consideration in assessment, and that schools are to make an effort to meet the needs of pupils in such cases. Special arrangements should be made for these pupils when it comes to general assessment, for example, longer time to complete examinations, being given customised examinations, use of support materials and assistance during examinations and oral examinations (Ministry of Education, Science and Culture, 2012).

At the pre-school level, all disabled children are accommodated in regular pre-schools. There are two special schools at the compulsory level that serve pupils with disabilities. One is for children with multiple disabilities and the other is for children with behavioural or psychological difficulties. No special schools exist at the upper-secondary school level, but some schools run special units. Many upper-secondary schools now provide extra support to pupils who have difficulties with reading and writing.

During the school year 2014-2015, 12,263 (or 28.4%) of all students in compulsory schools received special education. Of the students who received support, 61.5 % were boys and 38.5 % were girls. The number of students who have a foreign mother tongue and get support for learning Icelandic has increased by 64.6% over the past five years[15]. Figures are not available for special education in

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[14] See: EURYDICE, https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Iceland:Special_Education_ Needs_Provision_within_Mainstream_Education.
[15] See: Statistics Iceland 2016, https://hagstofa.is/utgafur/frettasafn/menntun/skolahald-i-grunnskolum-2014-2015/.

kindergarten, but in kindergarten schools, there are special education teachers supporting children with special educational needs.

5.3.3 Promoting preschool attendance, especially among disadvantaged children

The benefits of attending preschool institutions have been proven in many studies. The duration of attendance is associated with greater academic improvement (Mullis et al. 2012b). The enrolment rate in Iceland is rather high. The OECD Family Database (2014) offers figures of participation rates at age 3, 4 and 5. According to 2010 statistical data, the participation rate is 96.5% for 5-year-olds, 95.3% for 4-year-olds, and 95.2% for 3-year-olds (OECD 2014) (for an overview of European countries see table C2 in Appendix B). What regards the average duration of preschool attendance no data are available for Iceland (for an overview of European countries s. table C3 in Appendix B.)

No child should be excluded from preschool because parents cannot afford to send their children to preschool/kindergarten institutions if they have to pay. Pre-primary education in Iceland is not free. Families contribute financially a substantial amount (around 1/3 of the operating costs of the pre-primary schools)[16]. Iceland does not belong to the half of the European countries where the entire period of ECEC is free. Many countries provide at least one year of free pre-primary education.

5.3.4   Provisions for preschool children with language problems

Literacy competence strongly builds on oral language proficiency, word knowledge, and syntactic knowledge. Measures must be taken by governments and institutions to ensure that children with poor language development (second-language speaking children and those from a low socio-cultural background, as well as others who experience difficulty in learning language) acquire adequate levels of oral language in kindergarten, preschool institutions and in school. It should be ensured that at age 4 at the latest all children are diagnosed in their oral language proficiency, and that there are obligatory courses for children falling behind in their acquisition of language competence. The aim should be that all children entering school can speak the language of the school so that they can profit from reading instruction**.**

Literacy is one of major pillars in the National curriculum plan for pre-school education (2011). The schools should deal with following competences, amongst others:

Get acquainted with language and its possibilities; Enjoy listening to and telling stories, poems and fairy tales. Develop literacy in the widest sense. Understand that written language and symbols have a meaning. Share their views and ideas. Employ various means and diverse material to acquire information and present their ideas. Reflect on their society and culture and the culture of other nations.

Over the last years, there is growing awareness amongst teachers and academics of the importance of early literacy skills and early interventions. Now, kindergarten schools have specially trained special teachers and some have access to speech therapists. There is however still a shortage of qualified staff in schools. In the Year 2012, the average percentage of trained pre-school teachers in the whole country was just 39% (Joelsdottir, S. 2012).

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[16] See: EURYDICE. https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Iceland:Early_Childhood_and_ School_Education_Funding.

The schools have access to some good screening tools which are used in most schools and provide valuable information on what needs to be done in the teaching of individual children.

> **Challenge:** It is very important to increase the number of educated teachers in the kindergarten schools.
>
> The schools need more services from specialists, such as speech therapists, especially in the rural areas. Although some research has been carried out, there is a need for ongoing research, especially on language and literacy development. There is as well the need for further development in screening and diagnosing of disorders. This is important for early intervention so children don´t develop problems which could lead to reading difficulties.

5.3.5 Support for children and adolescents whose home language is not the language of school (taken from post primary doc)

Pupils whose mother tongue is not Icelandic are entitled to learn Icelandic as a second language in compulsory schools. There are also provisions in the general curricula that students whose native language is not Icelandic may be exempted from learning a particular subject. Compulsory schools may recognise pupils' skills in their mother language as part of the compulsory education. There are no specific central provisions on mother language education for students of foreign origin, but according to a survey conducted a few years ago almost half of the students of foreign origin received some mother tongue education at compulsory school level (Eurydice, 2012).

