

LITERACY IN THE CZECH REBUBLIC

COUNTRY REPORT
CHILDREN AND ADOLESCENTS

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Main authors (in alphabetical order):

Christine Garbe, Dominique Lafontaine, Veronika Laufková, Gerry Shiel, Renate Valtin

Contributing authors (in alphabetical order):

Ana Arqueiro, Valeria Balbinot, Ariane Baye, Juliana Cunha, Maria Lourdes Trindade Dionísio, Claudia Fischer, Stéphanie Géron, Eithne Kennedy, Maija Koikkalainen, Maria Kovacs, Gudmundur Kristmundsson, Anna Kucharská, Dominique Lafontaine, Gina Lemos, Heikki Lyytinen, George Manolitsis, Carmen González Martí, Ioana Camelia Moler, Fabio Nascimbeni, Franziska Pitschke, Helin Puksand, Jolana Ronková, Sari Sulkunen, Eufimia Tafa, Giorgio Tamburlini, Anne Uusen, Ariana-Stanca Văcăreţu, Corina Volcinschi, Christine Wagner, Esther Wiesner, Radka Wildová

Coordinator of the ELINET-Project:

University of Cologne

Prof. Dr. Christine Garbe Institut für Deutsche Sprache und Literatur

Richard-Strauss-Str. 2 50931 Köln – Cologne Germany

christine.garbe@uni-koeln.de

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1 Introduction

This report on the state of literacy in the Czech Republic 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

Czech Republic participated in IEA's PIRLS (4th graders reading comprehension) in 2001 and 2011, in OECD's PISA (15 year-olds' reading literacy) since 2000, and in OECD's PIAAC (adults' reading literacy) in 2012. This means it is possible to describe the changes over time in average reading proficiency, according to different characteristics of the readers, and to compare relative reading levels of proficiencies for different age groups.

Czech Republic performed above the EU average both in PIRLS 2011 (545 vs 535 EU-average) and very close to the EU's average in PISA 2012 (493 vs 489). While the performance in PIRLS increased between the first and the third cycles (by 9 points), the Czech students' overall performance in PISA seems unchanged between 2000 and 2012, but a decrease (by 13 points) was observed in 2009 when reading was the main topic. It then increased back to its initial level in 2012.

A limited proportion of pupils (13% in both studies) can be considered as low-performing readers in PIRLS, they were 16.9% in PISA. This is less than in EU countries on average (20% both in PIRLS and PISA). 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 has decreased in PIRLS between 2001 and 2011 (from 18.8% to 12.7%). In PISA, between 2000 and 2009, this proportion of low-performing readers had slightly increased (by 6.4%), among girls (+ 2.8%) and even more among boys (+ 7.2%). However, in PISA 2012, the proportion of low-performers in the Czech Republic decreased again and was very close to the initial situation in PISA 2000 (around 17%) among both girls and boys.

The proportion of top-performing readers was 8% in PIRLS (vs 9% in EU) and 6% in PISA (vs 7% in EU).

The gap according to the pupils' socioeconomic background was higher than the EU average in PIRLS (87 vs 76 on average). The percentage of parents whose highest level of education was lower secondary or below was very weak in Czech Republic (2% vs 18% in EU). In PISA, the gap according to parents' education level was lower than the EU average (84 vs 89 on average). However, the indices of socioeconomic 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 lower than in EU countries on average (22 vs 38 EU-average), the equivalent of a half-year of schooling. The proportion of students with an immigrant background was rather small in comparison with EU countries (2,3% vs 8,3%). Similarly, in PIRLS the mean score difference between those who always spoke the test language at home, and those who sometimes or never did so was lower than in EU countries (12 vs 26). In PISA, there was barely any difference in reading performance between students speaking the test language at home and those who do not. This result should be taken with caution, as the proportion of students who do not speak the test language at home was very low (1.3 % of the students).

In Czech Republic, the gender gap (in favor of girls) was lower than the corresponding EU average differences in PIRLS 2011 (7 vs 12 on average) whereas in PISA, it was slightly higher (48 vs 44 on

average). The gender difference was somewhat smaller in PIRLS 2011 than in PIRLS 2001 (by 13 points). In PISA, no change was observed in the performance of both boys and girls between 2000 and 2012, whereas a decrease of performance had been observed in 2009 among boys (-17 points) as well as a decline among girls, to a smaller extent (-6 points).

In conclusion, Czech Republic slightly increased its performance in reading over time among 4th graders. It performed better than EU countries on average on both levels, but very close to in PISA. Among 15 year-olds, if the comparison focuses on the first and third cycles of the study, a great stability is observed both as for the overall reading score and the proportion of low performers. Czech Republic experienced nevertheless a second cycle worse than the previous and following one: a decrease of the overall performance was observed as well as an increase of the proportion of readers in difficulty. The spread of achievement (gap between low and top performing readers) is lower in Czech Republic than in EU on average at both levels. The results regarding equity are going in different directions: the gap according to socioeconomic status is higher than EU in PIRLS, lower in PISA. The gap according to migration or language spoken at home tends to be lower in Czech Republic than in EU on average.

As far as adults are concerned, Czech Republic performed almost at the same level as the EU countries on average (274 vs 271). It should be remembered that only 17 EU countries took part to 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 lower in Czech Republic than the EU-17-Average (102 vs 117 on average). The proportion of adults performing at or below level 1 in Czech Republic was 12%, less than the EU-17 average (16.4%). Females were 12% in that category, males 11%.

Females performed somewhat less well than men (272 vs 276) and the gender gap in favor of males was somewhat higher in Czech Republic (4 score points) than in EU on average (2 score points) which is coherent with what was observed among 15 years-old students. The gap according to parents' level of education was nearly similar to the EU countries on average (respectively 42 and 41 points), while the difference according to that criterion was higher in PIRLS and close in PISA. The gap according to the language spoken at home was much lower than in European countries but must be taken with caution because only 2% of tested adults reported speaking another language at home.

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 the Czech Republic has parents with positive attitudes towards reading. Contrary to what happens in other countries, in Czech republic the gap in reading performance at grade 4 between children whose parents like to read (average achievement 561) and those who do not (540) is not as huge as expected.

In the Czech Republic, there are less parents (1%) who never or hardly ever engage in the nine activities, compared with the EU 24 (2%). The Early Literacy Activity Scale correlates with later reading performance in grade 4. The average reading score of pupils who were engaged often in these activities was 555, as compared with 542 for those pupils who sometimes were engaged in these activities with their parents before the beginning of primary school.

In the Czech Republic 6% reported having 10 or fewer books at home (ELINET PIRLS Appendix, Table E1). This is below the EU-24 average of 11.3%. In the Czech Republic, 15.2% had 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 92.0 points in the Czech Republic, compared with an average of 81.7 across the EU-24. Hence, the relative association between number of books and reading achievement in the Czech Republic is stronger than on average across the EU-24.

