



LITERACY IN NORWAY

COUNTRY REPORT

CHILDREN AND ADOLESCENTS

March 2016

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1 Introduction

This report on the state of literacy in Norway 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 countries¹. 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 2012². 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 equity⁴).

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.

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

Norway participated in IEA's PIRLS (4th graders reading comprehension) in 2001, 2006 and 2011, in OECD's PISA (15 year-olds' reading literacy) since 2000, and in OECD's PIAAC (adults' reading literacy) in 2012.

Norway performed significantly below the EU average in PIRLS 2011 (507 vs 535 EU-average) and above the average in PISA 2012 (504 vs 489 EU average). While the performance in PIRLS slightly increased between 2001 and 2011, it remained nearly unchanged in PISA between 2000 and 2012.

In PIRLS, a high proportion of pupils (about 29%) can be considered as low-performing readers. This is more than the average across EU countries (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. The proportion of low-performing readers were even higher in 2000: it gradually and drastically decreased between 2000 and 2011 (from nearly 40% in 2001 to 29 % in 2011). In PISA 2012, the percentage of low-performing readers was somewhat lower than in European countries (16.2 vs 19.7%). The decrease of this proportion was much more limited than among 4th graders (from 17.5% to 16.2%). It should be underlined that the proportion of low performers among 15 year-old teenagers was much higher among boys than among girls (in 2012, 9.6% among girls vs 22.5% among boys).

The proportion of top-performing readers was low in PIRLS (2% vs 9% in EU) and on the contrary, higher than the EU average in PISA (10.2% vs 7% in EU).

The gap according to the pupils' socio-economic background was lower than the EU average both in PIRLS (59 vs 76 on average) and in PISA (68 vs 89 on average). However, the indices of socio-economic background are not the same in PIRLS and PISA, so the comparison should be taken with caution.

In PISA 2009, the gap between native students and students with a migrant background was higher than in EU countries on average (52 vs 38 EU-average), which is almost equivalent to one and a half year of schooling. However, in PIRLS the mean score difference between those who always spoke the language of the test at home, and those who sometimes or never did so was lower than in EU countries (19 vs 26). In PISA, this gap according to the language at home was close to the EU average (58 vs 54).

In Norway, the gender gap (in favour of girls) was higher than the corresponding EU average differences both in PIRLS 2011 (14 vs 12 on average) and in PISA (47 vs 44 on average). The gender difference at grade 4 in Norway was higher in the previous cycles (19 points in 2006 and 21 in 2001, always above the EU average). In PISA, the stability of the national overall reading performance observed between 2000 and 2012 was observed among girls (- 1 point) while at the European level they improved their score by 5 points. Boys' performance showed a decrease of 7 points just close to what was observed at European level on average.

In conclusion, at grade 4, even if Norway increased its performance in reading overtime, it still performs well below the EU average. The proportion of low-performing readers has decreased but is still very high: nearly a third of its pupils score in that category, which is a matter of concern. Moreover,

the percentage of top performers is very low. Among 15 year-olds, the pattern of results is quite different: Norway performed above the EU mean across the three cycles of the study with a perfect stability. Boys' performance showed a small decrease and they are much more numerous in the category of low-performing readers than girls. The spread of achievement (gap between low and top performing readers) is smaller in Norway than in EU on average at both levels. At both levels, the gap according to socio-economic status is lower in Norway than in EU on average. These results seem to indicate that Norway is more equitable in its educational system than most of the European countries. However, the gap according to migration or language spoken at home was somewhat higher.

As far as adults are concerned, Norway performed somewhat above the EU in PIAAC (278 vs 271). It should be remembered that only 17 EU countries took part in PIAAC in 2012, so the comparison with other age groups should be taken with caution. The spread of achievement – namely the gap between top and bottom performers - was just a little lower in Norway than the EU-17-average (115 vs 117 on average). The proportion of adults performing at or below level 1 in Norway was 13%, less than the EU-17 average (16.4%).

Females performed somewhat less well than men (276 vs 280) and the gender gap in favor of males was somewhat higher in Norway (4 score points) than in EU on average (2 score points). In PIRLS and PISA, the gap gender in favour of girls was higher. The gap according to parents' level of education was somewhat lower than in the EU countries on average (35 vs 41), reflecting the same trend as in PIRLS and PISA. The reverse was observed for the gap according to the language spoken at home: the gap between native and non-native speakers was larger than the EU-17-average (40 vs 28).

Challenge: Below average reading performance in Norway needs to be addressed as a matter of urgency. There is a need to raise standards across the board, with a view to reducing the proportion of low achievers, and raising the performance of higher achievers.

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

Creating a Literate Environment

Pre-Primary Years

Providing a supportive home environment: Compared to the European average, the number of pupils in Norway whose parents like reading is very high. The importance of parental attitudes to reading is shown by the fact that there is a significant difference in reading performance at grade 4 between children whose parents like to read (average achievement 563) and those who do not (average achievement 541). The availability of children's books in the home is very high, yet 4% of students in Norway had 10 or fewer children's books at home, compared with a European average of 12%. Concerning the number of books at home (regardless of whether they are children's books or not) the mean score difference between those with 10 or fewer books and those with more than 200 (16% in Norway) was 62 points – somewhat lower than the EU-24 average of 81 points.

Parents engage often or at least sometimes in literacy related activities with their children. Considering the *Early Literacy Activities before Beginning Primary School*, the percentage of pupils in Norway whose parents engaged in literacy-related activities with them before the beginning of primary school is close to (but somewhat below) the European average, but is higher for singing songs, one of the nine early literacy activities investigated.

More family literacy programmes needed: Although there are some family literacy programmes provided by local authorities or private organisations, 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.

Primary Children and Adolescents

Providing a literate environment in school: According to PIRLS 2011 **40%** of 4th graders in Norway were in classrooms without a library and the percentage of classrooms with more than 50 books available is relatively small (18%) compared to the EU-24 average of 32%. Furthermore, the percentage of children who can borrow books from the classroom library to take home (39%) is substantially lower than the EU-24 average (57%). These findings indicate that, despite the emphasis in the curriculum on reading for pleasure, the resources and infrastructure (at least in paper form) needed to support it in schools are not in place to the degree needed.

Supporting reading motivation, especially among boys and adolescents: Reading for pleasure has a major emphasis in the reading/language curriculum in Norway.

Strengthening the role of public libraries in reading promotion: In Norway, there is a strong general focus on the importance of reading and literacy development for children in the public domain and in the media. Public libraries are an important agent in reading promotion. As part of the national programme "Make space for reading 2003 - 2007" local libraries brought books to kindergartens and replaced them with new books every third month. The kindergartens used the books in their daily

activities, informed the parents about the books and parents could borrow books to take home. The programme was evaluated and suggestions for further initiatives were made, many of which have been implemented as part of national education policies, and strategies for public libraries. Most local libraries have one day a week where the focus is on children. Activities vary from reading of fairy tales, introduction to new books for the different age groups plays for/by children etc.

Offering digital literacy learning opportunities at school: A literate environment can also be created by incorporating digital devices into the school environment. According to teachers' reports, 88% of students in Norway have a computer available for reading lessons, compared to the EU-average of 45%. Teachers report that at least monthly, 68% of students use instructional software to learn reading skills and strategies, look up information (79%), read stories or other texts (54%), and write stories or other texts (77%). These figures are well above the corresponding EU-24 averages (27%, 39%, 32% and 33% respectively) indicating that computers are used in very different ways in Norway than across the EU.

Improving the Quality of Teaching

Pre-Primary Years

Providing free or affordable high quality preschool education for all children / investing more money in Early Childhood Education and Care (ECEC): The total public expenditure per child in pre-primary education as a percentage of GDP is 0.3%, which places Norway closer to the lower end among European countries for the total public expenditure per child on pre-primary education.

Raising the professional qualification level of staff in ECEC: The minimum required level to become a qualified teacher is Bachelor level (ISCED 5). Length of training is 3 years.

Improving early language and literacy screening and training: Many communities (kindergarten owners) and many kindergartens use a programme for assessing the development of skills related to language and social interaction. Based on the screening results from the programme the kindergarten can offer more focused stimulation and help to the children.

Children in centre-based ECEC settings receive language support. Norway seeks to employ staff from a migrant or minority background. These staff are involved in the teaching process to provide language support to migrant children and those from ethnic minorities to help them integrate in ECEC. Norway has encouraged ECEC settings to employ bilingual assistants and develop their skills in multicultural and bilingual education.

Introducing comprehensive literacy curricula in pre-primary schools: Norway has no preschool curriculum. There is however a National Framework Plan for the Content and Tasks of Kindergartens. The plan is a framework for the work of supervisory authorities, owners, parents and staff, and provides guidelines for fundamental values, content and tasks for kindergarten. According to the Ministry of Education, all children should be provided with a rich and varied language environment at their kindergarten. Teachers should create an environment that stimulates children's engagement with books, motivates them to use language actively, and encourages the development of listening and conversation skills. Furthermore, teachers should read books and tell stories to the children and discuss books on a daily basis.

Primary Children and Adolescents

Ensuring adequate time for language and literacy instruction in primary and secondary schools:

According to PIRLS 2011, teachers in Norway report allocating less time to the teaching of reading across the curriculum and in reading classes (110 hours) than on average across EU countries (147 hours).

Improving the quality of literacy instruction: Literacy is an essential part of the Norwegian curricula. Steering documents at primary level mention the importance of drawing inferences, making connections between different parts of text and encouraging children to reflect on their own reading process.

In secondary school, literacy instruction is part of "Written communication" and "Language, Literature and Culture". The curricula mention reading and writing of different texts (genres) and literacy is conceived of as cross-curricular. The focus of the curriculum is on the student's competences. Advanced literacy skills, both when using printed texts as well as digital texts, is part of the curricula in all subjects and explained in supporting material. The teachers are persuaded to emphasize literacy, reading and writing in all subjects. It is pointed that an important aim is to "develop strategic readers", create motivation for reading and "active readers". Schools should be active in promoting literacy at all levels and in all subjects. All teachers are thought to be responsible for literacy development of their students. However, according to PIRLS 2011 data, fewer students in Norway than on average across the EU-24 are engaged in specific reading comprehension strategies on a daily or almost daily basis. The negative finding on engagement in reading lessons, together with reduced opportunities to engage in reading comprehension strategies, needs to be addressed, and there should be a stronger focus on teaching and applying higher-order reading skills.

Improving the quality of pre-service and in-service teacher training: Norway requires primary and lower secondary teachers to have a bachelor's degree which takes four years' study. The Norwegian government has decided that primary and lower secondary teacher education will be reorganised as a 5-year master programme in 2017.

According to PIRLS 2011, 48% of the fourth grade students were taught by reading/language teachers with an educational emphasis on language, 48% were taught by teachers with an emphasis on pedagogy/ teaching reading, and 15% had teachers with an emphasis on reading theory. These figures are below the corresponding EU-24 averages. Initial teacher education needs a compulsory focus on developing literacy expertise among future primary and secondary teachers. Innovations in the differentiated teacher education system should be capitalised on in the new master's level programme to be introduced in teacher education, which should preserve its practical orientation. In addition, initial teacher education programmes should be reviewed to ensure that there is a stronger focus on addressing reading difficulties. The emphasis on assessment of reading also needs to be reviewed. There is also a need for greater involvement in CPD on the part of teachers.

Improving the quality and quantity (participation rates) of continuing professional development (CPD):

According to PIRLS 2011, 32% of students in Norway were taught by teachers who had allocated no time to professional development in reading in the last two years. Attendance of continuing training and in-service courses depends to a large degree on the resources and attitudes of local authorities. Municipal education authorities decide whether staff may participate or not. Top-level education authority assures CPD quality. For mandatory CPD programmes, local authorities need to ensure the conditions for the teachers to be able to attend such courses. Improving the quality and

participation rates in continuing professional development targeted at building literacy expertise of teachers is a challenge for Norway.

Extending systematic assessment of literacy skills: In Norway, there are standards for what the students should master at the end of grades 2, 4, 7, 10, 11, 12, and 13. Struggling students are identified early in their school career. There are compulsory mapping tests in reading skills for pupils in grades 1, 2 and 3. The purpose of the mapping tests is for teachers and schools to identify which pupils may need additional follow up and adaptation. Norway has a programme of compulsory national tests in grade 5 and grade 8/9 in reading. Constructed similarly to PIRLS and PISA assessments including different texts, multiple choice and constructed response questions, the test allows for monitoring development over several years. The national tests for grade 5 are scored on a three-point scale, while those for grade 8/9 are on a five-point scale, the points indicating achievement levels; there are detailed descriptions of what students at the different achievement levels can do. The main purpose of the national tests is to collect information about pupils' basic skills and to provide instruments for improvement and development activities locally and centrally. Results from national tests are expected to give the teacher a better starting point for adapting and planning teaching that is well suited to their pupils. The tests are part of the National Quality Assessment System (NQAS).

Building a stronger focus on literacy into curricula: There is a need to mainstream reading / writing literacy across the curriculum and to offer content area literacy instruction in all school subjects throughout secondary education, whether academic or vocational. The new generation of competence-based curricula have integrated literacy skills across subjects, but often literacy dimensions are not described in literacy-specific terms. It would be worthwhile to sharpen the literacy focus to help teachers of all subjects to become literacy teachers.

Increasing Participation, Inclusion and Equity

Pre-Primary Years

Compensating socio-economic and cultural background factors: In Norway, the proportions of children with parents born outside the country (6%) or only one parent born outside the country (12%) are quite close to the corresponding European averages. The proportion of children speaking a different language at home from the one used at school is 3%. There is a quite significant performance gap in reading competence at grade 4 between children who spoke the language of the test before starting school. Efforts to reduce the performance gap in reading competence at grade 4 between children who spoke the language of the test before starting school and those who did not speak the language should be made.

Increasing pre-school attendance of disadvantaged children: The Norwegian government has set a moderate maximum fee to be paid by parents for their children to attend pre-school. Financially disadvantaged parents will receive support, and for children with special needs kindergarten is free.

While in Norway there are no national programmes to help the poorest parents, teenage mothers, single-parent families, or children whose home language is not the language of school, it must be noted that Norway has very well developed social and health systems. As part of these systems, there are provisions to look after the needs of teenage mothers, single parents and financially disadvantaged citizens.

Children in centre-based ECEC settings receive language support. Norway seeks to employ staff from a migrant or minority background. These staff are involved in the teaching process to provide language support to migrant children and those from ethnic minorities to help them integrate in ECEC. Norway has encouraged ECEC settings to employ bilingual assistants and develop their skills in multicultural and bilingual education.

Primary Children and Adolescents

Supporting struggling literacy learners: It is estimated that 17.4% of students in fourth grade in Norway are in need of remedial reading instruction. It is also estimated that 12.1% are in receipt of remedial reading instruction. On average across EU-24 countries, 18.1% of students in Grade 4 are identified by their teachers as being in need of remedial teaching, while 13.3% are identified as being in receipt of such teaching. In Norway, 29.1% of students in fourth grade performed at or below the PIRLS low benchmark on overall reading. Hence, the percentages of students in Norway in receipt of remedial reading instruction (12.1%) is below the percentage that performed poorly on PIRLS.

As compared to the EU-24 average, in Norway, students had less access to specialised professionals, slightly less access to teacher aides, and the same (low) access to adult volunteers to support struggling literacy learners.

Almost all students in Norway (95%, which is above the EU-24 average) are taught by teachers who spend additional time working on reading individually with a student who falls behind. Similarly, 99% of students in Norway (and 97% on average across the EU-24) are taught by teachers who ask parents to provide additional support to a student who falls behind in reading.

Formal provisions to secure participation of foreign language speakers in the educational system are in place. However, the tradition of local autonomy is strong in the Norwegian administrative system and it is important to make sure that children and adolescents have the same opportunities regardless of where in Norway they live.