The Education Act 2008 grants immigrant pupils' parents a right to receive information on interpretation services at school, and demands schools to follow their municipality's reception plan when receiving pupils who are starting school in Iceland. Reception plans for pupils whose mother tongue is not Icelandic shall take into account the pupil's background, language skills and skills in other fields of study. Pupils and their parents will be ensured adequate counselling and access to information on compulsory school organisation and activities (Compulsory School Act, 2008: Art. 16).

The instruction in compulsory schools is mainly conducted in Icelandic, although other languages may be used for instruction whenever entailed by the nature of the matter or by the National Curriculum Guide. Immigrant pupils then learn Icelandic as a second language, the aim being that the pupils will be actively bilingual and that they can be educated in general schools, and can participate actively in the Icelandic society (Compulsory School Act, 2008: Art. 16).

> **Challenge:** Some schools have teachers who are specialised in multicultural education and teaching students with other mother tongue than Icelandic. They are acting as supporters but some are class teachers. Now there is a growing need for all teachers to have knowledge in teaching students with other languages than Icelandic.

5.3.6 Preventing early school leaving

Literacy provision and participation in secondary schooling: What is the rate of early school leavers?

One important, but certainly not sufficient, precondition for raising performance levels in literacy for adolescents is literacy provision during secondary schooling, as functional literacy is mainly acquired in school-based learning. Thus, the provision of secondary education for all adolescents and the

prevention of early school leaving may serve as indicators for the opportunities of adolescents to improve their literacy performance especially related to basic functional literacy.

What is the rate of early school leavers?

According to Eurostat, in Iceland, the rate of early school leavers was 20.5 % in 2013, slightly up from 20.1% a year before. Most of these young people drop out of secondary school, i.e. at the age of 16-19. In 2012 12.7% of young people aged 16-24 years had not completed secondary education (European Commisson 2013).

The duration of compulsory education in Iceland is 10 years. Children start school at the age of 6; compulsory schooling ends at 16 years (Compulsory Education in Europe 2013/14, Eurydice report).

As concerns students (ISCED 1-6) aged 15-24 years, we find that in Iceland 69.1% of 15-24 year olds were in some form of education in 2011.

> **Challenge:** The roots of the drop-outs seems to lie deeper than people think. Iceland is a wealthy country, but had a financial crisis in 2008. Then, the number of drop-outs went down. Before the crisis, the figures were quite high. Now, the labour market is recovering and there is a lack of working hands. Some of the young people are therefore going for work instead of attending school. There is a need for substantial discussion on what education means for the future. Suggestions in a white paper from the minister of education are fine (see below), but there is a need for some personal interviews, not only for the students who are leaving but for all students.

5.3.7 Addressing the gender gap among adolescents

What support measures are in place to specifically address the gender gap?

The principle of equal opportunities in the National Curriculum guide states that pupils at compulsory school level are entitled to appropriate education, and opportunities to learn should not depend on whether pupils are boys or girls, where they live, etc. (Ministry of Education, Culture and Science, 2012).

5.3.8 Increasing participation, inclusion and equity for children and adolescents: Programmes, initiatives and examples

Programmes against poverty

The Icelandic nation counts only around 320,000 inhabitants. This means people are closer to each other than in countries with millions of people. The nation is as well rather well off, although there are people who have difficulties. The social welfare and some organisations are supporting families. There is no information on programmes against poverty.

Family literacy programmes for migrant parents

There is no information on family literacy programmes for migrant parents but schools have different ways of supporting parents. Good connections with the class teacher, and there are as well in some schools meetings with parents, especially the parents who have children with difficulties.

Policies / programmes to prevent early school leaving

In Iceland, the Ministry of Education, Science and Culture has developed a 'Risk Detector' to prevent ESL from upper secondary schools. The aim of the risk detector is to provide school counsellors with a

systematic approach to identify students at risk of dropping out based on factors that could predict school failure, according to research and practice. The risk detector is mainly a questionnaire for students enrolled from the 10th grade up to the 1st year in upper secondary school. The main categories of the questionnaire include: Student background, family factors, previous school experience, school engagement and attitude towards education, psychological adjustment and working while at school, friends at school and friends' school engagement. The risk detector was initially tested in three schools with high ESL rates and received very positive feedback from all school counsellors. The Ministry has now decided to expand the program to 18 out of 32 upper secondary schools (European Commission, 2013, p. 38).

The minister of education and culture has published a white paper with aims of the coming years in the educational system. Possible suggestions for improvement are:

1) Finding and recording reasons for leaving school
2) Screening for these reasons in the years 15-19 (the end of compulsory school and the high school).
3) Cooperation established between schools, health- and social welfare institutions for intervention because of students in danger for drop-out.
4) Schools which help these students get special support.
5) Cooperation (and support) with the institutions which provide education for people who have left school (Hvítbók, 2014, p34-35) – um umbætur I menntun. (2014) Ministry of Education and Culture).

For years people have had the opportunity to attend so-called evening school for secondary education. This is provided by some secondary schools and has been popular. Some students finish just some courses and come back later.

Adult education institutions provide courses for people who wants to learn for instance some basic skills as in Icelandic, mathematics, languages and reading. Some of these courses are run under the name "back to school". It is thought to be support and motivation for start secondary school or going back to school again.

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