There are many projects, mainly initiated by public libraries and carried out by librarians, to coax preschool children and their parents into libraries – reading aloud, dramatization of fairy tales, playing with books (speaking, reading and drawing), series of lectures on children's literature, need of reading etc. The examples of concrete projects are "The Week of Reading to Children" in June, "Every Czech Reads to Kids" (the aim is to build strong family ties through reading together), "Reader of the Year" etc. Other project mainly initiated by bookshops to attract preschool children and their parents into bookshops – for example authors' reading.

Children and adolescents

Providing a literature environment in school: According to PIRLS 2011 only 55.1% of fourth graders in the Czech Republic were in classrooms which had class libraries – well below the corresponding EU-24 average of 73% (ELINET PIRLS 2011 Appendix, Table H2). Just 13.7% were in classrooms with more than 50 books in a class library (ibid), compared with an EU-24 average of 32.2%. Focuses on the development of literacy and motivation of pupils to read, the Czech schools need to be supported in founding of classroom libraries, libraries centres, collections of books etc. The averages of the Czech Republic (in comparison with EU average) is low.

Supporting reading motivation, especially among boys and adolescents: According to PIRLS 2011 Encyclopedia, the Czech Republic is one of the four European countries that reading for pleasure was given a little or no emphasis (Mullis et al. 2012, Vol.1, exhibit 9, p. 36). This fact can be the reason, why Czech student also in PISA (OECD, 2010) does not reach high score on reading performance. The survey in PISA 2012 show the significant downgrade in the relationship of Czech pupils to the school (Palečková & Tomášek, 2013). More than half of the Czech 15-year-old pupils perceive school as a place where they are often boring. A third of all Czech pupils said that they would prefer not to go to school at all (OECD, 2014). Comparisons showed that the results of the Czech Republic was decreased because of worse results of pupils of basic schools. On the other hand, according to their results pupils of participating secondary schools would have occupied the top positions. Results of pupils attending secondary general schools considerably exceeded the best countries. (CSI, 2011, p. 77). Reading performance varies highly between schools depending on the socio-economic make-up of their student body. Equity indicators show that Czech schools are influenced by their socio-economic intake (OECD, 2010), the main problem is early tracking and streaming into special schools (Straková, 2009).

The gender gap (in favour of girls) was lower in the Czech Republic than the corresponding EU average differences in PIRLS 2011 (7 vs 12 on average) whereas in PISA, it was slightly higher (48 vs 44 on average). The gender difference was somewhat smaller in PIRLS 2011 than in PIRLS 2001 (by 13 points). In PISA, no change was observed in the performance of both boys and girls between 2000 and 2012, whereas a decrease of performance had been observed in 2009 among boys (-17 points) as well as a decline among girls, to a smaller extent (-6 points). In 2012, girls perform better than boys with a statistically significant difference of 39 points⁶ (PISA 2012). The gap between girls and boys is caused by a lack of acceptable male archetypes in contemporary literature (Ernestová, 2004) and it is caused also by a fact that Czech teachers don't respect the special needs of texts for boys (shorter texts, a lot of illustrations, facts) (Ronková & Wildová, 2014).

The Czech Republic needs to build a stronger focus on giving some emphasis to reading for pleasure (free choice of a book topic, more spare time activities, usage of efficacious opinion makers, good practice, wide supply etc.) and to motivating pupils for reading, especially boys. More research and project (where male archetypes are represented) oriented on support of reading of boys are needed.

The role of public libraries: There are no national and municipal library regulations in the Czech Republic. The research (Quick et al. 2013) estimates that there are 5,408 public libraries in the Czech Republic, which equates to 5.1 libraries per 10,000 population, significantly higher than the average of 1.3 libraries per 10,000 population across the EU. Public libraries users in the Czech Republic were more likely than the EU average to be women and to have left full time education aged 19 or under. They were also more to live in a city or large town. Apart from the core service of 'books to read or borrow', users in the Czech Republic were much less likely than users across the EU to rate services as 4 or 5 on the scale. The core service of 'books to read or borrow' was considered the most important, rated as important by 92% of users in the Czech Republic (and 94% across the EU).

SKIP (Association of Library and Information Professionals of the Czech Republic) is the profession's largest association in the Czech Republic: it counts about 1400 individual and institutional members and 11 regional organizations. SKIP e.g. organizes social events for libraries and information professionals, promotes and supports reading / readership, book culture and libraries etc. – A Night with Andersen; A Week of Reading (an event promoting reading), Biblioweb (a competition for the

⁶ OECD average: 38 points higher for girls.

best library pages); Library Workshop (meetings focusing on the current problems of public libraries); Children's Book Day; Library Week and other events in regions of the Czech Republic.

Digital literacy learning opportunities in schools (and other public spaces, e.g. libraries): According to PIRLS 2011 one-third of fourth graders in the Czech Republic (33%) used a computer at least monthly to look up information. The corresponding EU-24 average is 39.9% (Mullis et al. 2012). ICT infrastructure in Czech schools is good. Access to computers and broadband internet are above EU mean. Connectedness of schools is relatively high as well (i.e. schools have a website or homepage). Fourth graders use of computers and personal mobile phone is high. Also, there are more interactive whiteboards in the Czech Republic than there are in average in the EU. The number of data projectors available is close to the EU average at all grades.

At secondary level, ICT is part of the curriculum as a separate subject and also as a tool for tasks in other subjects. Media education in the Czech Republic must be present at the secondary level. It is a compulsory, interdisciplinary, cross-curricular subject. The authority to decide how to treat media education in class lies with the schools. In the Framework Education Program For Secondary General Education (2007), media education has a guaranteed place. It claims that media education is a necessary prerequisite for media communication and for media related work. The Czech government conducts various programs to support ICT in schools.

Improving the Quality of Teaching

Pre-primary years

Improving the quality of staff and a need to become more attractive to males: In Czech kindergartens, children are taught by teachers of nursery schools, who mainly have completed secondary education with a school-leaving examination specialised in preschool pedagogy (graduates of secondary pedagogical schools, ISCED 3). They can also gain education at higher vocational schools or higher education institutions in a bachelor's or master's study programme. The education must always be specialised in preschool pedagogy.

According to Pordata (2014), 0.4% of the pre-primary teachers in the Czech Republic are males. The range is from 0.2% in Bulgaria and Hungary to 17.7% in France. The non-governmental organisation LOM (The League of Open Men) has initiated a programme called "Men to School". In 2008 the share of male teachers in kindergartens was 0.1% (and they were mainly in alternative military services) or this organisation has also initiated a programme called "Fathers read to children".

Introducing comprehension literacy curricula in pre-primary schools: In kindergarten, children could be prepared for formal instruction in school. Kindergarten teachers should provide a literacy environment where children learn and engage in the communication, in the motivation to learn and write in school, in building relationships with books, in pre-reading strategies. Comprehensive literacy curriculum in pre-primary schools could be created.