3 General Information on the Norwegian Education System

In Norway, all children and young persons have the right to 13 years of schooling. Compulsory education lasts for 10 years. As shown in Figure 1 below, the educational system includes early education (0-6 years), which comprises ante-preschool (0-3 years) and preschool education (3-6 years). Children in Norway usually enter school at the age of six. The primary school phase extends through grade 7, and lower secondary phase goes through grades 8, 9, 10 (13-16 years). Upper secondary education extends to grades 11-13 (16-19 years) (Norwegian Ministry of Education and Research, 2007). All young people have a legal right to three years of upper secondary education (five years for students with special needs). Although upper secondary education is optional, the government has recently emphasised that all students should complete upper-secondary schooling (Norwegian Ministry of Education and Research, 2012).

The Education Act of 1998, last amended in 2013, states that education shall be adapted to the abilities and aptitudes of the individual pupil, apprentice and training candidate (Norwegian Government, 2013). Inclusive education is a fundamental principle in Norwegian primary and secondary education. It means that all children and young people should be met with trust and respect at school, regardless of whether they have a disability, and irrespective of their gender, social background, ethnic, religious or linguistic affiliation, sexual orientation or gender identity, etc. For a school to be inclusive, it must organise and adapt the tuition to all pupils. Each and every pupil should get the opportunity to learn in a way that is adapted to their talents and abilities.

Based on White Papers 54 (1989-1990) and 35 (1990-1991), the Norwegian Parliament in 1991 decided the Government would no longer be responsible for running special schools. Existing schools were either shut down or changed into resource centres⁶.

The system of resource centres has been reorganised several times and is today known as Statped, a national service covering four regions, intended to secure users all over the country equal access to its services. Statped, which is managed by the Norwegian Directorate for Education and Training – the executive agency for the Ministry of Education and Research – is active in six defined core areas: Acquired Brain Injury; Complex Learning Disabilities; Deaf-blindness / Dual Visual and Hearing Impairment; Hearing Impairment; Speech and Language Impairment; Visual Impairment.

The Norwegian law of Education states that 'Education in school is to be adapted to the individual pupil's abilities and capabilities. Pupils who do not or cannot achieve a satisfactory learning yield from ordinary teaching, have a right to special needs education.' This means that Norwegian pupils are entitled to teaching as specially adapted as possible, and that this should take place in the local mainstream school. In many cases, schools and local authorities will need guidance and competence. Statped provides special teaching services at individual and system level in areas in which the country's local authorities do not have sufficient competence.

Statped runs two national schools. These are the school for the deaf in Trondheim and the school for the deaf-blind in Oslo. These schools can offer part-time courses for pupils and for the parents and

⁶ See: <https://www.stortinget.no/no/Saker-og-publikasjoner/Saker/Sak/?p=5755>.

teachers of deaf, blind and deaf-blind children and pupils needing alternative, supplementary communication. These courses supplement the ordinary, individually-adapted education that will take place at the school in the pupil's own home community⁷.

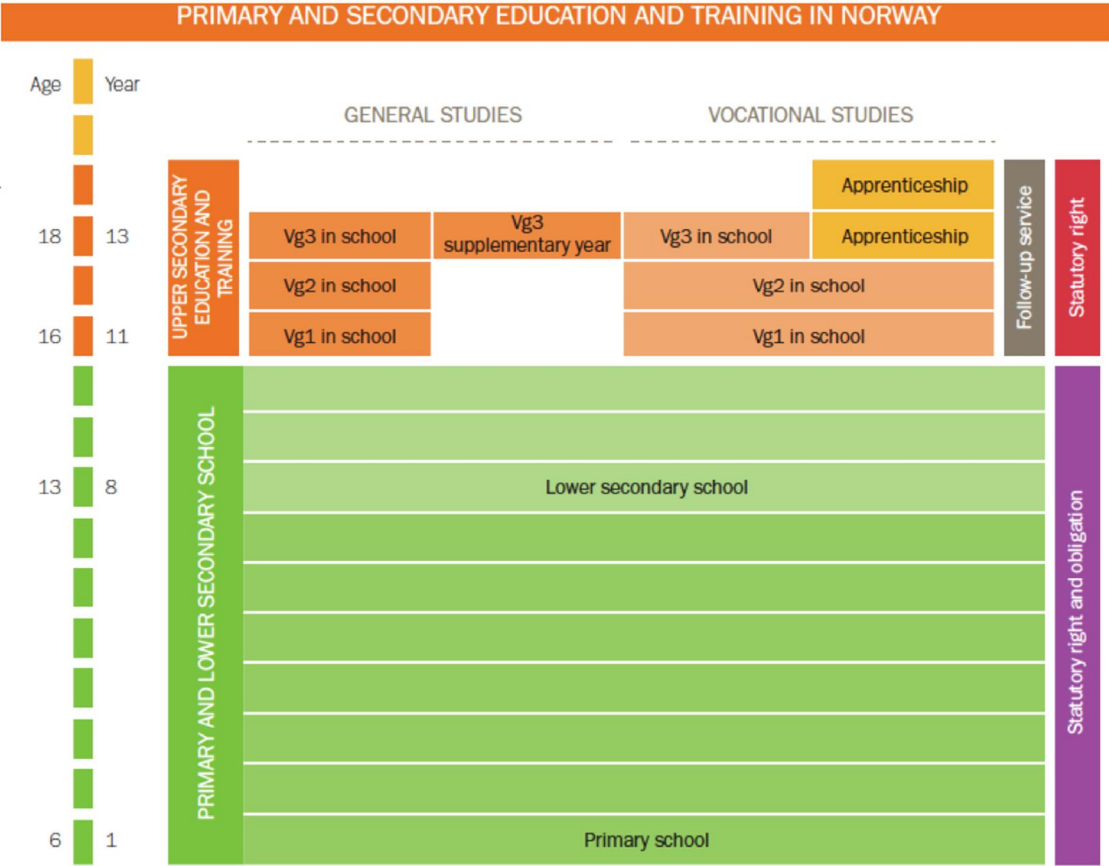
The government finances the activity of the municipalities and counties. The government supplies the funding, but the local authorities are responsible for making a budget distributing the money among the different activities (school, social service, roads, water etc.). Municipalities are school owners and are responsible for organising primary and lower secondary education (grades 1-10) and the counties (fylker) own the schools and are responsible for upper secondary education (grades 11-13). Municipalities and counties can organise classes for students with special needs as part of an ordinary school. These students will take part in the normal school activities (excursions, visits to museums, etc.) and can have part of their education with students from ordinary classes in suitable subjects.

Norway spends significant resources on providing special educational support and special needs education. It has long been a political goal to improve adapted tuition in schools. The aim is to improve learning outcomes for all pupils so that fewer of them require special needs education⁸.

⁷ See: <http://www.statped.no/Spraksider/In-English/>.

⁸ See: <http://search.ohchr.org/results.aspx?k=Norway#k=Norway#s=11>.

Figure 1: Structure of the Norway School System



Source: http://www.udir.no/Upload/Brosjyrer/5/Education_in_Norway.pdf?epslanguage=no

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.

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 organised 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.

Combining newly developed reading assessment passages and questions for 2011 with a selection of secure assessment passages and questions from 2001 and 2006, PIRLS 2011 allowed for measurement of changes since 2001. PIRLS 2011 also examined the national policies, curricula and practices related to literacy in participating countries, and included a set of questionnaires for students, parents/caregivers, teachers, and school principals to investigate the experiences that young children have at home and school in learning to read, in particular their attitudes and motivation towards reading.

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 C: ELINET PIRLS 2011 Data, Appendix D: ELINET PIRLS 2001 and 2006 Data).

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

The mean score of students in Norway on the PIRLS 2011 overall reading scale was 507 points. This was significantly lower than the EU-24 average of 535 points (Table 1). Norway's mean score was not significantly different from the two lowest-scoring EU-24 countries, Belgium (Fr) (506) and Romania (502). Pupils in Norway performed at about the same level when reading for Literacy and Informational purposes (Appendix C, Tables A2-A5). They performed marginally better on the Retrieve and Infer process subscale (511 points) than on the Interpret, Integrate & Evaluate scale (502 points).

Table 1: Overall Performance of Norway and EU-24 Average on PIRLS 2011

	Overall Reading –Mean Score
Norway	507
EU-24	535

Significantly different score (relative to the EU-24 Average) shown in **bold**.

In Norway, 29% of students achieved scores on overall reading that were at or below the Low PIRLS benchmark (Table 2). This was greater than the EU-24 average of 20%. Only Romania (35%) and Malta (45%) had more students than Norway performing at or below the Low benchmark. The proportion of

higher-achieving students in Norway, those scoring at the Advanced benchmark on the overall reading scale, was 2%. This is below the EU-24 average of 9%, and is well below the estimates for countries such as England and Finland (both 18%). No EU country has a lower proportion of students performing at the high benchmark than Norway.

Table 2: Performance by Overall PIRLS 2011 Reading Benchmarks - Percentages of Pupils in Norway and on Average across the EU-24

	Below 400	400-475 Low	475-550 Intermediate	550-625 High	Above 625 Advanced
Norway	5	24	46	23	2
EU-24	5	15	36	35	9

In Norway, the standard deviation on overall reading was 62. This was well below the EU-24 average of 71 (Table 3). While this can be interpreted as being indicative of an equitable spread in performance, it must be set against the relatively low overall performance of students in Norway. In Norway, the difference between the scores of students at the 90th and 10th percentiles on the overall reading scale was 157 points. This is well below the EU-24 average of 181, confirming a relatively narrow spread of achievement.

Table 3: Spread of Achievement – Standard Deviation, 10th, 90th Percentiles, and Difference between 90th and 10th Percentiles on Overall Reading – Norway and EU-24

	Standard Deviation	10 th Percentile	90 th Percentile	90 th -10 th
Norway	62	426	582	157
EU-24	71	440	621	181

Significant difference between 10th and 90th percentiles shown in **bold**.

Between 2001 and 2011, students in Norway improved by 8 score points on the overall reading scale (Table 4). Much of this improvement occurred between 2006 and 2011, when performance increased by 9 score points. Norway is one of a handful of countries in which performance increased between 2001 and 2011. The others include the Czech Republic (9 points), the Slovak Republic (17) and Slovenia (29).

Table 4: Trends in Performance 2001-2011 (Overall Scale)

	2001	2006	Change (2006- 2001)	2006	2011	Change (2011- 2006)	2001	2011	Change (2011- 2001)
Norway	499	498	-1	498	507	9	499	507	8
EU	534	534	0	534	535	1	534	535	1

Significant differences in **bold**

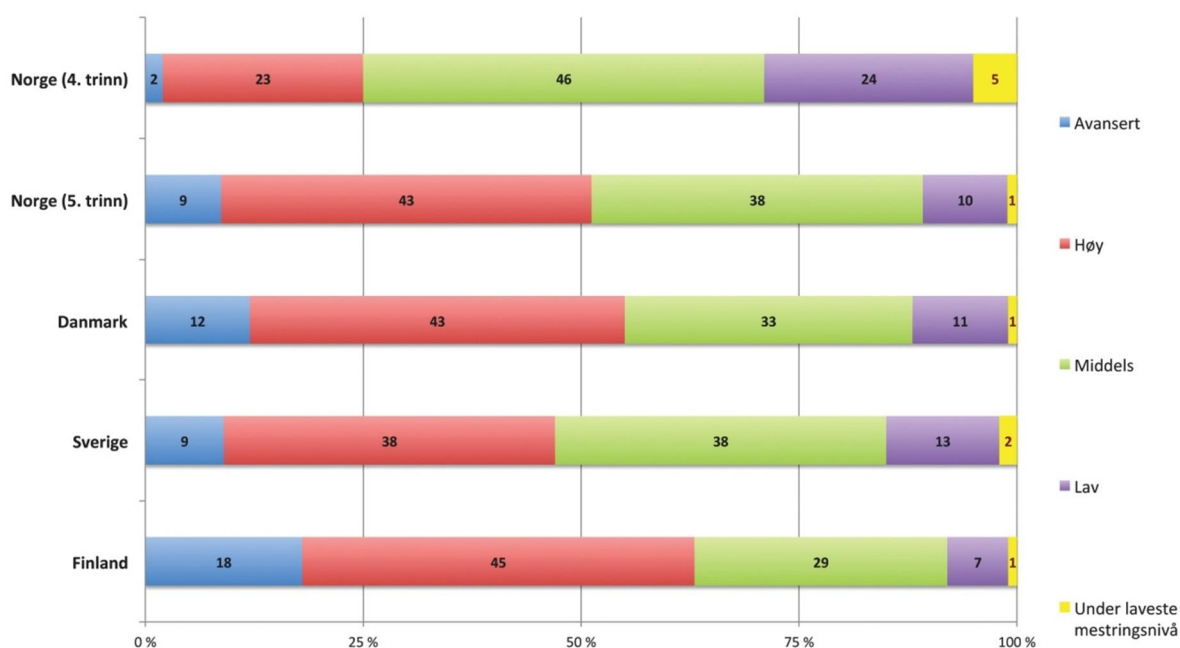
Even if Norwegian grade 4 students show statistically significant improvements in PIRLS 2011, they still perform well below the EU average. Since the Scandinavian countries are very similar in languages, culture and educational systems, the analysis of results in PIRLS in these countries always has had a special focus on comparisons between Norway, Sweden and Denmark. Norwegian grade 4 students

also lag behind grade 4 students in Sweden and Denmark. Obviously the low performance in PIRLS has caused concern in Norway, but not as much as one might have expected, and there is a simple reason for that.

The target group in PIRLS is grade 4. When Norway in 1997 lowered the age for starting in 1st grade to 6 years, the curriculum for the first year contained only preparatory activities and no formal education. As a result, the Norwegian students in grade 4 had one year less formal education and were among the youngest students in PIRLS 2001. This also was the case in PIRLS 2006, and Norway was therefore allowed to include an additional separate sample of students for grade 5. By the time of PIRLS 2011, the curriculum had changed, but progression is still very slow compared to other countries (no achievement goals before in grade 2) and the students are still among the youngest in PIRLS. Norway therefore also included a sample from grade 5 in PIRLS 2011.

In the main International report the results from the target group, grade 4, are reported, but in the Norwegian report both grade 4 and grade 5 are reported. In the Nordic countries it is also agreed that grade 5 is included when comparisons are made across the countries. In this way comparisons are more realistic. The Norwegian average in grade 5 in 2011 was 549 (grade 4 507). As you can see, it makes a big difference whether you discuss grade 4 or grade 5⁹.

Figure 2: Distribution of the Benchmarks in the Nordic Countries in PIRLS 2011.



Avansert = Advanced; Høy = High; Middels = Intermediate; Lav = Low; Under laveste mestringsnivå = Below lowest benchmark

The question of which grade is the right grade in Norway has been discussed with the IEA, and the conclusion is that in PIRLS 2016 the target group in Norway will be grade 5. For research purposes Norway will still include a full sample from grade 4.

⁹ See: http://lesesenteret.uis.no/getfile.php/Lesesenteret/Bøker%20og%20hefter/pdf_utgaver/OverKneiken_PIRLS2011_web.pdf.

In PIRLS 2011, grade 4 was the target group in Norway, and in the Elinet Country report the PIRLS results and the ensuing discussions are based on the available data in the international report (Mullis et al., 2012). It might however be wise to remember that the results of Norwegian grade 4 students in the PIRLS studies do not reflect the complete situation in Norwegian primary education.

The Norwegian grade 4 – grade 5 confusion can also explain why Norwegian 4th graders in PIRLS perform poorly, while the performance of 15-year-olds in PISA is much better – as opposed to most countries where the results in PIRLS are better than in PISA. The sample in PIRLS is grade based, and younger age and less formal education will have a strong impact on achievement in grade 4 (PIRLS). The sample in PISA is age-based, so there are no comparison problems due to differences in age and a slow start will be much less noticeable at the end of 10 years of education (PISA).

4.1.2 Gaps in reading

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

Parents’ educational achievement

Levels of parental education in Norway are higher than on average across the EU-24. Only 3% of pupils in Norway had parents whose highest level of education was lower secondary or below, which is substantially less than the EU average of 18%. In addition, the percentages with university education or higher (58%) is almost twice the EU-24 average of 30%. The gap in performance on PIRLS between students whose parents’ highest level of education was university or higher and those whose parents’ highest level was lower secondary or below was 58 score points. This was lower than the corresponding EU average of 76 (Table 5).