Children and adolescents

In 2011, pupils in the Czech Republic spent fewer instructional hours in schools (782 hours per year) compared with students on average across EU-24 countries (850 hours), though allocation of time to teaching the language of the PIRLS test in the Czech Republic (283 hours) is greater than the average across EU-24 countries (241 hours). The time to be allocated to language/reading is not specified in the Czech Republic curriculum. The average number of hours allocated to teaching reading each year in the Czech Republic a as part of language instruction (72 hours) is also above the EU-24 average (68),

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

131 hours). Teachers in the Czech Republic report allocating about the same amount of time to teaching reading across the curriculum and in reading classes as on average across EU countries (Mullis et al., 2012, p. 214, Exhibit 8.4).

though the EU average is itself low relative to, for example, the United States and New Zealand (both

Improving Literacy Curricula and Reading instruction in schools: The Czech Republic does not have a special curriculum on reading (Mullis et al. 2012, Vol.1, exhibit 5, p. 31). The content of the Czech Language and Literature field is complex but, for the sake of clarity, has been separated into three parts: Communication and Composition, Language, and Literature. However, the educational content of these individual parts is interconnected through instruction (Mullis et al. 2012, Vol.1, p. 173). The Czech Republic needs to build systematically support to development of reading literacy in national document, especially in FEPs or through the National Strategy for Development of Reading Literacy that does not exist.

The results of surveys (PIRLS 2011) showed that Czech teachers did not aim their attention to development of reading strategies, high-level strategies were less frequently in the Czech Republic. Czech teachers traditionally tend to concentrate mainly on the technical aspects of teaching reading, giving the functional aspects less attention (Najvarová, Najvar, 2007). Czech teachers have to tend to be taught frequently reading strategies, especially higher-level strategies, to develop students' reading comprehension skills. The new textbooks that will be also focused on reading literacy and development of higher-level reading strategies are needed.

Early identification of and support for struggling literacy learners is appropriately defined: In Czech Republic we are able to deal with with children developmental difficulties at the very beginning in the pre-school age from which might be develop some specific learning disabilities. Professional intervention for of pupils with reading difficulties includes the development of reading skills and overcoming barriers to reading. But it also covers the sub-functions (perceptual function, speech and language skills and abilities, attention, memory), that are the basis of specific learning disabilities. The intervention program based on diagnosis depending on the severity and duration of solving difficulties. Its preparation is under leadership of education specialist, psychologist or special education teacher in the School Advisory Centre. It can be implemented individually or in a group, also trained teachers may be involved. It is therefore an individual program or a group program. Recently it started to be involved global development programs, for example: Feuersteins Instrumental Enrichment, Elkonins method. From the perspective of diagnosis there is a large dynamic development of diagnostics that mingles with intervention.

Improving the quality of pre-service and in-service teacher training: According to PIRLS 2011, fourth-grade students are typically taught reading by general-purpose primary teachers who are responsible for teaching all basic subjects. The Master's level to upper and lower secondary teachers

takes five years. (European Commission/EACEA/Eurydice, 2013). 93% of fourth grade pupils have teachers who completed a Postgraduate University Degree, 1% had teachers who completed a Bachelor's Degree or equivalent but not a Postgraduate Degree; 3% had teachers with no further than upper secondary education. The EU-24 average for the last category is 6% (indicating that level of qualification of teachers of reading in the Czech Republic is quite high).

Introduce and maintain systematic support of novice teachers after their graduation is needed. The appointed mentors should also be trained for their role. Due to missing a clear link to professional development opportunities, the impact of performance review processes on teacher performance has been relatively limited. Professional development is predominantly a choice by individual teachers and is not systematically associated with school development needs (Santiago et al., 2012).

The Czech Republic need a systematic approach in continuous professional development of teachers and the induction support for new teachers also needs to improved and extended. This issue is widely discussed within the design of a quality standard for the teaching profession and currently also within the national project *Carrrier System*.

More time spent on professional development related to literacy: In the Czech Republic, 9% pupils in grade 4 have teachers who spent 16 hours or more (EU-24 average: 18%) engaged in professional development related to reading in the previous two years, 52% had teachers who spent some time but less than 16 hours (EU-24 average 53%), and 40% had teachers who spent no time in professional development related to reading in the previous two years (EU-24 average 29%) (Mullis at al., 2012, p. 196, Exhibit 7.4) These figures show a low engagement of Czech teachers. According to Teaching and Learning International Survey (TALIS, 2013): a smaller proportion of teachers report having a mentor assigned compared to most other TALIS countries (only 3.8 %); a smaller proportion of teachers report having undertaken professional development in the 12 months prior to the survey than in most other TALIS countries (82.5 %).

The Czech Republic needs to improve the quality and participation rates of professional development related to reading. It needs to target at building literacy expertise of teachers and mentors which are specified in development related to literacy.

Support for children and adolescents whose home language is not the language of school: The Czech immigrant population has extremely diverse integration needs. The Curriculum Framework for Romani was piloted in the Czech Republic. A crucial policy goal will be to define a vision for integration policy in the Czech Republic and formulate a clear and systematic action plan to put the integration strategy and support for children and adolescents whose home language is not the language of school in force.

Increasing Participation, Inclusion and Equity

Pre-primary years

There is a positive relationship between the length of preschool education attendance in the Czech Republic and the average reading score in grade 4, as PIRLS 2011 data show (Mullis et al. 2012, Exhibit 4.7, p. 128. More than 90% of 5-year-old children are enrolled in nursery schools. However the Czech Ministry of Education, Youth and Sports plans to introduce compulsory nursery school attendance for 5-year-old children from September 2017. No child should be excluded from preschool because

parents cannot afford to send their children to preschool/kindergarten institutions if they have to pay. Czech Republic belongs to the half of the European countries where the entire period of ECEC is free.

Children with special educational needs, such as those facing language development delays, can be educated in kindergartens for children with speech and language disorders. Preparatory classes (*přípravné třídy*) for socially disadvantaged children in the year prior to compulsory schooling can be set up in basic schools (*základní školy*, ISCED 1+2) corresponding to the pre-primary level of education⁷.

Provisions for preschool children with language problems: In the Czech Republic there is no particular description of how teachers should assess their learners, there is no systematic assessment of children in order to identify language development problems (Eurydice, 2013). General assessment responsibilities are assigned to teachers. The Czech Republic could create a systematic assessment of children in order to identify language development problems.

Children and adolescents

Supporting struggling literacy learners: The proportion of low-performing readers has decreased in PIRLS between 2001 and 2011 (from 18.8% to 12.7%). In PISA, between 2000 and 2009, this proportion of low-performing readers had slightly increased (by 6.4%), among girls (+ 2.8%) and even more among boys (+ 7.2%). However, in PISA 2012, the proportion of low-performers in the Czech Republic decreased again and was very close to the initial situation in PISA 2000 (around 17%) among both girls and boys. Boys are over-represented in the lowest proficiency levels. Schools should provide support systems (e.g. additional reading experts) for pupils falling behind in reading.