Table 5: Percentages of Parents Whose Highest Level of Education was Lower Secondary, and Percentages who Finished University or Higher– Norway and EU-24 Average

Level of Home Resources	Lower Secondary or Below		University or Higher		Difference (Univ or Higher – Lower Sec)
	%	Mean	%	Mean	
Norway	3	463	58	521	58
EU-24	18	495	30	571	76

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

Primary language spoken at home different from language used at school

In Norway, 82% of pupils reported that they always spoke the language of the test at home, while 1% reported that they never did so (Table 6). The difference in performance between pupils who always spoke the language of the test at home and those who sometimes or never did so was 19 score points – 7 points lower than on average across EU countries.

Table 6: Percentages of students reporting that they always or sometimes / Never spoke the language of the PIRLS test at home, and associated mean score differences – Norway and EU-24 Average

Language of the Test Spoken at Home	Always		Sometimes /Never		Mean Score Difference (Always – Sometimes/Never)
	%	Mean	%	Mean	
Norway	82	511	18	492	19
EU-24	80	541	20	515	26

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

Gender

In Norway, girls achieved a mean that was 14 points higher than boys on the overall reading scale in 2011. This was about the same as the EU-24 average difference of 12 points in favour of girls (Table 7). The gender difference in Norway dropped from 21 points in 2001 to 14 points in 2011 and a similar reduction can be seen in the EU-24 difference, which reduced by 5 points in this period.

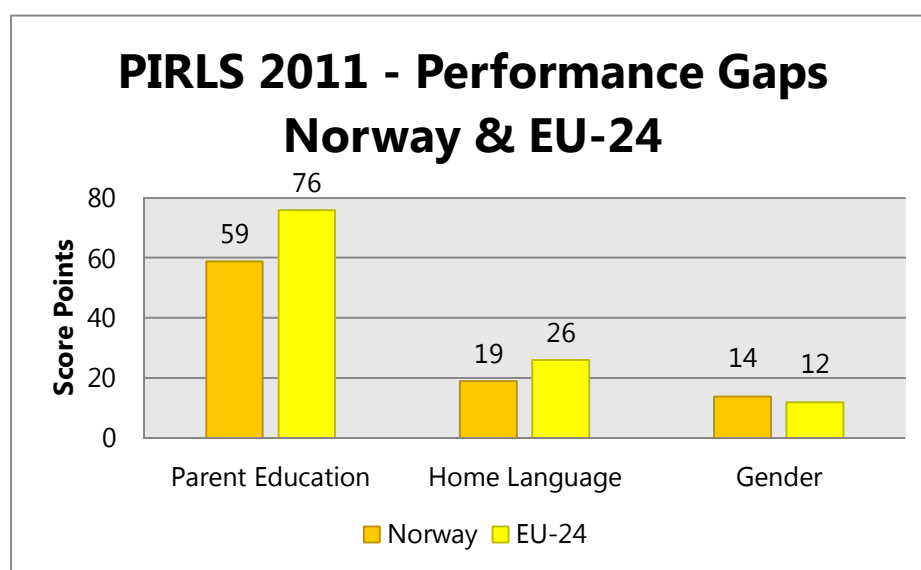
Table 7: Trends in Performance by Gender 2001-2011 (Overall Scale) – Norway and EU-24

	Norway			EU-24		
	Girls	Boys	Girls-Boys	Girls	Boys	Girls-Boys
2011	514	500	14	541	529	12
2006	508	489	19	541	528	13
2001	511	489	21	542	525	17

Significant differences in **bold**

Achievement gaps at primary level in Norway and on average across EU countries are summarised in Figure 3.

Figure 3: Performance Gaps – Gender, Parent Education and Language Spoken at Home



Gender: girls – boys Education: University vs. Lower Secondary/Primary education; Language: Student speaks language of the tests at home always vs. sometimes/never.

Attitudes to Reading

Students in Norway in the top quarter of the Like Reading attitudinal scale achieved a mean score on overall reading that was some 45 points higher than that of students in the bottom quartile (Table 8). This was marginally lower than the EU-average difference of 52 points, indicating that the relationship between Liking Reading and performance is a little weaker in Norway than on average across EU-24 countries.

Table 8: Mean Overall Reading Scores of Students in the Top and Bottom Quartiles of the PIRLS Like Reading Scale – Norway and EU-24 Average

Like Reading	Overall Reading		
	Top Quartile	Bottom Quartile	Difference (Q4-Q1)
Norway	531	486	45
EU-24	563	511	52

Significant differences in **bold**

Students in the top quartile of the Confidence in Reading scale achieved a mean score on overall reading that was some 62 points higher than students in the bottom quartile (Table 9). This is lower than the EU-24 average of 80 points, indicating a somewhat weaker association between Confidence in Reading and performance than on average across EU countries. In England, for example, the corresponding difference was 71 score points.

Table 9: Mean Overall Reading Scores of Students in the Top and Bottom Quartiles of the PIRLS Confidence in Reading Scale – Norway and EU-24 Average

Confidence in Reading	Overall Reading		
	Top Quartile	Bottom Quartile	Difference (Q4-Q1)
Norway	535	473	62
EU-24	570	490	80

Significant differences in **bold**

4.1.3 National literacy studies

Norway has a programme of compulsory national tests in grade 5 in reading, English and mathematics. These tests are constructed similarly to PIRLS and PISA assessments, including different texts, multiple choice and constructed response questions. They are scored on a three-point scale, the points indicating achievement levels describing in detail what students at the different achievement levels can do. The test results are published at national level, at county level, at municipality level and at school level. Teachers have access to the results of their students.

In 2015 it was possible to compare the results obtained in the computer-based tests in English and mathematics with the results obtained in 2014. The national tests in reading are in the process of being transformed into computer-based versions, and it is expected that in 2016 it will be possible to compare the results in reading with results from 2015.

Where comparison across years has been possible so far, there have been no significant changes in the results from 2015 as compared to those obtained in 2014 by grade 5 students¹⁰.

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 OECD¹¹, **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 on and evaluate 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 to 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 labour-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

Norway has participated in PISA since 2000. It is therefore possible to describe the change in reading performance over twelve years on average, according to different characteristics of the readers. In PISA 2012, students in Norway achieved a mean score of 504 points (Table 10). This was significantly higher than the average for EU countries by 15 score points (about one-half year of schooling), but well behind the highest-performing EU countries, such as Finland, Ireland, Estonia and Poland.

¹⁰ See:

<https://skoleporten.udir.no/rapportvisning?enhetsid=00&vurderingsomrade=11&skoletype=0&utdanningstype=-&skoletypemenuid=0&underomrade=29&sammenstilling=1&fordeling=-1#rapport>.

<http://www.udir.no/Vurdering/Nasjonale-prover/>.

http://www.udir.no/globalassets/filer/tall-og-forskning/statistikk/nasjonale-prover/analyse-np-5.trinn_2015.pdf.

¹¹ See : <http://www.pisa.OECD.org>.

Table 10: Reading performance in PISA 2012, Norway and EU average

	Mean	S.E.
Norway	504	(3.2)
EU-27	489	(0.6)

S. E. = standard error; Significant differences between the country and the EU's average are shown in **bold**

The performance in reading of students in Norway has remained remarkably constant between 2000 and 2012, with mean scores falling into a narrow range (503-505) (Table 11). This contrasts with countries such as the Czech Republic, Ireland and Sweden, where there have been noticeable changes in performance.

Table 11: Trends in Reading performance - PISA 2000-2012 – Norway and EU Average

	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.
Norway	505	(2.8)	503	(2.6)	504	(3.2)	-2	(6.2)	1	(4.9)	-1	(7.3)
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 Norway, the spread of achievement in PISA 2012 is the same as in the EU countries on average, with a difference of 252 points between students performing at the 10th and 90th percentiles (Table 12). Differences for boys and girls are also very similar to the corresponding EU averages.

Table 12: Spread of Achievement – Difference between 10th and 90th Percentiles on the Overall Reading Scale, All students and by Gender – PISA 2012 – Norway and EU average

	Difference 90 th –10 th for all students		Difference 90 th –10 th for girls		Difference 90 th –10 th for boys	
	Score diff.	S.E.	Score diff.	S.E.	Score diff.	S.E.
Norway	252	(4.8)	232	(7.0)	257	(7.0)
EU-27	251	(1.3)	230	(1.2)	259	(1.6)

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

In Norway there are slightly fewer low-performing readers (16.2%) – students performing below Level 2 on the PISA overall reading scale – compared with the EU average (19.7%) (Table 13). There are also more top-performing readers (10.2%) compared with the corresponding EU average (7%). However, Norway lags behind the top-performing EU countries at both ends of the scale. For example, in Finland in PISA 2012, 11.3% performed at or below Level 2, while 13.5% performed at Levels 5-6.

Table 13: Percentage of Low-performing (below level 2) and High-performing (levels 5 and 6) Students on Overall Reading – PISA 2012 – Norway and EU average

	Below level 2		Levels 5 and 6	
	%	S.E.	%	S.E.
Norway	16.2	(1.0)	10.2	(0.7)
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-performers in reading remained stable in Norway (Table 14). Among girls, a decrease of 0.8% was observed, while among boys it was 0.7%.

Table 14: Trends in the Proportion of Low-performers (Below level 2) in Overall Reading – PISA 2000-PISA 2012, All Students, and by Gender

	Proportion of students below level 2 in reading					
	All students		Girls		Boys	
	%	S.E.	%	S.E.	%	S.E.
2000	17.5	(1.1)	10.4	(1.0)	23.2	(1.6)
2009	15.0	(0.8)	8.3	(0.8)	21.4	(1.2)
2012	16.2	(1.0)	9.6	(0.9)	22.5	(1.4)

Significant differences between assessment cycles in **bold**

4.2.2 Gaps in reading performance

As at primary level, there are gaps in reading performance between groups in Norway and on average across EU countries.

Socio-economic status

In Norway the gap in reading performance according to the students' socio-economic background (the PISA scale of economic, social and cultural status) (70 points) is well below the corresponding EU-26 average (93) (Table 15). This can be interpreted as indicating that reading outcomes are more equitable in Norway than on average across EU countries.

Table 15: Difference in Reading Performance between Bottom and Top National Quarters of the PISA Index of Economic, Social and Cultural Status – PISA 2009 – Norway and EU Average

	Difference between bottom and top national quarters of the PISA index of economic, social and cultural status	
	Score diff.	S.E.
Norway	70	(4.3)
EU-26	93	(1.1)

Significant differences in **bold**

Migration

In Norway, the percentage of students with an immigrant background is 6.8%, somewhat less than the EU average of 8.3% (Table 16). The gap between native students and those with an immigrant background is 52 score points, which is equivalent to almost one and a half years of schooling. The gap between native students and those with an immigrant background is higher than in the EU countries on average (38 points).

Table 16: Percentage of Students and Reading Performance by Immigrant Status – PISA 2009 – Norway and EU Average

	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.		
Norway	93.2	(0.6)	508	(2.6)	6.8	(0.6)	456	(5.9)	52	(5.7)
EU-26	91.7	(0.02)	490	(0.4)	8.3	(0.02)	452	(6.4)	38	(6.4)

Significant differences between native and students with an immigrant background in **bold**

Language spoken at home

In Norway, the gap between students who reported speaking the PISA test language at home and those who do not is quite substantial (58 score points) but close to the corresponding EU average (Table 17). It is equivalent to one and a half years of schooling. Fewer students in Norway (7.3%) than on average across EU countries (13.2%) speak a different language to the language of the test at home.

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		Score dif.	S.E.
			Mean	S.E.			Mean	S.E.		
Norway	92.7	(0.5)	508	(2.6)	7.3	(0.5)	451	(5.6)	58	(5.3)
EU-27	86.7	(0.02)	494	(0.4)	13.3	(0.02)	441	(5.4)	54	(5.4)

Significant differences according to language spoken at home in **bold**.

Gender

The Gender difference in reading performance in favour of girls in Norway (47 score points in 2009) was close to the average for EU countries (also in favour of girls) (44) (Table 4.11).

Table 18: Mean Reading Performance by Gender and Gender Differences – PISA 2009 – Norway and EU Average

	Boys		Girls		Difference (B – G)	
	Mean	S.E.	Mean	S.E.	Score diff.	S.E.
Norway	480	(3.0)	527	(2.9)	-47	(2.9)
EU-26	463	(0.5)	506	(0.4)	-44	(0.5)

Significant gender differences in **bold**.

In Norway, between 2000 and 2012, the performance of girls' remained constant (a drop of just one score point) while the performance of boys declined by 7 score points (Table 19).

The trend in Norway is a bit different from what is observed in EU countries on average between 2000 and 2012: boys' performance also decreased (by 5 score points), whereas the girls' performance increased (by 5 score points).

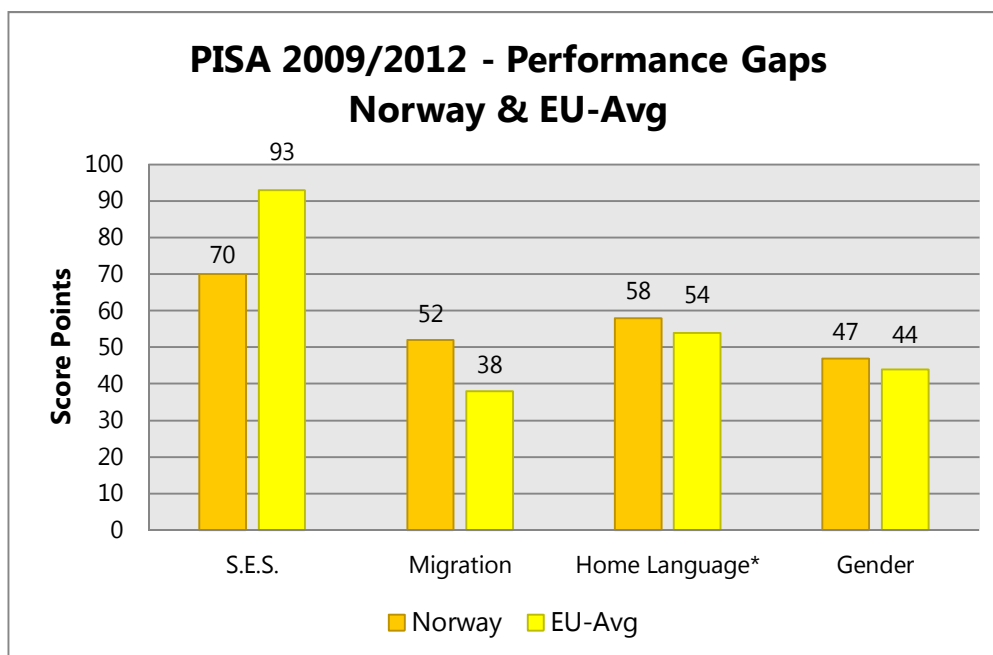
Table 19: Trends in Reading Performance by Gender – PISA 2000-2012 – Norway and EU Average

	Norway				EU-27			
	Girls		Boys		Girls		Boys	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
2000	529	(2.9)	486	(3.8)	506*	(0.8)	473*	(0.9)
2009	527	(2.9)	480	(3.0)	507**	(0.7)	464**	(0.8)
2012	528	(3.9)	481	(3.3)	511***	(0.6)	468***	(0.8)

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

Gaps in Norway and on average across EU countries relating to socio-economic status, migration, language spoken at home and gender are summarised in Figure 4.

Figure 4: Performance Gaps: SES, Migration, Language Spoken at Home and Gender – Norway and EU averages



Education: University – Lower Secondary or lower; Language: Language of test spoken always – sometimes/never; Gender: Girls – Boys.

Engagement and metacognition

In Norway, there is a gap of 110 score points – which is equivalent to more than two and a half years of schooling – between the students reporting high engagement in reading (top quarter in the PISA reading engagement scale), and those reporting low engagement (bottom quarter). Not surprisingly, students who report being engaged in reading perform better in the PISA test. The difference between the most and the least engaged readers in Norway is higher than the EU’s average.

Table 20: Mean Reading Scores between Students Poorly Engaged and Highly Engaged in Reading – PISA 2009 – Norway and EU-26 Average

	Bottom quarter		Top quarter		Difference
	Mean	S.E.	Mean	S.E.	
Norway	452	(3.3)	562	(3.2)	110
EU-26	444	(0.8)	543	(0.8)	99

Significant differences according to the level of reading engagement in **bold**.

In Norway, there is a gap of 81 score points - equivalent to two years of schooling - 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 them. On average, in the EU, the gap is somewhat higher (98 score points). These differences reflect how closely reading proficiency and awareness of efficient reading strategies are linked.

Table 21: Mean Reading Scores between Students in the Bottom and Top Quarters of Understanding and Remembering Strategies Scale – Norway and EU-26 Average

	Bottom quarter		Top quarter		Difference
	Mean	S.E.	Mean	S.E.	
Norway	459	(3.5)	540	(2.8)	81
EU-26	433	(0.8)	531	(0.8)	98

Significant differences according to the degree of awareness of efficient reading strategies (understanding and remembering strategies) in **bold**.

In Norway, there is a the gap of 89 score points – which is equivalent to slightly more than two years of schooling - between students who know which strategies are the most efficient to summarise a text, and those who have a limited knowledge (Table 22). This is close to the EU average of 90. The differences between students in bottom and top quarters reflect how closely reading proficiency and awareness of efficient reading strategies are linked.

Table 22: Mean Reading Scores between Students in Bottom and Top Quarters of the Summarizing Strategies Scale – PISA 2009

	Bottom quarter		Top quarter		Difference
	Mean	S.E.	Mean	S.E.	
Norway	455	(3.4)	544	(2.8)	89
EU-26	440	(0.8)	530	(0.7)	90

Significant differences according to the degree of awareness of reading strategies (summarizing strategies) in **bold**.

Challenge: Below average reading performance in Norway needs to be addressed as a matter of urgency. There is a need to raise standards across the board, with a view to reducing the proportion of low achievers, and raising the performance of higher achievers.

4.2.3 National literacy studies

Norway has a programme of compulsory national tests in grade 8 in reading, English and mathematics. The tests constructed for grade 8 are also applied in grade 9. The national tests for grade 8 are scored on a five-point scale. The points on the scales indicate achievement levels, and there are detailed descriptions of what students at the different achievement levels can do. The test results are published at national level, at county level, at municipality level and at school level. Teachers have access to the results of their students. No studies comparing results on national tests and PISA have been conducted; however, the general impression is that the two assessments yield a similar picture.

In 2015 it was possible to compare the results on the national test from one year to the next, but only for the computer based tests in English and mathematics. The national tests in reading are in the process of being transformed into computer-based versions, and in 2016 it will be possible to compare the results with results from 2015.

In grade 8, the average results in English and mathematics were the same in 2014 and 2015. In mathematics, however, there is a minimal change in the number of students at the lowest achievement

level. Compared to 2014, in 2015 the number of girls at the lowest level decreased with 4 %, while the decrease for boys was 2 %¹².

Challenge: Although the performance of 15-year olds in Norway is significantly higher than the corresponding EU average, Norway does less well than EU countries such as Finland, Ireland, Poland and Estonia. There is a need to raise achievement at post-primary level, and to reduce the proportion of low-performing students.

The immediate priority should be to increase performance at primary level, as this may then have an impact at post-primary level.

¹² See: <https://skoleporten.udir.no/rapportvisning?enhetsid=00&vurderingsomrade=11&skoletype=0&utdanningstype=-&skoletypemenuid=0&underomrade=29&sammenstilling=1&fordeling=-1#rapport>;
<http://www.udir.no/Vurdering/Nasjonale-prover/>;
http://www.udir.no/globalassets/filer/tall-og-forskning/statistikk/nasjonale-prover/analyse-np-ungdomstrinnet_2015.pdf.

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 overlap 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 2001 or 2006 are referred to. Appendix D offers this information for the PIRLS 2001 and 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 enabling children to express and exchange their individual (intimate) reading experiences, if they wish to do so.

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*). In 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

PIRLS 2011 used the “Parents Like Reading Scale” based on parents’ responses to seven statements about reading and how often they read for enjoyment. The figures are presented below with the percentage of students whose parents “like”, “somewhat like” or “do not like” reading” as reported by PIRLS 2011 (Mullis et al. 2012a, Exhibit 4.4 – Parents Like Reading, p. 120).

- Like: 44% (EU average 35%)
- Somewhat like: 46% (EU average 53%)
- Do not like: 10% (EU average 18%)

(For an overview of European countries, see table B1 in Appendix B).

The percentage of parents in Norway who like reading (44%) is greater than the EU average. The importance of parental attitudes to reading is shown by the fact that there is a significant difference in reading performance at grade 4 between children whose parents like to read (average achievement 563) and those who do not (average achievement 541).

Home educational resources

In Norway, 7.3% of students reported having 10 or fewer books at home (Appendix C, Table E1). This is below the EU-24 average of 11.3%. 16.4% of students in Norway have 200 or more books, compared with an EU-24 average of 12.3%. The mean score difference in favour of students with 200 books, compared with those who had 10 or fewer books was 62.2 points in Norway, compared with an average of 81.7 across the EU-24. Hence, the association between number of books at home and reading achievement in Norway is weaker than on average across the EU-24.

Students in Norway described as having ‘few’ home educational resources (based on a scale that includes number of books at home, number of children’s books at home, access to a quiet room to study, Internet access, and parent education and job status) had a mean score on PIRLS reading literacy that was significantly lower, by 57 points, compared with those described as having many resources (Table 23). The corresponding difference on average across the EU-24 was 78, indicating that the association between home resources and reading achievement is weaker in Norway than on average across the EU-24. This must also be seen in the context of the narrower spread of achievement in Norway.

Table 23: Percentages of Pupils Whose Parents Reported Having Few or Many Home Resources for Learning, and Corresponding Mean Overall Reading Scores – Norway and EU-24 Average

Level of Home Resources	Few Resources Bottom Quartile		Many Resources Top Quartile		Difference (Many – Few)
	%	Mean	%	Mean	
Norway	25	477	25	534	57
EU-24	25	495	25	573	78

Statistically significant mean score differences in bold.

Number of children’s books in the home

PIRLS 2011 offers two sets of data concerning books in the home: the first refers to numbers of children’s books in the home (based on reports by parents); the second refers to books in the home (regardless of whether they are children’s books or not), as reported by students. A possible discrepancy might be explained by the difference in sources and questions.

The PIRLS 2011 database provides data on the number of children’s books in the home, according to parents:

- 0-10: 3.7% (European average 11.8%)
- 11-25: 10.5% (European average 19.7%)
- 26-50: 25.0% (European average 29.4%)
- 51-100: 35.4% (European average 23.4%)
- >100: 25.4% (European average 15.7%).

Compared to the European average, the availability of children's books in the home is very high in Norway. Differences are large, with just 4% in Norway having 10 or fewer books at home, compared with a European average of 12% (for an overview of European countries, see table B2 in Appendix B).

Seven percent of students have less than 10 books at home. The mean score difference between those with 10 or fewer books and those with more than 200 (16% in Norway) was 62 points – somewhat lower than the EU-24 average of 81 points.

Table 24: Mean Overall Reading Scores of Pupil with 0-10 Books at Home, and those with More than 200 Books – Norway and EU-24 Average

Books in the Home	None or Few Books (0-10)		More than 200 Books		Mean Score Difference (More than 200 – None or few)
	Percent of Students	Mean Reading Score	Percent of Students	Mean Reading Score	
Norway	7	461	16	523	62
EU-24	11	482	12	563	81

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

Early Literacy Activity Scale

PIRLS 2011 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 (Mullis et al. 2012a, exhibit 4.6 - Early Literacy Activities Before Beginning Primary School, p. 126). Nine 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.

The data for Norway in a composite score for all these activities is below (for an overview of European countries see table B3 in Appendix B). When we combine the data for 'often' and 'sometimes', we find that similar proportions of parents in Norway and on average across EU countries engage in early literacy activities with their children. Moreover, the Early Literacy Activity Scale correlates with later reading performance in grade 4. The average reading score of pupils in Norway who were engaged often in these activities was 559 as compared with 551 for those pupils who sometimes were engaged in these activities with their parents before the beginning of primary school. These figures point to the importance of allocating time to literacy-related activities in early childhood and their association with achievement in Grade 4.

- Often: 37% (EU average 41%)
- Sometimes: 63% (EU average 57%)
- Never or almost never: 1% (EU average 2%).

While the Early Literacy Activity Scale yields a composite score, it is of interest to look at single items. If only the category "often" is considered, the percentage of pupils in Norway whose parents engaged in literacy-related activities with them before the beginning of primary school is close to the European average, but is higher for singing songs:

- read books to them often: no data are available (European average 58.4 %)
- told stories to them often: 38.3% (European average 51.5%)
- sang songs to them often: 63.6% (European average 50.6%)
- played games involving shapes (toys and puzzles) with them often: 52.4% (European average 63.5%).

(For more details and an overview of European countries see table B4-B7 in Appendix B).

5.1.2 Providing a literate environment in school

A number of projects have been implemented in recent years with a view to improving the environment for literacy in Norwegian schools.

The project *Program for skolebibliotekutvikling* (Programme for School Library Development) implemented in 2009-2013 aimed at promoting school libraries. The project was coordinated by the University of Agder (Teaching Reading in Europe: Contexts, Policies and Practices, Eurydice. 2011, p. 189). The programme involved 173 project schools all over Norway and the total budget was 40 million NOK. Nordisk institutt for studier av innovasjon, forskning og utdanning, NIFU (The Nordic Institute for Studies in Innovation, Research and Education) evaluated the programme at the request of the Directorate for Education and Training. The programme was designed, implemented and conducted by the University of Agder. School leaders, teachers, school librarians and school owners reported that the work performed by the University of Agder had been very valuable. However goal attainment on the three performance goals was not satisfactory. The programme had three performance goals¹³:

- 1) 50 % of school librarians in primary school will be trained in school library competence. **Goal not attained.**
- 2) There shall be an increase in the number of municipalities and schools that have actively implemented the school library in the education and that have anchored the school library in its long-term planning to strengthen literacy. **Goal not attained.**
- 3) There shall be established models for systematic use of school libraries in education. **Goal partly attained.**

The programme *Increasing Literacy Skills* also aimed at closer cooperation between public libraries and primary schools (European Commission, Comenius Good Practices Examples, 2013, p. 18). *Increasing Literacy Skills* is one of 22 projects mentioned in the chapter on literacy (Chapter 1) in the Comenius publication. One school in Norway and one school in the United Kingdom participated. There was no external evaluation. However, participating schools and libraries report that they cooperate more closely and that other schools in both countries have benefited from the work. Links to public libraries were introduced in the partner regions' local strategies to improve literacy education in the early years in school¹⁴.

No special programmes exist targeted at adolescents.

The main aim of the strategic plan, 'Make space for reading!' (2003-2007) was to improve reading skills and the motivation to read among children and adolescent, especially boys. It had a strong focus on local activities: schools and municipalities initiated several hundred large and small projects for teaching and reading at all levels, encouraging reading and the use of school libraries (Education, Audiovisual and Culture Executive Agency (2011). *Teaching Reading in Europe: Contexts, Policies and Practices*, p. 121).

Availability and use of classroom library

Based on data provided by their teachers, PIRLS shows that 60% of students in Norway are in classrooms which have class libraries – below the corresponding EU-24 average of 72.9% (Appendix C,

¹³ See: <http://www.nifu.no/files/2014/03/NIFUrapport2014-4.pdf>.

¹⁴ See: http://ec.europa.eu/education/library/publications/2013/comenius_en.pdf.

Table H2). In Norway, 18% of students were in classrooms with more than 50 books, which is below the EU-24 average of 32.1% (ibid.). According to Mullis et al. (2012), reading for pleasure has a major emphasis in the reading/language curriculum in Norway. However, 40% of classrooms have no classroom libraries and the percentage of classrooms with more than 50 books available is relatively small (18%) compared to the EU-24 average (32%). Furthermore, the percent of children who can borrow books from the classroom library to take home (39%) is substantially lower than the EU-24 average (57%). These findings indicate that, despite the emphasis in the curriculum on reading for pleasure, the resources and infrastructure (at least in paper form) for supporting it in schools are not in place to the degree needed.

Challenge: There is a need to update the quantity and quality of classroom libraries if schools are to be supported to encourage reading for pleasure, which is also associated with higher levels of achievement.

5.1.3 Providing a digital environment

Digital environment of primary students

A literate environment can also be created by incorporating digital devices into the school environment. According to teachers' of students in PIRLS 2011, 88% of students in Norway have a computer available for reading lessons, compared to the EU-average of 45% (Appendix C, Table I6). Teachers report that at least monthly, 68% of students use instructional software to learn reading skills and strategies, 79% look up information, 54% read stories or other texts, and 77% write stories or other texts. These figures are well above the corresponding EU-24 averages (27%, 39%, 32% and 33%, respectively) indicating that computers are used in very different ways in Norway than across the EU.

Digital environment of secondary students

Based on the study "Survey of Schools: ICT in Education", (SoS), Country Profiles were made by the European Schoolnet and the of Univeristy of Liege (2013). At grade 8 in Norway more than half the students use school desktop/laptop for learning purposes 'at least weekly'. In some schools students are allowed to bring their own technology into school for learning purposes, 34% of students use their own mobile phone and 15% use their own laptop for learning purposes 'at least weekly' (pp. 60-61). At grade 11, almost all students use the school computer and 41% of the students use their own laptop or mobile phone for learning purposes 'at least weekly'. Multimedia tools are also used at grade 11 in vocational training. But simulations and data-logging tools are very rarely used at all grades (pp. 62-85). Interactive Whiteboards are used at all grades by teachers of almost one-third of the students 'at least weekly'.

The DSWG (Digital Skills Working Group, Balanskat & Gertsch, 2010) points out that teachers in Norway practise ICT-based teaching and learning methods in specific subjects and projects.

Digital literacy is part of the curriculum. Policy focuses on the integration of ICT in learning management, and not only on infrastructure. As noted above, in some schools, students are allowed to bring their own technology into school for learning purposes (European Schoolnet & University of Liege, 2013, p. 61).

In Norway, digital competence is defined in the secondary national curriculum as a key competence, which is integrated in the curriculum in an interdisciplinary manner (in different subjects or ICT related

projects) (Digital Skills Working Group, European Schoolnet, p. 50). There are no official standards mentioned, but nationally there are some pilot projects for measuring students' digital competence. Teachers' knowledge and skills targets are very generally defined for different subjects, e.g. "be able to use and evaluate ICT as tools and measures in creative work" but there is no official programme for teachers (Digital Skills Working Group, European Schoolnet, 2010, p. 51).

Students in Grade 8 and Grade 11 (general and vocational) were among the most frequent users of ICTs during lessons at school, and well ahead of EU average levels (European Schoolnet and University of Liege, 2013, p. 86). Activities subsumed under the frequency of usage scales included searching the internet, posting homework on the school website, and using computers to conduct experiments.

Teachers and students are well supported also by ICT coordinators having a pedagogical as well as a technical role (European Schoolnet and University of Liege, 2013, p. 27). It seems that students in Norway are active participants in their learning and they more often use ICT-based activities compared to the other countries mentioned in the SoS study, where Norway has the highest frequencies of students' ICT-based activities at grade 11, as well as a high frequency at grade 8.

Students' digital competence is defined and developed as knowledge and skills targets: tool knowledge, information knowledge, media knowledge, to gather information, to evaluate and analyse, simulate and make models, be creative, solve problems, document, report, present, publish and communicate. Privacy and data protection are included. But competences are officially assessed in some examinations only (Digital Skills Working Group, European Schoolnet, p. 50). ICT is used as a communication tool, to gather knowledge related to presentations, for research, planning and cooperation and relating ICT to the outside world. So students should become active and creative producers (Digital Skills Working Group, European Schoolnet, p. 36). The experiences in the project mentioned in this study show that the use of hand-held technology causes students to be more actively engaged in learning. More than half the students responded that they have become "more" or "a little more" interested in the subjects while using technology. The number stating that they have not become more interested is smaller. Although no explanation is provided for this, girls' interest in a subject seems to increase more when they use the equipment, especially in mathematics.