Support for migrant children and adolescents whose home language is not the language of school: In the Czech Republic, the percentage of students with an immigrant background is low (2,3 %), much lower than in the EU countries on average. The gap between native students and those with an immigrant background is lower than EU countries on average. According to PIRLS 2011 (Mullis et al. 2012, 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 the lowest in Czech Republic, at 1.0 %.

Preventing early school leaving: According to Eurostat (2014), in the Czech Republic, the rate of early school leavers was 5.4 % in 2013, down from 5.5% a year before. The target value of the early school leaving (ESL) rate set for 2020 is 5.5%. The percentage of 18-year olds in education was 90.3% in 2011, which situated the Czech Republic above the EU-27 average (80.7%). By 2012, this indicator dropped to 89.9%. Since 2001, the Czech Republic has consistently exceeded the EU average value for this indicator.

However, there is no complex strategy for early ending of school attendance in the Czech Republic. This conceptual strategy should consist of a wide variety of pre-emptive measures as well as a targeted identification of pupils at risk along with a solution to specific individual problems. The Czech Republic needs to strengthen systematic approach inside schools, cooperation with parents, counselling institutions, psychologists, non-profit organizations and other institutions. The state needs to

⁷ See https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Czech-Republic:Overview.

implement a measure which would pressure parents into being more rigorous about regular school attendance of their children (including a requirement of children's school attendance in order to be eligible for social security benefits) and to develop a career counselling so that pupils can opt for a suitable field of study and an appropriate level of education (Trhlíková, 2015).

The Czech Republic needs to build the complex strategy for early ending of school attendance and to strengthen not only a systematic approach inside schools but also a cooperation with parents, counselling institutions, psychologists, non-profit organizations and other institutions as well.

3 General Information on the Czech Republic Education System

In the Czech Republic, schools are administered as part of the general administration. The responsibility is distributed among the central government, regions and communities. The **Ministry of Education, Youth and Sports (MEYS)** preserves and determines the integrated state educational policy. Regions are responsible for education in their territory. There are organising bodies for upper secondary schools and tertiary professional schools. The communities are responsible for pre-primary education and compulsory schooling. All schools have the status of legal entities. Public higher education institutions are established by law.⁸

Pre-primary education is provided for children aged 3 to 6 in nursery schools (*mateřské školy*). The attendance is not compulsory, nevertheless, it is very high. Children have a legal entitlement to education in the last year before compulsory education.

Primary and lower secondary education (basic education) is organised mostly within a single-structure system in nine-year-long basic schools (*základní školy*), which are divided into the first and second stage. Lower secondary education can be provided also by multi-year general secondary schools (*víceletá gymnázia*) and eight-year-long conservatoires (*osmileté konzervatoře*). School attendance is compulsory for nine years, usually from the ages of 6 to 15.

Upper secondary education is provided by upper secondary schools (*střední školy*) in general and vocational fields. School leavers acquire one of three levels of education. Secondary education with a school-leaving examination (*střední vzdělání s maturitní zkouškou*) is a requirement for entering tertiary education. The other two levels are secondary education with an apprenticeship certificate (*střední vzdělání s výučním listem*) and secondary education (*střední vzdělání*). The age of pupils is usually 15 to 18/19. Upper secondary schools provide also a follow-up study period (*nástavbové studium*), enabling holders of the apprenticeship certificate to acquire secondary education with a school-leaving examination, and a shortened study (*zkrácené studium*) in which the graduates with school-leaving examination or apprenticeship certificate gain a qualification in a different field.

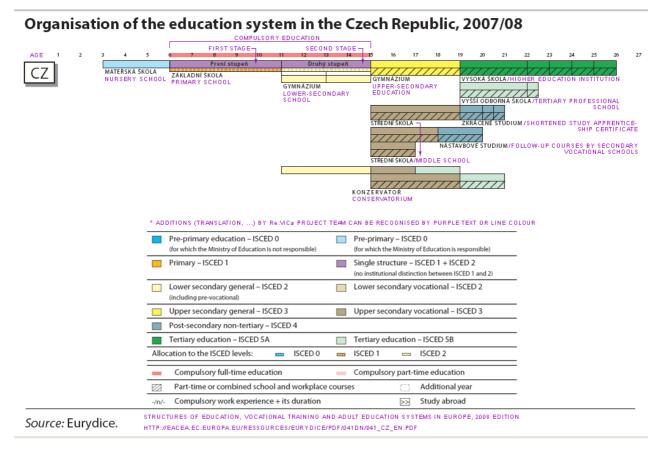
A specific type of school is the conservatoire (*konzervatoř*) which provides lower and upper secondary as well as tertiary professional education with an emphasis on art.

Tertiary education is carried out by tertiary professional schools (*vyšší odborné školy*) and higher education institutions (*vysoké školy*). Tertiary professional education is usually attained in three-year programmes. Higher education is provided in the first, second and third cycle programmes (Bachelor's, Master's and Doctoral degree programmes), or possibly in non-structured long Master's degree programmes.

Adult education includes general education, vocational education, special interest education and other education.

⁸ Source: https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Czech-Republic:Overview.

Figure 1: Structure of the Czech Republic School System



Source: http://www.virtualschoolsandcolleges.eu/images/e/ef/Czech-Republic_Educational-System.gif

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 organized by the Association for the Evaluation of Educational Achievement (IEA). The survey was administered in 35 countries in 2001, 45 education systems in 2006, and 50 in 2011. PIRLS assesses different purposes for reading (literary and informational) and different reading processes (retrieve explicit information, make inferences, interpret and integrate ideas and information, examine and evaluate content, language, and textual elements). Both multiple choice and open-ended questions are used.

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 2006 Data).

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

Pupils in the Czech Republic achieved an overall mean reading score of 545 in PIRLS 2011 (Table 1). Performance in the Czech Republic was broadly similar across reading purposes (Literary, Informational), and reading processes, ('Interpret, Integrate & Evaluate; Retrieve & Inference) (Elinet PIRLS 2011 Appendix and Encyclopaedia, Tables A2-A5).

Table 1: Overall Performance on PIRLS 2011 – the Czech Republic and EU-24 Average

	Overall Reading – Mean Score		
Czech Republic	545		
EU-24	535		

Significant differences (relative to the EU-24 Average) are shown in bold.

In the Czech Republic, 13% of students performed at or below the Low benchmark on overall reading (Table 2). This is lower than the EU average of 20%. In the Czech Republic, 8% of students achieve at the Advanced benchmark. This is very close to the EU average of 9%.

Table 2: Performance by Overall PIRLS Reading Benchmarks 2011 - Percentages of Pupils – Croatia and EU-24 Average

	Polou 400	400-475	475-550	550-625	Above 625
	Below 400	Low	Intermediate	High	Advanced
Czech	2	11	38	42	8
EU-24	5	15	36	35	9

Significant differences (relative to the EU-24 Average) are shown in bold.

The Czech Republic's standard deviation of 62 is 8 points lower than the EU-24 average (70), indicating a narrower spread of achievement (Table 3). Among EU countries, Austria (63) and Finland (64) had similar Standard Deviations.

The difference between the scores of students at the 90th and 10th percentiles in the Czech Republic – 157 points – is 23 points below the corresponding EU-24 average of 180, again pointing to a smaller gap in achievement than on average across the EU-24.

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

	Standard Deviation	10 th Percentile	90 th Percentile	90 th -10 th
Czech Rep.	62	463	619	157
EU-24 Avg	70	441	621	180

Significant differences (relative to the EU-24 Average) are shown in **bold**.

In 2001, students in the Czech Republic achieved a mean score of 537 on the overall reading scale (Table 4). There was a significant rise in performance of 9 points between 2001 and 2011. This rise in performance in the Czech Republic is in contrast to the EU-24 average, where performance was largely consistent across the three rounds of testing. The Czech Republic did not participate in PIRLS 2006.

Table 4: Trends in Performance 2001-2011 (Overall Scale) – Czech Republic and EU-24

	2001	Change 2006 (2006- 2006 2001)		Change 2011 (2011- 2001 2006)			2011	Change (2011- 2001)	
Czech	537	-	-	-	545	-	537	545	9
EU-24 Avg	534	534	0	534	535	1	534	535	1

Significant differences in **bold**

Girls in the Czech Republic achieved a mean score on overall reading that was higher than boys by 7 points in 2011. This was lower than the EU-24 average difference of 12 points (Table 5). The Czech Republic's gap in 2011 was smaller than the corresponding gap in 2001, which was 13 points.

Table 5: Trends in Performance by Gender 2001-2011 (Overall Scale) - Czech Republic and EU-24 Average

	(Czech Republic			EU	
	Girls	Girls Boys Girls-Boys		Girls	Boys	Girls-Boys
2011	549	542	7	541	529	12
2006	-	-	-	541	528	13
2001	543	531	13	542	525	17

Significant differences in **bold**.

Attitudes to Reading

There was a difference of 39 points between pupils in the top and bottom quartiles of the Like Reading scale in the Czech Republic in 2011 (Table 6). On average across the EU-24, the difference between pupils in the top and bottom quarters of the Like Reading scale was 50 points, indicating a relatively weaker relationship between Liking reading and performance in the Czech Republic.

Table 6: Mean Overall Reading Scores of Students in the Top and Bottom Quartiles of the PIRLS Like Reading Scale – Czech Republic and EU-24 Average

		Overall Reading Score	
Like Reading	Top Quartila	Pottom Quartila	Difference
	Top Quartile	Bottom Quartile	(Q4-Q1)
Czech	567	528	39
EU-24	563	511	52

Significant differences in **bold**.

Czech pupils in the top quarter of the Confidence in Reading scale achieved a mean score (575) that was 68 points higher than pupils in the bottom quarter (507) (Table 7). The average difference across the EU-24 was 80 points, indicating a relatively weaker relationship between Confidence and performance in the Czech Republic.

Table 7: Mean Overall Reading Scores of Students in the Top and Bottom Quartiles of the PIRLS Confidence in Reading Scale – Czech Republic and EU-24 Average

	Overall Reading Score						
Confidence in Reading	Top Quartile	Bottom Quartile	Difference (Q4-Q1)				
Czech	575	507	68				
EU-24	570	490	80				

Significant differences in **bold**.

4.1.2 Gaps in reading

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

Parent's educational achievement

Pupils in the Czech Republic whose parent attended University or Higher achieved a mean score (576) that was some 87 points higher than students whose parents completed Lower Secondary or below (490) (Table 8). The average difference across the EU-24 was 76 points.

Table 8: Percentages of Parents Whose Highest Level of Education was Lower Secondary, and Percentages who Finished University or Higher

Level of education	Lower Secondary or Below		University or Higher		Difference (Univ or Higher –
	%	Mean	%	Mean	Lower Sec)
Czech	2	490	23	576	87
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 the Czech Republic, 87% of pupils reported that they always spoke the language of the PIRLS reading test at home – above the corresponding EU-24 Average (80). Thirteen percent of students in the Czech Republic sometimes or never spoke the language of the PIRLS test. The difference in achievement between pupils in the Czech Republic reporting that they always or sometimes/never spoke the language of the test was 12 score points – 14 points lower than the corresponding EU-24 average difference (26) (Table 9)

Table 9: Percentages of Students Reporting that They Always or Sometimes / Never Speak the Language of the PIRLS Test at Home, and Associated Mean Score Differences – Czech Republic and EU-24 Average

Language of the Test Spoken at Home	Alv	vays	Sometim	nes /Never	Mean Score Difference (Always –
Spoken at Home	%	Mean	%	Mean	Sometimes/Never
Czech Rep.	87	548	13	536	12
EU-24 Avg	80	541	20	519	26

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

Gender

In 2011, girls in the Czech Republic achieved a mean score on overall reading that was higher than boys by 7 points. This was lower than the EU-24 average difference of 12 points (Table 10). The Czech Republic's gap in 2011 was smaller than the corresponding gap in 2001, which was 13 points.

Table 10: Trends in Performance by Gender 2001-2011 (Overall Scale) - Czech Republic and EU-24 Average

		Czech			EU	
	Girls	Boys	Girls-Boys	Girls	Boys	Girls-Boys
2011	549	542	7	541	529	12
2006	-	-	-	541	528	13
2001	543	531	13	542	525	17

Significant differences in **bold**

There was a difference of 39 points between pupils in the top and bottom quartiles of the Like Reading scale in the Czech Republic in 2011 (Table 11). On average across the EU-24, the difference between pupils in the top and bottom quarters of the Like Reading scale was 50 points, indicating a relatively weaker relationship between Liking reading and performance in the Czech Republic.

Table 11: Mean Overall Reading Scores of Students in the Top and Bottom Quartiles of the PIRLS Like Reading Scale – Czech Republic and EU-24 Average

	Overall Reading Score		
Like Reading	Top Quartila	Pottom Quartila	Difference
	Top Quartile	Bottom Quartile	(Q4-Q1)
Czech	567	528	39
EU-24	563	511	52

Significant differences in **bold**

Czech pupils in the top quarter of the Confidence in Reading scale achieved a mean score (575) that was 68 points higher than students in the bottom quarter (507) (Table 12). The average difference across the EU-24 was 80 points, indicating a relatively weaker relationship between Confidence and performance in the Czech Republic.