5.1.4 The role of public libraries in reading promotion

Public libraries are an important agent in reading promotion. Interested members of three Norwegian libraries can use the web page www.ebib.no to digitally loan e-books without having to physically go to a library. The selection of e-books is, however, geared towards adults rather than adolescents. All in all, adolescents seem to be the least supported group. The introduction of e-books in Norway has been slow. Norwegian publishing houses have been reluctant to use international platforms for distribution of e-books and have tried to introduce a Norwegian distribution platform. This has slowed down the use of e-books in Norway, and has obviously also affected the introduction of e-book loans in the libraries.

Challenge: There is a need to put a stronger focus on the part of libraries to accommodate adolescents and their preferred information and reading platforms.

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

Initiatives to foster reading engagement among children and adolescents

In Norway, there is a strong general focus on the importance of reading and literacy development for children in the public domain and in the media. For example, as part of the national programme "Make space for reading 2003 - 2007" there was a project where local libraries brought books to kindergartens and replaced them with new books every third month. The kindergartens used the books in their daily activities, informed the parents about the books and allowed parents to borrow books to take home. Posters and brochures dealing with the development of literacy which were developed as part of the project are still in use¹⁵.

The programme was evaluated and the evaluation contained a number of suggestions for further initiatives¹⁶.

Many of the suggestions have been implemented as part of national education policies, and strategies for public libraries. Most local libraries have one day a week where the focus is on children. Activities vary from reading of fairy tales, introduction to new books for the different age groups plays for/by children etc¹⁷.

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, p. 16)

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 labour 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.

¹⁵ See: <http://lesesenteret.uis.no/article.php?articleID=90176&categoryID=14164>.

¹⁶ See: <http://www.udir.no/Tilstand/Forskning/Rapporter/Sintef/Gi-rom-for-lesing--evaluerig-av-tiltaksplanen-sluttrapport-2008/>.

¹⁷ See: <http://bergenbibliotek.no/barn-og-ungdom>.

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 programmes.

There are no national programmes to measure the quality of Early Childhood Education and Care.

Annual expenditure on pre-primary education

According to Eurostat (2014, Figure D3), the total public expenditure per child in pre-primary education as a percentage of GDP in Norway is 0.3%. The range is from 0.04% in Turkey and 0.1% in Ireland to 1.01% in Denmark (for an overview of European countries see table D1 in Appendix B).

Percentage of males among preschool teachers

No data are available for Norway. There have been discussions about having a quota reserved for male applicants to pre-primary education, but no such quota has been introduced. Employers are however allowed to favour males if two applicants are equally qualified and there is a lack of males among staff. For an overview of European countries see table D3 in Appendix B.

Preschool teachers' qualifications

The minimum required level to become a qualified teacher is Bachelor level (ISCED 5). Length of training is 3 years (European Commission/ EACEA/Eurydice/Eurostat 2014, p. 101).

Continuing Professional Development is not obligatory (Eurostat 2014, pp. 104–105).

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, 2012).

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 being

read and told), being engaged and motivated in literacy-related activities, experiencing a literacy-rich environment, developing concepts of print, and language awareness.

Norway has no preschool curriculum. There is, however, a National Framework Plan for the Content and Tasks of Kindergartens. The plan is a framework for the work of supervisory authorities, owners, parents and staff, and provides guidelines for fundamental values, content and tasks for kindergartens¹⁸.

Eurydice (2011) gives insights into components of reading curricula in relation to emergent literacy, basic literacy and higher-order thinking. In Norway, in relation to emergent literacy, one of the six indicators for knowledge of conventions and understandings of print is included in official steering documents for pre-school.

According to the Framework Plan for the Content and Tasks of Kindergartens, communication skills are considered central in the spectrum of young children's literacy. Children should be motivated to participate in various playful activities which facilitate them to listen, observe and respond to mutual interaction with children and adults, develop their understanding of concepts, and use a varied vocabulary, use their language to express feelings, wishes and experiences, develop a positive relationship with texts and pictures as sources of aesthetic pleasure, knowledge and conversations, and as inspiration for fantasies and creativity as well as to become familiar with books, songs, pictures, the media, etc. (Norwegian Ministry of Education and Research, 2011, p. 34).

All children should be provided with a rich and varied language environment at their kindergarten. Teachers should create an environment that stimulates children's engagement with books, motivates them to use language actively, and encourages the development of listening and conversation skills. Furthermore, teachers should read books daily and tell stories to the children and discuss with them the contents of the books (Norwegian Ministry of Education and Research, 2011, p. 31, 34).

Improving early language and literacy screening and training

Teachers should create situations in which children, through playful activities, become familiar with the sounds of letters in words and rhymes of words. These should facilitate playful involvement with sounds and motivate children to listen to sounds and rhymes in the language and become familiar with symbols such as numbers and letters (Norwegian Ministry of Education and Research, 2011, p. 34). In Norway, the Framework Plan for Kindergartens will be revised in 2017. At the moment little is known about the content of the revised plan.

Many communities (kindergarten owners) and many kindergartens use a programme for assessing the development of skills related to language and social interaction. The programme is designed to monitor the development between ages 3-6. Based on the screening results from the programme, the kindergarten can offer more focused stimulation and help to the children.

Children in centre-based ECEC settings receive language support. Norway seeks to employ staff from a migrant or minority background. These staff are involved in the teaching process to provide language support to migrant children and those from ethnic minorities to help them integrate in ECEC. Norway has encouraged ECEC settings to employ bilingual assistants and develop their skills in multicultural and bilingual education (European Commission/EACA/Eurydice/Eurostat 2014, p. 145-147).

¹⁸ See: <http://www.udir.no/Barnehage/Rammeplan/Rammeplan-for-barnehagens-innhold-og-oppgaver/>.

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

Reading for pleasure

Reading for pleasure has a major emphasis in the reading/language curriculum in Norway. According to PIRLS 2011 Encyclopedia, four of the EU-24 countries in PIRLS 2011 reported that reading for pleasure was given a little or no emphasis and 11 countries that it had some emphasis (Mullis et al. 2012b, Vol.1, exhibit 9, p. 36).

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 reading strategies.

Explicit instruction of grapheme-phoneme correspondences

The Eurydice report shows that central guidelines differ in the way they express the instruction of skills related to grapheme-phoneme correspondence. The importance of developing skills recognizing the relationship between sounds and letters, letter clusters and within words is mentioned in the curricula of a majority of countries, but there are also countries where the central curriculum does not directly refer to such a relationship. The report mentions that a reason for not including direct references to phonic instruction might reflect a political desire not to prescribe teaching methods that are overtly specific.

An interesting point made in the report is that in languages with complex orthographic and syllabic structures it seems to take longer for pupils to learn and apply grapheme-phoneme correspondence than it does for pupils learning to read in an orthographically consistent language. It would therefore be advisable not to stop teaching phonics too early in countries with languages with complex orthographic and syllabic structures. In fact, the report finds that in the countries with orthographically complex languages (The United Kingdom, Denmark, Ireland, France and Portugal) the importance of phonics instruction is present in the curriculum for all years or cycles of primary education..

Norway is part of a group of 10 countries where phonics teaching is discontinued after the first or middle cycle of primary education. In 10 countries phonics instruction is developed throughout primary education. In 6 countries phonics instruction is not mentioned (or primary education not split into cycles). (Eurydice, 2011, p. 58, Figure 1.3).

Norwegian is a fairly orthographically consistent language and it seems reasonable that explicit phonics teaching is not part of the curriculum after the middle cycle of primary education. Other parts

of the curriculum will however assure that problems with decoding will be addressed regardless of grade or subject.

An important part of the Norwegian curriculum are the five basic skills – oral skills, writing skills, reading skills, numeracy skills and digital skills. Developing these skills is the responsibility of teachers in all subjects throughout primary, lower secondary and upper secondary education. In the description of “reading skills” one point mentioned it that the students should progress from basic decoding and comprehension of simple texts to understanding, interpreting, reflecting on and evaluating increasingly complex texts in different genres. The important point is that basic decoding is regarded as the starting point for the development of more complex reading processes like understanding, interpreting etc. Consequently a teacher in any subject and in any grade will have the responsibility to address basic decoding if that is necessary for developing reading in that subject and at that stage. For example a teacher of a student with reading problems in grade 7 will have to work with decoding if that is the student’s problem and a teacher of English (or any other foreign language) has to be aware of the importance of new challenges the students meet due to new complex orthographic and syllabic structures¹⁹.

Teaching of reading strategies in primary schools

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 analyses by Eurydice (2011, p.60, Figure 1.4), in Norway steering documents mention the importance of drawing inferences, making connections between different parts of text and encouraging children to reflect on their own reading process. The only one of six identified skills absent at primary level is monitoring own comprehension.

Literacy curricula in secondary schools

The new curriculum in Norwegian language was launched in August 2013 (Utdanningsdirektoratet 2013). Supporting materials for schools were published by the Ministry of Education in connection with the implementation of the curriculum (God leseopplæring for lærere på ungdomstrinnet). Literacy is an essential part of the Norwegian curricula. It is under the headings “Written communication” and “Language, Literature and Culture”. This goes through all years of secondary education (vocational education is part of secondary education). The curricula mention reading and writing of different texts (genres) and, according to supporting material from the Ministry of Education, literacy is a cross-curricular subject.

¹⁹ See: <http://www.udir.no/kl06/nor1-05/Hele/?lplang=eng>.

The focus of the curriculum is on the students' competences. Advanced literacy skills, both when using printed texts as well as digital texts, are part of the curriculum in all subjects and explained in supporting materials. The teachers are encouraged to emphasise literacy, reading and writing in all subjects. Students are expected, for instance, to read, collect information on particular topics, research, interpret, consider, and use critical thinking. In the supporting materials, there is a special chapter on content area reading in all stages and subjects. It is pointed out that the aim is to "develop strategic readers", create motivation for reading and "active readers". There is information on students with reading problems as well.

In the curriculum, hours are allocated for different purposes. It is stressed that literacy is a part of this. It appears that it is the work of schools and teachers to find out how much time is given to literacy. While it is difficult to see how big a role literacy plays in terms of time, literacy is indeed very much stressed in both the curriculum and the supporting material.

It is obvious from the curricula and the supporting materials that schools should be active in promoting literacy at all levels and in all subjects. All teachers are thought to be responsible for literacy development of their students.

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 order to describe the practice of reading instruction, we would need extensive observational studies. However, there are only rare observational studies (Philipp 2014). There is a noteworthy shortage of data on actual reading instruction in school. Only PIRLS offers 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: Individualized child-centred 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, Figure 2). Also, the analysis of PIRLS 2011, teacher self-reports revealed differences between the approaches to reading instruction in European countries (Mullis et al. 2012a). Unfortunately, Norway was not included in this analysis.

In PIRLS 2011 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. The percent of instructional time for reading and language is not specified in the national curriculum in Norway (Appendix C, Table I4). The number of instructional hours per year in Norway spent on language and reading is 817 hours, which is lower than the EU average (849 hours). In disaggregating the hours, 244 hours are spent on language instruction, which is broadly in line with

the EU average (241), and 77 hours of this is spent on reading instruction which is somewhat higher than the EU average of 68 hours.

No comparable data are available for secondary schools.

Activities of teachers to develop students' comprehension skills and to engage them

PIRLS 2011 provides information on the frequency with which teachers in Norway engaged students in specific reading comprehension activities. The following are the percentages of students in Grade 4 in Norway and on average across the EU-24 who engaged in specified comprehension activities 'every day or almost every day' (ELINET PIRLS 2011 Appendix, Table I1):

- Locate information within the text: 61.3% (EU-24 = 65.5%)
- Identify main ideas of what they have read: 39.2% (EU-24 = 55.5%)
- Explain or support their understanding of what they have read: 32.7% (EU-24 = 61.6%)
- Compare what they have read with experiences they have had: 13.9% (EU-24 = 34.7%)
- Compare what they have read with other things they have read: 8.9% (EU-24 = 22.4%)
- Make predictions about what will happen next in the text: 4.1% (EU-24 = 22.4%)
- Make generalisations and inferences: 14.3% (EU-24 = 36.5%)
- Describe the style or structure of the text: 4.3% (EU-24 = 22.7%)
- Determine the author's perspective or intention: 4.1% (EU-24 = 21.0%)

Source: PIRLS 2011 database. See Mullis et al. 2012a, Exhibit 8.8, p. 226 for data for 'at least weekly', s. also Table I.1 in Appendix C.

Fewer students in Norway than on average across the EU-24 are engaged in each strategy on a daily or almost daily basis. A few strategies, such as making predictions about what will happen next in the text, describing the style or structure of the text, and determining the author's perspective or intention, are practiced by considerably lower proportions of students in Norway than on average across EU countries.

In PIRLS 2011, teachers were asked a series of questions designed to ascertain the extent to which students are engaged in learning (for an overview of responses from European countries S. Table I.2 in Appendix C). These included: "I summarise what students should have learned from the lesson"; "I relate the lesson to students' daily lives" and "I use questions to elicit reasons and explanations". Based on a scale summarising frequencies across all six items, 37.6% of students in Norway were deemed to be taught by teachers who implemented instructional practices to engage learning in "most lessons". The corresponding EU-24 average was 70% (Appendix C, Table I2). These findings, together with those based on frequency of student opportunities to engage in reading comprehension strategies, suggest low levels of reading engagement in classrooms in Norway and less focus on higher-order thinking skills by teachers.

Challenge: Fewer students in Norway than on average across the EU-24 are engaged in specific reading comprehension strategies on a daily or almost daily basis. The negative finding on engagement in reading lessons, together with reduced opportunities to engage in reading comprehension strategies, needs to be addressed, and there should be a stronger focus on teaching and applying higher-order reading skills.

Teachers may need support in how to use the technology effectively to support higher-order thinking skills and to integrate it effectively into instruction. As important as access to computers is, equally important is how the technology is used to support learning.

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 Norway, there are standards for what the students should master at the end of grades 2, 4, 7, 10, 11, 12, 13²⁰.

Screenings for reading competence to identify struggling readers

In PIRLS 2011, the percentage of students in Norway (87%) taught by teachers who reported that a major emphasis was placed on the evaluation of students' ongoing work to monitor progress in reading is similar to the corresponding EU-24 average (84%). In addition, 53% of students were taught by teachers who reported placing a major emphasis on the use of classroom tests for this purpose (EU-24 average = 51%), and 35% were taught by teachers who reported placing a major emphasis on the use of national or regional tests (EU-24 average = 25%) (Appendix C, Table I8).

According to Solheim (2012), between 1993 and 1995, screening tests were developed to identify students performing at or below the 20th percentile in reading. In 2000, schools began using a screening test in Grade 2 and Grade 7 for a trial period of 4 years. In 2004, the Norwegian Directorate for Education and Training commissioned the National Centre for Reading Education and Research at University of Stavanger to revise the screening tests for Grades 1, 2 and 3. A revised curriculum, the Knowledge Promotion Curriculum, was introduced to schools in 2006 and new screening tests are in line with the new standards introduced in the new curriculum.

There is systematic assessment of children in order to identify language development problems. In particular, Norway has established national tests to identify individual learning needs from the first year of the compulsory education at the age of 6 (EURIDYCE 2012, pp. 168-169). Before the age of 6, Norway provides specialised programmes through the "mother and child health stations" for the

²⁰ See: <http://www.udir.no/kl06/NOR1-05/Kompetansemaal?arst=372029323&kmsn=461102025>.

screening of pre-primary children's development (The Norwegian Ministry of children and family affairs 1998²¹).

National tests are compulsory in grades 5 and 8 (ages 10 and 13) in reading, English and Mathematics (Eurydice, 2014a). Since 2010-2011, a national reading test has been conducted in grade 9 as well (International Bureau of Education, 2012). The main purpose of the tests is to collect information about pupils' basic skills and to provide instruments for improvement and development activities locally and centrally. Results from national tests are intended to give the teacher a better starting point for adapting and planning teaching that is well suited to their pupils. The tests are part of the National Quality Assessment System (NQAS) (Eurydice, 2014a).

Challenges: Even if the availability of tests is good in Norway, there should be more focus among teachers, schools and school owners on how to use the test results not only for reports, but also to improve reading education.