Table 12: Mean Overall Reading Scores of Students in the Top and Bottom Quartiles of the PIRLS Confidence in Reading Scale – Czech Republic and EU-24 Average

Canfidanasia		Overall Reading Score	
Confidence in Reading Top Quartile	Bottom Quartile	Difference (Q4-Q1)	
Czech	575	507	68
EU-24	570	490	80

Significant differences in **bold**

PIRLS 2011 - Performance Gaps Czech Rep & EU-24 100 87 76 80 **Score Points** 60 40 26 12 12 20 0 Home Language Gender Parent Education ■ Czech Rep ■ EU-24

Figure 2: Performance Gaps in the Czech Republic and on Average across the EU-24 - Primary Level

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

Attitudes to Reading

There was a difference of 39 points between pupils in the top and bottom quartiles of the Like Reading scale in the Czech Republic in 2011 (Table 13). On average across the EU-24, the difference between pupils in the top and bottom quarters of the Like Reading scale was 50 points, indicating a relatively weaker relationship between Liking reading and performance in the Czech Republic.

Table 13: Mean Overall Reading Scores of Students in the Top and Bottom Quartiles of the PIRLS Like Reading Scale – Czech Republic and EU-24 Average

		Overall Reading Score	
Like Reading	Top Quartile	Bottom Quartile	Difference (Q4-Q1)
Czech	567	528	39
EU-24	563	511	52

Significant differences in **bold**

Czech Students in the top quarter of the Confidence in Reading scale achieved a mean score (575) that was 68 points higher than students in the bottom quarter (507) (Table 14). The average difference across the EU-24 was 80 points, indicating a relatively weaker relationship between Confidence and performance in the Czech Republic.

Table 14: Mean Overall Reading Scores of Students in the Top and Bottom Quartiles of the PIRLS Confidence in Reading Scale – the Czech Republic and EU-24 Average

		Overall Reading Score						
Confidence in	Тор	Bottom Quartile	Difference					
Reading	Quartile	Bottom Quartile	(Q4-Q1)					
Czech Republic	575	507	68					
EU-24	570	490	80					

Significant differences in **bold**

National Studies: The *Enhancing Literacy Development in European Languages* (ELDEL) project was established to provide a state of the art training environment in the scientific study in literacy development which takes into account language-specific characteristics. The research programme comprised a number of overlapping cross-linguistic studies designed to reveal the language-specific and language-general factors affecting literacy development. The network included partners with expertise in developmental, educational and clinical psychology, experimental psycholinguistics, speech and language therapy, and an industrial partner specialising in the creation of intelligent spellchecking systems⁹. The specifics of the Czech language, which belongs to the flective languages with relatively free word-order a transparent ortography, is discussed in detail in Seidlová, Málková, Kucharská and Sotáková; Seidlová Málková a Litavský, 2011; Jagerčíková, Z., Franke, H., Nash, H., Kucharská, A., & Snowling, M, 2011.

The other national project is named *Czech Longitudinal Study in Education* (CLoSE). It is a unique 7-year research project (2012-2018) which undertakes a comprehensive research programme in order to gain a better understanding of the key issues related to schooling, skills acquisition, and achievement. It expands on the knowledge about the formation of skills and their relationship to labour market outcomes, as well as substantially expands the existing evidence on skill creation and its impact in the Czech Republic. Thanks to its multidisciplinary nature and the use of cutting edge research methods in the social sciences, CLoSE employs multiple research techniques and spans numerous topics. Its highlights include new datasets - extensive longitudinal data sets and several smaller experimental data sets. Data from longitudinal studies are extensively used by researchers all over the world, yet there has so far been no such data set in the Czech Republic. CLoSE remedies this situation by building three longitudinal panels following cohorts over time: pre-school-age children (cohort 1, followed 4 years), primary school children followed from lower- to upper-secondary level (cohort 2, followed 8 years), and adults aged over sixteen years (cohort 3, followed 4 years). In CLoSE, pupils are tested in Math skills, Reading skills ad Czech language. For more information, see Federičová & Münich (2014), Federičová (2015).

⁹ For more information see http://www.eldel.eu/aboutus.

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 OECD¹⁰ assesses the skills and knowledge of 15-year-old students every three years in all OECD countries and in a number of partner countries.

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

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

The Czech pupils have 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.

Table 15: Reading performance in PISA 2012

	Mean	S.E.
Czech Republic	493	(2.9)
EU-27	489	(0.6)

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

¹⁰ See http://www.pisa.OECD.org.

In PISA 2009, the Czech pupils performed bellow the EU's average.

Table 16: Trends in reading performance - PISA 2000-2012

	2000		2000 2009		201	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.	
Czech Republic	492	(2.4)	478	(2.9)	493	(2.9)	-13	(6.2)	15	(4.8)	1	(7.0)	
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 2009, achievement levels of Czech pupils in PISA were not significantly different from the OECD average in mathematics and science. However, the performance of Czech 15-year-olds in reading was statistically significantly below the OECD average – 23 OECD countries scored significantly higher than the Czech Republic (Santiago, 2012). Although the national politics do not explicitly focus on reading competence, in 2012, the average performance in reading of Czech among 15-year-olds is 493 points, compared to an average of 496 points in OECD countries.

The problem of low reading performance was firstly realised in 1995. In spite of it, no action (that would target the strengthening of reading skills that would lead to better prepared teachers in this area; offering a special support aimed at reading strategies; promote the development of reading skills in other subjects, etc.) was developed (Straková, 2009). As shown in table 16, the reading performance of Czech pupils were worse in 2009 (as compared to 2000). Comparisons show that the results of the Czech Republic was decreased because of worse results of pupils in basic schools. On the other hand, according to their results pupils of participating secondary schools would have occupied the top positions. Results of pupils attending secondary general schools considerably exceeded the best countries. (CSI, 2011, p. 77). Reading performance varies highly between schools depending on the socio-economic make-up of their student body. Equity indicators show that Czech schools are influenced by their socio-economic intake (OECD, 2010; Straková, 2009). Straková (2009) also wrote about inequitable system-level practices, such as early tracking and streaming into special schools. According to PISA 2009, Czech pupils reported a negative view of relations with their teachers and learning environments in their classrooms (OECD, 2010). The national research and studies about these effects do not exist. There is talk about educational reform with changing curriculum etc. (started in 2007, Framework Education Programme for Basic Education – FEP BE).

The change between 2000 and 2012 was only 1 score point. The improvement between 2009 and 2012 is significant (15 score points).

Due to the low reading and other performance levels, two significant individual national projects, entitled "Preparation and Implementation of International Surveys in Initial Education and Their Disclosure (Competence I)" and "Implementation of International Surveys of Lifelong Learning and Disclosure of Their Results (Competence III)", were transferred, by the decision of the Minister, to the remit of the CSI. Thus inspection evaluations can also encompass important international sample surveys, such as PISA, PIRLS, TIMSS, ICILS and TALIS, which have become an important element for assessing the effectiveness and quality of the education provided by the Czech education system in the framework of international competition (CSI, 2011, p. 7).