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. While in theory there should be support for all children with special needs, this might not be realised totally. Based on a question that class teachers answered in PIRLS 2011, it is estimated that 17.4% of students in fourth grade in Norway are considered to be in need of remedial reading instruction. It is also estimated by teachers that 12.1% are in receipt of remedial reading instruction (Appendix C, Table K1). On average across EU-24 countries, 18.1% of students in Grade 4 are identified by their teachers as being in need of remedial teaching, while 13.3% are identified as being in receipt of such teaching. In Norway, 29.1% of students in fourth grade performed at or below the PIRLS low benchmark on overall reading (Appendix C, Table A6). Hence, the percentages of students in Norway in receipt of remedial reading instruction (12.1%) is below the percentage that performed poorly on PIRLS.

Types 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.

Based on teacher responses to a series of questions in PIRLS 2011, 14% of students in Norway were in classes where there is always access to specialised professionals to work with students who have reading difficulties, compared with an EU-24 average of 25% (Table 26). Eleven percent of students in Norway are in classrooms where there is access to a teacher aide with the same frequency, while 3% are in classrooms where there is access to an adult/parent volunteer. Corresponding EU-24 averages are 13% and 3%. Hence, teachers in Norway had somewhat less access to specialised professionals, slightly less access to teacher aides, and the same (but low) access to adult volunteers.

²¹ See: <http://www.regjeringen.no/upload/kilde/bfd/rap/1998/0001/ddd/pdfv/15110-oecd.pdf>.

Table 26: Percentages of Students in Classrooms with Access to Additional Personnel to Work with Children with Reading Difficulties, Norway and EU-24 Average

Access to...	Norway			EU-24 Average		
	Always	Sometimes	Never	Always	Some-times	Never
Specialised professional	13.9	53.0	33.1	24.9	41.8	33.3
Teacher aide	11.3	67.6	21.1	13.2	33.6	53.2
Adult/parent volunteer	3.3	9.6	87.1	2.8	17.5	79.7

Source: ELINET PIRLS 2011 Appendix, Tables K2-K4

According to responses provided by teachers in PIRLS 2011, the percentage of pupils in Norwegian classes whose teachers had struggling readers work with a specialised professional was the same as the EU-24 average (55%) (Table 27). Twenty-four percent of students in Norway are in classes whose teachers wait to see if performance improves with maturation – lower than the EU-24 average of 37%. It is unclear why teachers of students in Grade 4 would wait when a difficulty arises. Such a strategy seems more relevant when working with younger children.

Almost all students in Norway, 95% are taught by teachers who spend more time working on reading individually with a student who falls behind – a little above the EU-24 average (90%). Finally, 99% of students in Norway and 97% on average across the EU-24 are taught by teachers who ask parents to provide additional support to a student who falls behind in reading.

Table 27: Percentages of Students in Classrooms Where Teachers Engage in Specified Activities to Support Students Who Begin to Fall Behind in Reading, Norway and EU-24 Average

	Norway (Yes)	EU-24 Average (Yes)
I have students work with a specialised professional	55.5	55.2
I wait to see if performance improves with maturation	24.1	36.6
I spend more time working on reading individually with the student	95.4	90.1
I ask the parents to help the students with reading	99.1	96.9

Source: Appendix C, Tables K5-K8.

In PIRLS 2011, 17.2% of students in Grade 4 in Norway reported that they sometimes speak a language other than the test language at home, while 1.3% reported that they never speak the test language at home. EU-24 averages are 17.3% and 3.0% respectively (Appendix C, Table F2). According to Solheim (2012), students with a foreign language background may choose Norwegian as a second language and will receive instruction in their mother tongue. Students with a foreign language background will receive additional training in Norwegian so that eventually they will have sufficient mastery of and can receive instruction in Norwegian.

Support for struggling readers – a legal right?

Education for all is a basic precept of Norwegian educational policy. The government is committed to inclusion. Children and young people must have an equal right to education, regardless of where they live, or their gender, social and cultural background or any special needs (Norwegian Ministry of Education, 2007:5).

Section 1–3 of the Education Act states that the tuition and training must be adapted to the individual pupil's abilities and capacities and that the school must put measures in place as soon as possible. Pupils in primary and secondary education and training are entitled to an individual education plan which must include goals and content of the special needs education. There is provision for the special educational assistance or special needs education to be evaluated every six months²².

Pupils who are unable to obtain satisfactory learning outcomes from the tuition can be entitled to special education after a thorough assessment. The assessment is used not only to identify the difficulties, but also to create an individual subject curriculum, stating goals and contents of the special education required (Norwegian Ministry of Education and Research, 2011).

There is an emphasis on a tiered approach to intervention. The classroom teacher first adapts classroom instruction before calling on special education assistance or expert assistance from the educational psychological service if adequate progress is not made.

Students whose reading difficulty requires further intervention are referred to the municipal educational psychological services that conduct further testing to diagnose the problem. Students diagnosed with dyslexia or requiring special assistance for other reasons are entitled to special education services.

There is also a national strategy called 'Strategy for Lower Secondary Education in Norway, Motivation and Mastery for better Learning 2013 – 2017', which aims at helping and supporting teachers, school administrators and owners to achieve optimal learning and motivation for the pupils. Literacy development is among the main goals of the strategy (Eurydice, 2014b; Norwegian Ministry of Education and Research, 2012).

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

Entry requirements for Initial Teacher Education

The European Commission/EACEA/Eurydice (2013, Fig. A5, p. 32) provides the following information in relation to requirements for ITE in Norway:

- Certificate of final examination of upper secondary education (decided at the level of the education authority)
- Performance at upper secondary level (decided at the level of the education authority).

²² See: <http://www.european-agency.org/country-information/norway>.

The entry requirements for ITE of secondary teachers, according to European Commission/EACEA/Eurydice, 2013. *Key Data on Teachers and School Leaders in Europe*, are:

- Certificate of final examination of upper secondary education decided at the level of the education authority;
- Performance at upper secondary level decided at the level of the education authority;
- Performance at bachelor level decided at the level of the education authority;

No examination in language skills is required (European Commission/EACEA/Eurydice, 2011. *Teaching Reading in Europe: Contexts, Policies and Practices*).

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

Norway requires primary and lower secondary teachers to have a bachelor's degree which takes four years' study. Typically, primary and lower secondary teachers' education routes are through a four-year university bachelor's degree programme in primary education. In ten European countries – Croatia, the Czech Republic, Estonia, Finland, Germany, France, Iceland, Portugal, Slovakia and Slovenia – initial education for primary teachers is at master's level and usually takes five years. In recent years an increase in the minimum length of initial teacher education can be noted for many countries (European Commission/EACEA/Eurydice 2012, Fig. E2, p. 112).

The Norwegian government has decided that primary and lower secondary teacher education will be reorganized as a 5-year master programme in 2017²³.

More information about reading teachers' formal education is offered by PIRLS 2011 (Mullis et al. 2011, exh. 7.1, p. 188). 1% of fourth grade students have teachers who completed a Postgraduate University Degree, 96% had teachers who completed a Bachelor's Degree or equivalent but not a Postgraduate Degree, 3% had teachers who completed post-secondary education but not a Bachelor's Degree, and 0% had teachers with no further than upper secondary education. The EU-24 average for the last category is 6%.

In general, the Norwegian teacher education regulations are based on the European Qualifications Framework and state what candidates should know, understand and be able to do in the form of 'learning outcomes' (European Commission/EACEA/Eurydice, 2013. *Key Data on Teachers and School Leaders in Europe*). There is some form of framework of competences for teachers working at pre-primary, primary and general (lower and upper) secondary education (European Commission/EACEA/Eurydice, 2013. *Key Data on Teachers and School Leaders in Europe*). Such competence frameworks have been introduced only recently (European Commission/EACEA/Eurydice, 2013. *Key Data on Teachers and School Leaders in Europe*).

Some data from PIRLS 2011

PIRLS 2011 contains some data on what teachers report about their education. When reading this information it is important to remember that the teachers in PIRLS 2011 have had their teacher education over a long period of time, some of them 40 years ago. Teachers with an education before 1990 will have had a 3-years of teacher training, as 4-years of teacher education was introduced in the early 1990's. Norway has had 4 changes in teacher education.

²³ See: <https://www.regjeringen.no/no/aktuelt/Innforer-5-arig-grunnskolelarerutdanning-pa-masterniva/id761439/>.

In PIRLS 2011, primary teachers were asked to indicate the level of emphasis given to a number of topics deemed relevant to teaching literacy in their pre-service teacher education.

In PIRLS 2011, teachers reported their areas of specialisation in their formal education and training (Mullis et al. 2012a, exh. 7.2, p. 190). In Norway, 48% of the fourth grade students were taught by reading/language teachers with an educational emphasis on language, 48% were taught by teachers with an emphasis on pedagogy/ teaching reading, and 15% had teachers with an emphasis on reading theory. These figures are below the corresponding EU-24 averages. On average across the EU-24, 74% of the fourth grade students had reading teachers with an educational emphasis on language, 59% had teachers with an emphasis on pedagogy/teaching reading, and 30% had teachers with an emphasis on reading theory (PIRLS 2011 Database).

Two programmes of importance when describing initial teacher education in Norway:

- 4-year programme for general teachers. Implemented in 2003. Students following the programme from 2003 have the right to sit examinations in accordance with this programme until 31 December 2015.
- 4-year programme for differentiated primary and lower secondary teacher education for years 1-7 and years 5-10. Implemented in 2010.

The role of literacy expertise in Initial Teacher Training

Important teacher competences in the 2003 teacher education programme 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.

The National Curriculum Regulations for Differentiated Primary and Lower Secondary Teacher Education Programmes for Years 1 – 7 and Years 5 – 10 contain detailed expected learning outcomes. There are learning outcomes for each teacher education programme separately, as well as learning outcomes to be expected from both programmes²⁴.

Teaching practice for prospective teachers of reading - the duration of in-school placement in Initial Teacher Training

The time allotted to in-school placements during ITE in Norway is 20-22 weeks, in the 4 year teacher education programme from 2003, and a minimum of 100 hours in the differentiated teacher education programme. Institutions have some autonomy in relation to the duration and distribution of school placements. There is considerable variation in Europe. For prospective primary teachers, this time ranges from 40 hours in Latvia to 900 hours in Austria (European Commission/EACEA/Eurydice, 2011, Fig. 2.6, p. 102). Norway belongs to the eight countries which explicitly state that skills relating to the teaching of reading must be practised during in-school placements, together with Cyprus, Hungary, Latvia, Lithuania, Romania, Turkey and the United Kingdom (England and Wales) (European Commission/EACEA/Eurydice 2011, Fig. 2.6, p. 102).

²⁴ See: https://www.regjeringen.no/globalassets/upload/kd/vedlegg/uh/forskrifter/national_curriculum_differentiated_teacher_education.pdf.

Length of required training of secondary teachers

If you have an academic degree from university college or university, acknowledged professional competence as an artist, or certificate of vocational competence including vocational practice, you can obtain qualifications as a teacher in upper secondary education by completing a 60 credit 1-year postgraduate programme in educational theory and practice for subject teachers. The 60 credits contain pedagogy of 30 credits and 30 credits subject didactics and vocational didactics. Students will also have 12-14 weeks of teaching practice related to the subjects in their academic degree.

There are also 3-4 year programmes for teachers in practical and aesthetic subjects, physical education, arts and crafts and music dance and drama²⁵.

Challenge: Initial teacher education needs a compulsory focus on developing literacy expertise among future primary and secondary teachers. Innovations in the differentiated teacher education system should be capitalised on in the new master's level programme to be introduced in teacher education, which should preserve its practical orientation.

Continuing Professional Development (CPD)

In the 2005 (and earlier 1995) Act on Universities and University Colleges in Norway, it is stated that university colleges offering teacher education and other higher education institutions should provide continuing- and in-service training, and that it is a priority for the national education authorities to stimulate greater involvement of teachers. In-service training and continuing education courses are organised at local, regional and national levels. The organisers may be local education authorities, teachers' associations, associations for special subjects in higher education institutions, regional officers' educational departments, County Education Committees, national councils or national education authorities (Eurypedia Reports on CPD).

As concerns bodies with decision power at the national level, responsibility for in-service training for teachers at the national level lies with:

- The Ministry of Education and Research
- The Directorate for Education and Training
- The universities and other teacher education institutions. (Eurypedia Reports on CPD)

Regarding the funding system for CPD, school owners are supported by national authorities in competence development for teachers, head teachers and school administrators, including further education for teachers in priority subjects. Most of the funds go to continuing training. These funds are to be allocated to the County Governors (fylkesmannen) who distribute them based on an applications scheme (Eurypedia Reports on CPD).

CPD content is influenced by the school reforms and by the priority areas decided by the Ministry of Education and Research. "The content of in-service and continuing training is influenced by current school reforms as well as by the priority given to certain areas by the Ministry of Education and Research. The strategy Competence for Quality (2009-2012) gave school owners an opportunity to apply for teachers to attend courses (continuing training) in prioritised subjects at different Universities and University Colleges. The strategy is a consensus document, signed by the ministry of education

²⁵ See: https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Norway:Initial_Education_for_Teachers_Working_in_Early_Childhood_and_School_Education; <https://lovdata.no/dokument/SF/forskrift/2005-12-13-1454>.

and research, employer and employee organizations. By February 2011, there has been made agreements with 22 universities and university colleges to offer 96 study programs within the program." (Eurypedia Reports on CPD)

Foreign teachers may also participate in in-service training in Norway; there are many different exchange programmes. The Ministry of Education and Research welcomes a strengthening of international co-operation in higher education and research and recommends participation in international programmes for schools and practising teachers (Eurypedia Reports on CPD).

Local authorities and the school heads play an important role in deciding upon teachers' attendance at CPD programmes. Responsibilities of counties and municipalities for in-service training as employers of teachers are stated in the Education Act of 1998.

In the Education Act it is stated that the municipalities as school owners at primary and lower secondary level and the counties (fylker) at the upper secondary level are responsible for ensuring correct and necessary competence development for teachers. The school owner should have a system for providing teaching personnel, school leaders and personnel with special responsibilities in the school system with opportunities for necessary competence enhancement with a view to refreshing and extending their professional and educational knowledge.

Attendance at continuing training and in-service courses depends to a large degree on the resources and attitudes of local authorities. Municipal education authorities decide whether staff may participate or not.

The tradition of local autonomy is strong in the Norwegian administrative system. National educational authorities are discussing ways of avoiding such differences in participation in in-service programmes (Eurypedia Reports on CPD).

For mandatory CPD programmes, local authorities need to ensure the conditions for the teachers to be able to attend such courses are met.

Participation in course programmes is looked upon as a way to qualify for additional tasks or to develop in the actual field of work. In the case of mandatory in-service educational programmes, local educational authorities do have some responsibility for adapting the working environment to the new qualifications of the personnel included in the programme. Admission requirements vary depending on the type of course. They may refer to initial teacher education, in-service training, continuing training, number of years in teaching, other responsibilities or posts in the school system (Eurypedia Reports on CPD).

Teachers participating in CPD may ask for salary raises. "Teachers who participate in continuing training or extensive in-service training can in general argue for an increase in their salary, depending on their seniority and the extent on the training" (Eurypedia Reports on CPD).

Teachers are remunerated during CPD programmes. Separate training classes are provided for mentors. "Teachers are released from parts of their ordinary duties, but keep their salary during the training. The teachers contribute themselves, in form of use of time. In addition there are also separate continuing training programmes for mentors (as an offer for those mentoring newly educated

teachers) and education programs for newly employed head teachers/principals and school deputies. Both programmes lead to formal accreditations" (Eurydica Reports on CPD)²⁶.

Quality standards of CPD

The top-level education authority assures CPD quality (Commission/EACEA/Eurydice 2013, Fig. C6, p. 64).

Time spent on professional development related to literacy

In Norway, teachers can take a higher education course worth 60 credit points focusing on the teaching of reading (European Commission/EACEA/Eurydice, 2011, p. 109) but this is not compulsory.