Table 17: Spread of achievement. Difference between 10th and 90th percentiles on the reading scale, all students and by gender – PISA 2012

	Difference 90 th - studen		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.	
Czech Republic	226	(5.2)	215	(5.7)	229	(7.5)	
EU-27	251	(1.3)	230	(1.2)	259	(1.6)	

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

In the Czech Republic, the spread of achievement is significantly lower than in the EU countries on average.

Table 18: Percentage of low-performing (below level 2) and high-performing (levels 5 and 6) students - PISA 2012

	Below le	vel 2	Levels 5 and 6		
	%	S.E.	%	S.E.	
Czech Republic	16.9	(1.2)	6.1	(0.5)	
EU-27	19.7	(0.2)	7.0	(0.1)	

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

In the Czech Republic, low-performers and high-performers were more numerous than in the EU countries in 2012.

Table 19: Trends in the proportion of low-performers (below level 2) in reading, all students, and by gender – PISA 2000-2012

	Proportion of students below level 2 in reading									
	All stude	ents	Gir	ls	Boys					
	%	S.E.	%	S.E.	%	S.E.				
2000	17.5	(0.8)	11.5	(0.8)	23.6	(1.6)				
2009	23.1	(1.3)	14.3	(1.2)	30.8	(1.9)				
2012	16.9	(1.2)	10.6	(1.2)	22.8	(1.7)				

Significant differences between assessment cycles in **bold**

4.2.2 Gaps in reading performance

Socio-economic status

Table 20: Difference in reading performance between bottom and top national quarters of the PISA index of economic, social and cultural status – PISA 2009

Difference between bottom and top national quarters of the PISA index of economic, social and cultural status

	Score diff.	S.E.
Czech Republic	86	(4.5)
EU-26	93	(1.1)

In the Czech Republic, the gap in reading performance according to the students' socio-economic background is significant.

Migration

Table 21: Percentage of students and reading performance by immigrant status – PISA 2009

	Native students				backgrou	Students with an immigrant background (first- or second- generation)				Difference in reading performance between		
	Percentage S.E of students		S.E. reading scale		Percentage of students	S.E.	Performance on the reading scale		nativo studen an imn backg	ts with nigrant		
			Mean	S.E.			Mean	S.E.	Score dif.	S.E.		
Czech Republic	97.7	(0.2)	479	(2.8)	2.3	(0.2)	457	(13.7)	22	(13.2)		
EU-26	91.7	(0.02)	490	(0.4)	8.3	(0.02)	452	(6,4)	38.5	(6.4)		

In the Czech Republic, the percentage of students with an immigrant background is low (2.3 %), much lower than in the EU countries on average. The gap between native students and those with an immigrant background is lower than in EU countries on average.

Language spoken at home

Table 22: Percentage of students and reading performance by language spoken at home – PISA 2012

	Speak tes	Speak anot	her lang	guage at l	nome	Differe read accord langu spoke hor	ling ing to uage en at			
	Percentage of students	S.E	Perform on the reading Mean	he	Percentage of students	S.E.	Perforr on t reading Mean	:he	Score dif.	S.E.
Czech Republic	98.7	(0.2)	481	(2.8)	1.3	(0.2)	477	(16.5)	4	(16.1)
EU-27	86.7	(0.02)	494	(0.4)	13.3	(0.02)	441	(5.4)	54	(5.4)

In the Czech Republic, the gap between students speaking the test language at home and those who do not (1.3 %) is much lower than the EU's average.

Gender

Table 23: Mean reading performance by gender and gender differences – PISA 2009

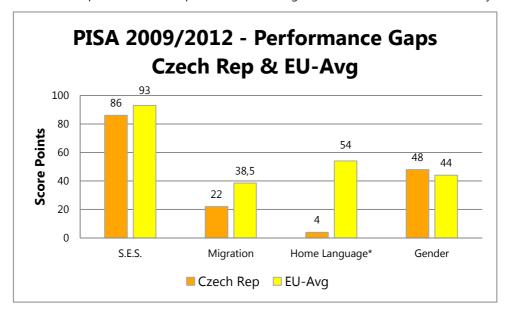
	Boys		Girls	5	Difference (I	Difference (B – G)	
	Mean	S.E.	Mean	S.E.	Score diff.	S.E.	
Czech Republic	456	(3.7)	504	(3.0)	-48	(4.1)	
EU-26	463	(0.5)	506	(0.4)	-44	(0.5)	

Table 24: Trends in reading performance by gender – PISA 2000-2012

	Czech Republic				EU-27			
	Gi	Girls		Boys		ls	Boys	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
2000	510	(2.5)	473	(4.1)	506	(0.8)	473	(0.9)
2009	504	(3.0)	456	(3.7)	507	(0.7)	464	(0.8)
2012	513	(3.4)	474	(3.3)	511	(0.6)	468	(0.8)

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

Figure 3: Performance Gaps in the Czech Republic and on Average across EU Countries - Post-Primary Level



SES: Top – Botton quartile on PISA ESCS scale; Migration: Native – first/second generation immigrants; Language: Speaks language of the PISA test at home – speaks another language; Gender: Girls - Boys

Engagement and metacognition

Table 25: Mean reading scores between students poorly engaged and highly engaged in reading - PISA 2009

	Low q	uarter	Top quarter		Difference	
	Mean	S.E.	Mean	S.E.	Difference	
Czech Republic	434	(3.2)	545	(3.4)	111	
EU-26	444	(0.8)	543	(0.8)	99	

Table 26: Mean reading scores between students in low and top quarters of understanding and remembering strategies

	Low q	uarter	Top quarter		D:ffavoras	
	Mean	S.E.	Mean	S.E.	Difference	
Czech Republic	428	(3.6)	526	(3.4)	98	
EU-26	433	(0.8)	531	(0.8)	98	

Table 27: Mean reading scores between students in low and top quarters of summarizing strategies

	Low quar	Top q	uarter	Difference	
	Mean	S.E.	Mean	S.E.	Difference
Czech Republic	423	(3.2)	534	(2.8)	112
EU-26	440	(0.8)	530	(0.7)	90

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

In the Czech Republic, there is a gap of 112 score points between the students who know which strategies are the most efficient to summarise a text, and who have a limited knowledge of that. On average, in the EU-26, the gap is somewhat lower (90 score points).

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 (with the term "equity" added by ELINET).

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

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

5.1 Creating a literate environment for children and adolescents

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

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

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

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

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

Adolescence is a crucial phase in life where young people develop long-term *identities and self-concepts* which include media preferences and practices (*media identity*). 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" according to their 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. 2012, Exhibit 4.4 – Parents Like Reading, p. 120).

- Like: 33.0% (European average 35.3 %)
- Somewhat like: 53.2% (European average 52.6 %)
- Do not like: 13.8% (European average 17.9 %)
 (For an overview of European countries see table B1 in Appendix B).

In the Czech Republic, the gap in reading performance at grade 4 between children whose parents like to read (average achievement 561) and those who do not (540) is not as huge as expected.

The importance of parental attitudes to reading is shown by the fact that in the Czech Republic there are great differences in reading performance at grade 4 between children whose parents like to read (average achievement 561) and those who do not (average achievement 540).