No data are available concerning the participation rate of teachers in literacy-related professional development, with one exemption: In PIRLS 2011 teachers were asked how much time they had spent on reading professional development in the past two years before the study. In Norway, 18% of the students have teachers who spent 16 hours or more (EU-24 average: 18%) on reading, 49% had teachers who spent some time but less than 16 hours (EU-24 average 53%), and 32% had teachers who spent no time (EU-24 average 29%) (Mullis et al. 2012a, exh. 7.4, p. 196). However, it is unclear to what extent courses are easily available to teachers or if funding is provided for them.

5.2.6 Digital literacy as part of initial teacher education

There are compulsory training and national accreditation standards for the programmes and there are competence frameworks (ICT and Initial Teacher Education: national policies, 2011). "Institutions are free to decide whether or not to include ICT in initial teacher education" (EACEA; Eurydice, Key Data on Learning and Innovation through ICT at School in Europe, 2011). "On a formal level, Norway already has the national and institutional framework in place to integrate ICT in initial teacher training. The recent reform in education, the Knowledge Promotion reform, puts digital competence on an equal footing with other basic skills (along with ability to express oneself verbally, reading, writing and mathematics). This has generally generated a stronger focus at teacher training institutions on preparing student teachers to make use of ICT in their teaching, as expressed through strategic documents and plans at teacher training institutions" (ICT in Initial Teacher Training, Norway Country report, 2009).

According to an analysis of guidelines for ITE institutions, teaching to read on-line texts is not a topic in Initial Teacher Training (European Commission/EACEA/Eurydice 2011, Fig. 2.5, p. 101).

Challenge: There is a need to strengthen the focus on teaching digital reading skills in initial teacher education and continuing professional development in Norway.

²⁶ See: https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Norway:Continuing_Professional_Development_for_Teachers_Working_in_Early_Childhood_and_School_Education.

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

Improving literacy instruction

The *Lesesentret* (Reading Centre) is a part of the University of Stavanger. As the National Centre for Reading Education and Research, it carries out tasks set by the Directorate of Education. The centre is responsible for reading education and reading development on a national level. "It is our task to put the teaching of reading and the pleasure of reading on the agenda and to help and strengthen language stimulation, the teaching of reading and reading promotion in schools and kindergartens on a national level" (Lesesentret (2014)). The Reading Centre is engaged in conducting international surveys on reading, developing national tests and screening material, developing instructional material related to the national curriculum, participating in projects on reading education in cooperation with schools, offering information about literature for children and adolescents and in organising courses and national conferences. As part of the University of Stavanger the Reading Centre is engaged in projects research on reading and reading difficulties, teacher education, master and PhD programmes and participation in international networks on literacy²⁷.

A successful national CPD programme on content area literacy was based on Carol Santa's CRISS (Creating Independence through Student-owned Strategies). The programme was developed by Liv Engen from the Reading Centre who adapted Santa's programme for Norwegian conditions. The adaptation from 1996 was a cooperation with the Dyslexia Research Foundation and the English translation of the name of the Norwegian programme and book was "Learning to Learn". The book was revised in 2003. After 1996 "Learning to Learn" has been the basis for innumerable CPD courses in all parts of the country. The courses have been organised by the Reading Centre, by other special education resource centres, and by county and municipality based CPD centres²⁸.

Another example of a CPD programme is NY GIV (New Possibilities) developed jointly by the Reading Centre and the Writing Centre. The objective of the programme was to prevent school drop out in upper secondary education. The programme focused on the transition from lower secondary to upper secondary. As part of the programme students at risk were given intensive education in reading, writing and mathematics. The project started in some communities in 2011 and in 2013 all counties were represented in the programme. At the end of 2013 13.000 students had received intensive education and 3600 teachers had taken part in the CPD programme. The programme was evaluated in 2012 and 2015. The evaluation shows that it was very well received by students, teachers and headmasters and that it significantly reduced the drop out rate²⁹.

²⁷ See: <http://lesesenteret.uis.no/frontpage>.

²⁸ See: <https://bokelskere.no/bok/laere-aa-laere-prosjekt-criss/671/>.

²⁹ See: <https://www.regjeringen.no/no/aktuelt/ny-giv-lofter-de-faglig-svakeste-elevene/id708821/>;
<https://www.regjeringen.no/no/dokumenter/evaluering-ny-giv/id708841/>;
<http://evalueringsportalen.no/evaluering/oppfolgingsprosjektet-i-ny-giv-sluttrapport-fra-en-kartleggingsstudie>

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. This 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 greater for adolescents than for young children. In all PISA cycles to date, 15-year-old girls outperformed boys in reading in all the European countries, and boys were 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 for different reasons can be considered as a group "at risk" (i.e., those 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 (see 5.2.4).

5.3.1 Compensating socio-economic and cultural background factors

The child’s **socioeconomic 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 (World Bank 2005; Naudeau et al. 2011). 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 (for more information concerning the concepts and indicators s. Appendix A).

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 22.6%, Norway has the highest percentage or level of equity among the countries participating in ELINET.

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 (UNICEF Innocenti Research Centre, 2012). With 6.1%, Norway is at the lower end of the distribution. 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 mother’s level of education referring to ISCED levels. The figures for Norway are presented below and point to a very high proportion of mothers with a high level of education (ISCED 5A), compared with the average figures for the European countries participating in PIRLS (shown in parentheses) (for an overview of European countries see table A3 in Appendix B).

- No schooling: 0.3% (0.6%)
- ISCED 1: primary education: 0.4% (5.3%)
- ISCED 2: Lower secondary education: 4.9% (16.7 %)
- ISCED 3: Upper secondary education: 19.9% (36.1%)
- ISCED 4: Post-secondary non-tertiary education: 14.5% (7.1 %)
- ISCED 5B: Tertiary education (first stage) with occupation orientation: 8.6% (9.5%)
- ISCED 5A: Tertiary education (first stage) with academic orientation 45.9% (13.9%)
- BEYOND: 5.3% (10.1%)
- Not applicable: 0% (0.9%).

Teenage mothers

According to UNICEF (2001), the percentage of teenage mothers is 12.4 for Norway. The range is from 5.5% in Switzerland to 30.8% in United Kingdom (for an overview of European countries see table A4 in Appendix B).

Single parent

Source: Eurostat (2012, Figure A 7)

No data are available for Norway. 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 Norway the proportions of children with parents born outside the country (6%) or only one parent born outside the country (12%) are quite close to the corresponding European averages (for an overview about European countries see table A6 in Appendix B).

Primary language spoken at home different from language used at school

According to PIRLS 2011 (Mullis et al. 2012a, exhibit 4.3 - Students Spoke the Language of the Test Before Starting School, p. 118), the proportion of children speaking a different language at home from the one used at school is 3% (for an overview of European countries see Table A7 in Appendix B). There is a quite significant performance gap in reading competence at grade 4 between children who spoke the language of the test before starting school (mean reading score = 509) and those who did not speak the language (mean reading score = 483).

Challenge: Efforts to reduce the performance gap in reading competence at grade 4 between children who spoke the language of the test before starting school and those who did not speak the language should be made.

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 Norway was 4.1%. 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 PERISTAT (2010, Figure 7.14, p.155), the percentage of live births with a gestational age below 32 weeks is 1.0 in Norway (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 is 5.3% in Norway (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

It is difficult to find numbers about students with cognitive and sensory disabilities. Since the right to special needs education is not tied a special diagnosis but to whether the student benefits from mainstream education or not, there is no registration of diagnosis/handicap and special needs education³⁰.

In the school year 2014-2015 the total number of student receiving special needs education was around 8 per cent. The distribution among students receiving special needs education was 80 per cent boys and 20 per cent girls.

A little less than 4,000 pupils in primary and lower secondary school received their education in special needs units or separate special needs schools in the school year 2014-2015. This accounts for around 0.6 per cent of all pupils in primary and lower secondary school. In addition, somewhat more than 1,300 pupils received their education in alternative learning environments outside the mainstream education one day a week or more. Any requirement for making use of alternative learning arenas outside the mainstream education must be stated in the individual decision regarding the pupil's educational needs.

Until recently, upper secondary schools have not collected statistics on pupils receiving special needs education, but from the 2013–2014 school year, schools have to register all pupils with individual decisions concerning special needs education³¹.

The Norwegian law of Education states that Education in school is to be adapted to the individual pupil's abilities and capabilities. Pupils who do not or cannot achieve a satisfactory learning yield from ordinary teaching, have a right to special needs education. This means that Norwegian pupils are entitled to teaching as specially adapted as possible, and that this should take place in the local mainstream school (See 3, General Information on the Norwegian Education system).

The Norwegian Directorate for Education and Training has issued detailed guidelines for how to establish a student's need for special education and steps to be taken when organising special education³².

- 1) The teacher notices that a student has problems.
- 2) The teacher and the school administration see if it is possible to help the student by reorganising the education offered in the class/school. (Schools have a percentage of their ordinary budget set aside for adapted education.)
- 3) If the student's needs are still not met, the student will be referred to the Educational-Psychological Service. Every municipality and county is by law obliged to offer the service of an Educational-Psychological Service.
- 4) Based on an assessment from the Educational-Psychological Service, in cooperation with the parents and the teacher, the school will suggest a programme of special education.
- 5) Based on the report from the Educational-Psychological Service the school can receive extra funding form the municipality or county

³⁰ See: <http://www.ohchr.org/Documents/Issues/Disability/SocialProtection/States/Norway.docx>.

³¹ See: <http://www.ohchr.org/Documents/Issues/Disability/SocialProtection/States/Norway.docx>.

³² See: <http://www.udir.no/Regelverk/tidlig-innsats/Veilederene-i-fulltekst/Spesialundervisning/Fase-5-Planlegging-og-gjennomforing/>.

- 6) When the students right to special education has been established the school, in cooperation with the child and the parents, must produce an individualized education plan. Twice a year the plan must be evaluated and the school has to make a written report based on this evaluation.
- 7) If parents do not think that the student receives the necessary special education, they can appeal to the County Governor (the government representative in every county). As a last resort, parents can take the case to court (which happens, but not often).

Special education/extra provision is free of charge for pupils. The state does not fund any education directly in Primary, Lower secondary or Upper secondary education. Funding of the education system is through the municipalities and counties and they provide extra funding for special needs education. As mentioned, parents can appeal to the County Governor if they think funding is insufficient and in violation of the student's legal right to special education.

Teachers with a degree in special education do exist; however, in order to work as a special teacher, one does not need a specific qualification (Rix *et al.*, 2013). There are also teachers specialised in reading – at least in the primary level (Eurydice, 2011).

The class teacher is responsible for the education of all students in his/her class, including the education of students with special needs education. In inclusive education, the education program of students with special needs must be coordinated with the adapted education for the rest of the students in the classroom. A second teacher and/or a teacher's assistant can assist the teacher. The second teacher can be an ordinary teacher or a teacher with special needs education background. Assistants cannot be responsible for teaching, but should assist the teacher's educational work.

Most universities and teacher training institutions offer teacher training in special needs education. The University of Oslo offers the most comprehensive programme in special needs education for teachers. This program has the largest number of subjects and also the largest number of student in the bachelor and master programmes³³.

5.3.3 Promoting preschool attendance, especially among disadvantaged children

According to European Commission/EACEA/Eurydice/Eurostat (2014, Figure C1 p.62), the enrolment rate in Norway at age 4 is 97.2%. Norway reaches the European benchmark for at least 95% of children between age 4 and the start of compulsory education participating in ECEC (for an overview of European countries see table C1 in Appendix B).

The OECD Family Database (2014) offers more differentiated figures of participation rates at age 3, 4 and 5. According to 2010 statistical data, the participation rate is 97.6% for 5-year-olds, 97.1% for 4-year-olds, and 94.0% for 3-year-olds (OECD 2014) (for an overview of European countries see table C2 in Appendix B).

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).

³³ More information on special needs education at the University of Oslo is available at <http://www.uio.no/studier/emner/uv/isp/>.

There is a positive relationship between the length of preschool education attendance in Norway and the average reading score in grade 4, as PIRLS 2011 data show (Mullis et al. 2012a, Exhibit 4.7, p. 128). These are the figures for Norway:

- 3 years and more: 71% (average reading score 512)
- Between 1 and 3 years: 24% (average reading score 500)
- 1 year or less: 2%
- Did not attend: no data are available

(For an overview of European countries s. table C3 in Appendix B).

Since 2008 all children have a legal right to attend kindergarten. No child should be excluded from preschool because parents cannot afford to send their children to preschool/kindergarten institutions if they have to pay. While in half of the European countries the entire period of ECEC is free, in Norway, pre-primary education is not free. Families contribute financially by paying a monthly fee³⁴.

The government has set a moderate maximum fee to be paid by parents. Financially disadvantaged parents will receive support, and for children with special needs kindergarten is free.

To ensure equitable development and activity opportunities children with disabilities are by law given priority for admission to a kindergarten. In the kindergarten year 2013–2014, 6,959 children (2.4 per cent of children attending kindergarten) received special educational support in their kindergartens³⁵.

The Norwegian Directorate for Education and Training has published guidelines for how to proceed when a pre-school child is in need of special education³⁶.

There are no programmes encouraging universal preschool attendance. Nonetheless, since 73.5 % of Norwegian women between 15 – 64 years are working, the focus has been on supplying kindergartens to cover the demand.

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.

In Norway, children with language problems have the same rights and will be treated in the same way as children with any other disabilities. Special education assistance for children with language problems will be provided based on the same legal rights and the same guidelines regulating special education assistance for children with disabilities. For culturally and/or linguistically disadvantaged children, additional support is usually given by extra staff in mainstream kindergarten class for those children who need it. The core part of this additional support is the enhancement of children's

³⁴ See: EURYDICE. <https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Norway:Overview>.

³⁵ See: <http://www.ohchr.org/Documents/Issues/Disability/SocialProtection/States/Norway.docx>.

³⁶ See: <http://www.udir.no/globalassets/filer/regelverk/tidlig-innsats/foreldreinfo/spesialpedagogisk-engelsk.pdf>.

language skills. Special groups for children with specific needs are very rare (EACEA; Eurydice 2009, p. 104).

5.3.5 Support for children and adolescents whose home language is not the language of school

All pre-school children have a legal right to a place in kindergarten. Children with a minority language background do not have a special legal right to attend kindergarten. However many communities and kindergartens give priority to children with a minority language background. The communities receive special funding from the government based on the number of minority language speaking children attending kindergarten. The funding is for supporting the kindergartens' work to teach Norwegian to minority language children³⁷.

According to § 2-8 in the Education Law, students with a mother tongue other than Norwegian or Sami, have a right to special language education. The term "special language education" comprises special education in Norwegian, mother tongue education and bi-lingual education. In special education in Norwegian the student will receive enriched education in Norwegian. In special mother tongue education the student will receive education in her/his mother tongue. In bi-lingual education the student will receive education in two languages in one or more subjects. In Sami districts, all pupils have a right to receive their education in Sami or through the medium of Sami. In other districts, municipalities should offer education in Sami language if at least 10 pupils in the municipality so wish (Norwegian Government, 2013).

Pupils in secondary schools whose mother tongue is other than Norwegian or Sami can receive adapted education in Norwegian, as well as instruction in their mother tongue or bilingual subject teaching until they are able to follow normal class instruction (Norwegian Government, 2013). That is to say, adolescents whose mother tongue is not the language of school either receive assistance or are taught separately until their command of Norwegian is sufficient to fully access the curriculum in Norwegian.

A minority language student has a right to special education in Norwegian until the student is proficient enough in Norwegian to follow the ordinary instruction in the classroom³⁸.

There is a special curriculum for basic Norwegian for language minorities. The curriculum may be used in primary and lower secondary school and in upper secondary education and training. Basic Norwegian for language minorities is a level-oriented plan not related to age. Competence aims are based on the Common European Framework of Reference for Languages and are described for three levels³⁹.

The National Centre for Multicultural Education (NAFO) was established in 2004. NAFO carries out assignments given by the Directorate for Education and Training and collaborates with universities, university colleges, the National Parents' Committee for Primary and Secondary Education (FUG), the Norwegian Agency for Lifelong Learning (VOX) and other national centres for education. The Centre's target groups are owners of day-care centres, kindergartens, schools, and adult-education centres as well as administrators of schools and kindergartens, teachers, staff of the pedagogical psychological

³⁷ See: <http://www.udir.no/Barnhage/Regelverk/Finn-regelverk-for-barnhage/Regelverk-etter-tema/Minoritetsspraklige-barn/>

³⁸ See: <http://www.udir.no/Spesielt-for/Minoritetsspraklige-elever/regelverk/skole-og-opplaring/6-16-ar/>.

³⁹ See: <http://www.udir.no/k106/nor7-01/Hele/Formaal/?lplang=eng>.

counselling services and professionals at universities and university colleges. NAFO runs competence-building programmes for the different target groups⁴⁰.

Challenge: Formal provisions to secure participation of foreign language speakers in the educational system are in place. However, the tradition of local autonomy is strong in the Norwegian administrative system and it is important to make sure that children and adolescents have the same opportunities regardless of where in Norway they live.

5.3.6 Preventing early school leaving

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.

If we consider the Eurostat indicator of students (ISCED 1-6) aged 15-24 years as a percentage of corresponding age population, we find that in Norway 64.4% of 15-24 year olds were in some form of education in 2011, which was above the average EU-27 value of 61.5%. The percentage of 18-year olds in education was 88% in 2011, which situated Norway over the EU-27 average (80.7%). In 2012, this indicator was at an all-time high at 88.4%. Since 2001, Norway has consistently exceeded the EU average value for this indicator. According to Eurostat, in Norway, the rate of early school leavers was 13.7 % in 2013, down from 14.8% a year before, and 4.7 percentage points lower than the peak ESL rate of 18.4% recorded in 2007. Nonetheless, the Norwegian rate of ESL in 2013 is still above the 11.9% average rate of the EU-28.

In some countries, young people do not transfer from ISCED 2 until they are older. Participation rates for 15-year-olds at ISCED 2 were above 90 % in Norway in 2009. Norway keeps its participation rate at more than 90% one year or two years after end of the compulsory schooling (Key Data on Education in Europe, 2012).

5.3.7 Addressing the gender gap among adolescents

The gender gap in education is combatted through various measures. The government targets increasing the number of male employees at schools and kindergartens, and Ministry of Education launches efforts to raise competence in reading training for boys. Other measures include commissioning of gender equality, short films and certain upper-secondary courses for boys and girls (Norwegian Ministry of Children, Equality and Social Inclusion, 2014).

One example of national actions aimed at combating the gender gap in reading has been 'Make Space for Reading!' initiative. It was a four-year national action plan (2003-2007) covering all schools and school levels in the country, with a particular emphasis on improving reading achievement and motivation among boys. Priorities included strengthening teacher competences in teaching reading, improving the use of school libraries and increasing overall awareness of reading as a social issue (European Commission, 2012).

After the end of the programme a plan was developed to ensure a follow up of successful initiatives⁴¹.

⁴⁰ See: <http://nafo.hioa.no/om-nafo/about-nafo/>.

⁴¹ See: http://bestilling.utdanningsdirektoratet.no/Bestillingstorg/PDF/GRFL_Veien%20videre.pdf.

It is always difficult to assess the direct impact on specific reading results of a national large-scale programme with many goals and target groups and 35 points of action. The results on international surveys like PIRLS and PISA might however give some indications. In PIRLS the gender gap in 2001 was 21 points, in 2006 the gap was 19 points and in 2011 the gap was 14 points (all differences in favour of the girls). In PISA in 2012 girls outperform boys by an average of 46 points in reading, and the gender gap is unchanged from PISA 2000. It is a general experience that it is easier to influence reading development at an early stage than in later years. Consequently, if 'Make Space for Reading!' had had an effect on the gender gap one would expect to see a reduction of the gap first in the lower grades – as we do in PIRLS⁴².

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

Family literacy programmes

Lifelong learning and opportunities for education for adults are important principles in Norwegian education policy, and adults who have not completed primary or lower secondary education earlier in life have a right to free primary and lower secondary education as adults. This right also applies to refugees and immigrants after they have sufficient command of Norwegian. The municipalities are responsible for organising this education⁴³.

All refugees and immigrants have a right to a minimum 550 hours and up to a total of 3000 hours of free tutoring in the Norwegian language plus 50 hours of introduction to Norwegian society⁴⁴. (EU/EFTA citizens have a right to a total of 300 hours.)

While in Norway there are no national programmes to help the poorest parents, teenage mothers or single mothers or fathers, or children whose home language is not the language of school, it must be noted however that Norway has very well developed social and health systems. As part of these systems there are provisions to look after the needs of teenage mothers, single parents and financially disadvantaged citizens.

There are some small local family literacy programmes provided by local authorities or organisations.

Policies/programmes to prevent early school leaving

As a follow up of the EU initiative "Education and training 2020", Norway has had a special focus on prevention of early school drop out. This is the focus of the programme 'Ny GIV – New possibilities' (2010-2013)⁴⁵, which incorporates the following measures:

- Intensified follow-up of pupils with the poorest results in the 10th grade and in Upper Secondary Education and Training
- Courses for teachers from all over the country in how to develop pupils' basic skills in reading, writing and numeracy

⁴² See: http://www.udir.no/globalassets/upload/forskning/internasjonale_undersokelser/timsspirs2011/pirls2011.pdf;

<http://www.oecd.org/pisa/keyfindings/PISA-2012-results-norway.pdf>

⁴³ See: <http://www.udir.no/Regelverk/Finn-regelverk-for-opplaring/Finn-regelverk-etter-tema/Voksne/>.

⁴⁴ See: http://www.imdi.no/opplaring-og-utdanning/hvem-har-rett-til-hva-slags-opplaering/#title_2.

⁴⁵ See: <https://www.regjeringen.no/globalassets/upload/kd/kampanjer/nygiv/nygiv5.pdf>.

- Teacher networks to orient teachers` classroom practice in a more practical manner for the common core subjects Norwegian, English and Math
- Pupils who are in danger of dropping out are offered summer jobs or summer school make the transition between different school levels easier to handle
- A common set of indicators has been established offering valid and credible statistics based on numerical information from all county municipalities
- Improved collaboration between the Follow-Up Service and the Norwegian Labour and Welfare Administration to help young people between the ages 16 – 21 who are neither in school nor at work to return to school or apprenticeship
- Extensive dialogue with the social partners to obtain more apprenticeships both in the private and the public sector
- More relevant and practice oriented vocational education and training (VET), for example via:
 - 1) The Certificate of Practice: a 2 year VET education programme (Lower Level Craft/Journeyman`s Certificate)
 - 2) Training Candidature: individually adapted education and training scheme based on a reduced package of competence objectives, often both working place and school based.

For more information about organisation and evaluation of NY GIV see chapter 5.2.7.

6 References

- *** *Act of 17 July 1998 no. 61 relating to Primary and Secondary Education and Training (the Education Act)*. Available at http://www.regjeringen.no/upload/KD/Vedlegg/Grunnskole/dokumenter/EducationAct_with_amendments_entered2013.pdf (Accessed on June 17, 2014)
- *** *Inclusive Education – CRPD GDD – Norwegian Statement*. Available at <http://www.ohchr.org/EN/HRBodies/CRPD/Pages/DGDontherighttoeducationforpersonswithdisabilities.aspx> (Accessed on November 13, 2015)
- *** Norwegian report 9 March 2011. Available at http://www.hfh.ch/fileadmin/files/documents/Dokumente_FE/D.20_Country-Report---Norway-by-C-Wendelborg.pdf (Accessed on November 13, 2015)
- Balanskat, A., Gertsch, Ch. A. (2010). Digital Skills Working Group. *Review of National Curricula and Assessing Digital Competence for Students and Teachers: Findings from 7 Countries*, Brussels, European Schoolnet.
- EACEA/ Eurydice. (2014). *Norway. Assessment in Single Structure Education*. Available at https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Norway:Assessment_in_Single_Structure_Education (Accessed on June 17, 2014)
- Education, Audiovisual and Culture Executive Agency (2011). *Teaching Reading in Europe: Contexts, Policies and Practices*. Brussels, Eurydice
- Education, Audiovisual and Culture Executive Agency (2012). *Key Data on Education in Europe 2012*, http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/134EN.pdf (accessed on August 22, 2014)
- EU High Level Group of Experts on Literacy (2012). *Final Report*. Available at http://ec.europa.eu/education/policy/school/doc/literacy-report_en.pdf (Accessed on June 17, 2014)
- European Agency for Special Needs and Inclusive Education (2012). *Teacher training - Basic and specialist teacher training – Norway* (Booklet). Available at: <http://european-agency.org/sites/default/files/Teacher-Training-in-Norway.pdf> (Accessed on December 30, 2015)
- European Agency for Special Needs and Inclusive Education (2014). *Initial Identification of Special Educational Needs – Norway*. Website. <https://www.european-agency.org/agency-projects/assessment-in-inclusive-settings/assessment-database-of-key-topics/norway/initial-identification-of-special-educational-needs> (Accessed on June 17, 2014)
- European Commission (2012). *EU High Level Group of Experts on Literacy. Final report*. Luxembourg: Publications Office of the European Union.
- European Commission (2013). *Comenius Good Practices. Examples*. Available at: ec.europa.eu/education/library/publications/2013/comenius_en.pdf (Accessed on December 30, 2015)
- European Commission (2013). *Reducing early school leaving: Key messages and policy support, Final Report of the Thematic Working Group on Early School Leaving*, November 2013, Available at http://ec.europa.eu/education/policy/strategic-framework/doc/esl-group-report_en.pdf (accessed on August 22, 2014)

- European Commission (2014). *The Structure of European Education Systems 2014/2015. Schematic Diagrams*. Available at http://eacea.ec.europa.eu/education/eurydice/documents/facts_and_figures/education_structures_EN.pdf (Accessed on November 13, 2015)
- European Commission/EACEA/Eurydice (2011). *Key Data on Learning and Innovation through ICT at School in Europe*. Brussels: Eurydice.
- European Commission/EACEA/Eurydice (2013). *Education and Training in Europe 2020: Responses from the EU Member States, Eurydice Report*. Brussels: Eurydice. Available at http://eacea.ec.europa.eu/education/eurydice/thematic_reports_en.php (accessed on August 22, 2014)
- European Commission/EACEA/Eurydice (2013). *Key Data on Teachers and School Leaders in Europe*. Brussel: Eurydice.
- EURO PERISTAT (2010). *European Perinatal Health Report. Health and Care of Women and Babies in Europe in 2010*. Available at <http://www.europeristat.com/reports/european-perinatal-health-report-2010.html> (Accessed on January 11, 2016)
- European Schoolnet and University of Liege (2013). *Survey of schools: ICT in education. Benchmarking access, use and attitudes to technology in Europe's schools. Final Report*. Paris: Author.
- Eurostat, Early leavers from education and training by sex and labour status, <http://appsso.eurostat.ec.europa.eu/nui/setupDownloads.do> (accessed on August 22, 2014)
- Eurydice (2014b). *Reforms in school education*. Website. https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Norway:Reforms_in_School_Education (Accessed on June 17, 2014)
- Eurydice Facts and Figures. *Compulsory Education in Europe 2013/14* http://eacea.ec.europa.eu/education/eurydice/documents/facts_and_figures/compulsory_education_EN.pdf (accessed on August 22, 2014)
- Eurypedia Reports on CPD. Available online at https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Norway:Continuing_Professional_Development_for_Teachers_Working_in_Early_Childhood_and_School_Education.
- God leseopplæring – for lærere på ungdomstrinnet. <http://www.udir.no/Utvikling/Ungdomstrinnet/Lesing/Lesing-som-grunnleggende-ferdighet/God-leseopplaring--for-larere-pa-ungdomstrinnet/> (Accessed on January 11, 2015)
- International Bureau of Education (2012). *World data on education, 2010-2011. 7th edition. The educational process: Primary and lower secondary education (compulsory school)*. p. 11.
- Lankes, E.M. & Carstensen, C.H. (2007). Der Leseunterricht aus der Sicht der Lehrkräfte. In W. Bos, S. Hornberg, K.-H. Arnold, G. Faust, L. Fried, E.M. Lankes, K. Schwippert, & R. Valtin (Eds.). *IGLU 2006 Lesekompetenzen von Grundschulkindern in Deutschland im internationalen Vergleich*, Pp. 161–193.
- Lærplan i norsk. 2013. Oslo. Utdanningsdirektoratet. Available at <http://www.udir.no/kl06/NOR1-05> (Accessed on December 30, 2015)
- Lesesentret (2014). *Om Lesesentret*. Available at <http://lesesenteret.uis.no/om-lesesenteret/> (accessed on September 3, 2014).

- Mullis, I.V.S., Martin, M.O., Minnich, C.A., Drucker, K.T., & Ragan, M.A. (2012a). (Eds.), *PIRLS 2011 encyclopaedia. Educational policy and curriculum in reading (Vols 1 and 2)*. Boston: Lynch School of Education, Boston College, TIMSS and PIRLS International Study Centre. Available at <http://timssandpirls.bc.edu/pirls2011/encyclopedia-pirls.html> (Accessed on December 30, 2015)
- Mullis, I.V.S., Martin, M.O., Minnich, C.A., Drucker, K.T., & Ragan, M.A. (2012b). *Pirls 2011 Encyclopedia: Education Policy and Curriculum in Reading*, IEA.
- Norway Government (2013). *Act of 17 July 1998 no. 61 relating to Primary and Secondary Education and Training (the Education Act) with amendments as of 25 June 2010, 31 May 2011, 5 June 2012 and 17 June 2013. In force as of 1 August 2013*. Sections: 1-3, 2-6, 2-7, 2-8, 2-15, 3-9, 3-12, 5-1, 9-2, 9a-4.
- Norwegian Ministry of Children, Equality and Social Inclusion (2014). *Equality 2014 – The Norwegian Government's gender equality action plan*. Pp. 22.
- Norwegian Ministry of Education (2007). *Education – from Kindergarten to Adult Education*. Pp. 5, 9, 12.
- Norwegian Ministry of Education and Research (2011). *Learning together. Meld. St. 18 (2010-2011) Report to the Storting (white paper) Summary*. Pp. 3, 6.
- Norwegian Ministry of Education and Research (2012). *Strategy for Lower secondary Education in Norway: Motivation and Mastery for better Learning. Joint effort to improve classroom management, numeracy, reading and writing*. Pp. 3, 5.
- Norwegian Ministry of Education and Research. (2006, 2011). *Framework plan for the content and tasks of kindergartens*. Oslo. Available at: http://www.udir.no/globalassets/upload/barnehage/rammeplan/framework_plan_for_the_content_and_tasks_of_kindergartens_2011_rammeplan_engelsk.pdf (Accessed on December 30, 2015)
- Norwegian Ministry of Education and Research. *Strategy for Lower Secondary Education in Norway*. Available at http://www.regjeringen.no/upload/KD/Vedlegg/Grunnskole/Strategiplaner/F_4276_E_web.pdf (Accessed on June 17, 2014)
- OECD (2014). *Talis 2013 Results: An International Perspective on Teaching and Learning*, TALIS, OECD Publishing.
- Rix, J., Sheehy, K., Fletcher-Campbell, F., Crisp, M. & Harper, A. (2013). *Continuum of Education Provision for Children with Special Educational Needs: Review of International Policies and Practices*. Pp. 187-189, Available at http://www.ncse.ie/uploads/1/Continuum_appendices_07_08_13.pdf (Accessed June 17, 2014)
- Solheim, R. G. (2012). Norway. In I.V.S. Mullis, M.O. Martin, C.A. Minnich, K.T. Drucker, & M.A. Ragan (Eds.), *PIRLS 2011 encyclopaedia. Educational policy and curriculum in reading (Vol. 2 L-Z)*, pp. 479-488). Boston: Lynch School of Education, Boston College, TIMSS and PIRLS International Study Centre. Available at http://timssandpirls.bc.edu/pirls2011/downloads/PIRLS2011_Enc-v2.pdf (Accessed on December 30, 2015)
- UNESCO, IBE (2012). *World Data on Education*. http://www.ibe.unesco.org/fileadmin/user_upload/Publications/WDE/2010/pdf-versions/Norway.pdf (Accessed June 17, 2014)