Home Educational Resources

Fourteen percent of parents in the Czech Republic reported having few home resources for learning – well below the EU Average of 25%. There is only a 1 percentage point gap between the EU Average (25) for many resources, and the Czech average (24). The difference in achievement between pupils in the Czech Republic whose parents reported having many home resources and few resources was 80 score points – only 1 point higher than the corresponding EU-24 average difference (79).

Table 28: Percentages of Pupils Whose Parents Reported Having Few or Many Home Resources for Learning, and Corresponding Mean Overall Reading Scores – Czech Republic and EU-24 Average

Loyal of Hama Dasayreas	Few Re	Few Resources		esources	Difference	
Level of Home Resources	%	Mean	%	Mean	(Many - Few)	
Czech	14	501	24	581	80	
EU-24	25	495	25	573	79	

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

Number of children's books in the home

In the Czech Republic 6% reported having 10 or fewer books at home (ELINET PIRLS Appendix, Table E1). This is below the EU-24 average of 11.3%. In the Czech Republic, 15.2% had 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 92.0 points in the Czech Republic, compared with an average of 81.7 across the EU-24. Hence, the relative association between number of books and reading achievement in the Czech Republic is stronger than on average across the EU-24.

Table 29: Mean Overall Reading Scores of Pupil with 0-10 books at Home, and those with More than 200 Books – Czech Republic and EU-24 Average

	None or Few Books (0-10)		More than 2	Mean Score Difference	
Books in the Home	Percent of Students	Mean Reading Score	Percent of Students	Mean Reading Score	(More than 200 – None or few)
Czech	6	480	15	572	92
EU-24	11	482	12	563	82

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. 2012, 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 the Czech Republic are composite score for all these activities below (for an overview of European countries see table B3 in Appendix C):

- Often: 39.7 % (European average 40.7%)
- Sometimes: 59.6 % (European average 57.4)
- Never or almost never: 0.7 % (European average 1.9%).

The Early Literacy Activity Scale correlates with later reading performance in grade 4. The average reading score in Grade 4 of pupils who often engaged in these activities with their parents before the

beginning of primary school was 555, as compared to 542 for pupils who sometimes engaged in these activities. These data demonstrate the importance of the time devoted to literacy-related activities in early childhood and their association with achievement in grade 4.

While the Early Literacy Activity Scale gives a composite score, it is of interest to look at single items. If only the category "often" is considered, the percentage of pupils in the Czech Republic whose parents engaged in literacy-related activities with them before the beginning of primary school is comparatively high compared with the European average:

- read books to them often: 65,0% (European average 58.4 %)
- told stories to them often: 41,4% (European average 51.5%)
- sang songs to them often: 57,8% (European average 50.6%)
- played games involving shapes (toys and puzzles) with them often: 75,8% (European average 63.5%).

(For more details and an overview of European countries see table B 4-B 7 in Appendix B).

Challenge: Since reading to the child is a predictor of future literacy achievement it is a matter of concern that 35 percent of parents do not read books to them often. There is a need for programs to raise awareness of all parents that literacy is a key to learning and life chances and that the basis for good literacy achievement is laid in early childhood. In particular there is a need for more family literacy programmes with a focus on supporting parents and carers in understanding and fostering the literacy development.

5.1.2 Providing a literate environment in school

Availability and use of classroom library

Based on data provided by their teachers, PIRLS shows that 55.1% of pupils in the Czech Republic were in classrooms which had a classroom library – well bellow the corresponding EU-24 average of 73% (Mullis et al. 2012, exh. 8.13, p.240; EU averages from PIRLS 2011 database, s. Table H2 in Appendix C). Just 13.7% were in classrooms with more than 50 books in a class library (ibid), compared with an EU-24 average of 32.2%.

Challenges: Focus on the development of literacy and motivation of pupils to read, the Czech schools need to be supported in founding classroom libraries, libraries centres, collections of books etc. The averages of the Czech Republic (in comparison with EU average) are low.

5.1.3 Providing a digital environment

Computer technologies at schools in the Czech Republic are usually placed in computer classrooms / laboratories. This solution may influence pupils' education at an economical, organisational and pedagogical level. At present, pupils and their teachers use computers not only at school, but also at home. Internet access is more common in families with children and families of school children, which is also reflected in the availability of the Internet at home.

According to PIRLS 2011, one-third of fourth graders in the Czech Republic (33%) used a computer at least monthly to look up information. The corresponding EU-24 average is 39.9% (Mullis et al. 2012). ICT infrastructure in Czech schools is good. Access to computers and broadband internet are above the EU mean. Connectedness of schools is relatively high as well (i.e. schools have a website or homepage). Student use of computers and personal mobile phone is high. Also, there are more

interactive whiteboards in the Czech Republic than there are on average in the EU. The number of data projectors available is close to the EU average at all grades.

What is the main use of computer technology for literacy purposes in school education in the Czech Republic (Černochová, 2006):

- Computers are seen as an intelligent tool in the process of cognition, the basis is to develop cognitive abilities (Intelligence) of human beings through computer technology.
- Virtual reality is regarded as a new computing paradigm for mediation experiences.
 Students communicate electronically with artificially created environments, as if it were real, and gain experience exploring hypothetical behavior objects (e.g. travels through the human body, and the student is observing how its various systems and institutions operate, or perform experiments in a virtual laboratory).
- Computer technology as an integral component working environment. With the use of ICT as a teaching support tool, and learning related to the use of telecommunication systems linking resources, people and tools for work (creation, problem solving, organisational learning, application sharing, remote control robots or measuring systems etc.).
- Linking information sources and making and accessing the results of human knowledge. Linking information sources are a necessary component in the development of literacy.

According to PISA (2003), students mostly used a computer at home for emailing and chatting (55%); for searching on the Internet (55%), playing computer games (53%), work with a text editor (48%), then to study teaching materials (30%), programming (24%) and work with educational software (18%). According to PISA (2012), 6% of children from socio-economically disadvantaged families for the first time used the Internet at school, not at home. The ratio of students per computer at school is almost 2·1

Some conclusions about the digital environment in the Czech Republic from PISA 2012:

- Students who use computers at school only moderately score the highest results in reading.
- Students who spend their time weekly or daily at computers at school have lower digital reading skills.
- Technology can amplify innovative teaching.
- Education is a heavily personalised service, so productivity gained through technology is limited, especially in the teaching and learning process.
- Impact of technology on educational delivery remains sub-optimal over-estimation of digital skills among teachers and students; low quality of educational software; resistance of teachers and students; naïve policy and implementation strategies.
- New technologies are promising new developments, mainly in the use of gaming in instruction, and highly interactive, non-linear courseware, based on state-of the art instructional design these may have a future influence on the education industry.

The Government Ruling no. 790 (2013) obliges the Minister of Education, Youth and Sports to develop a comprehensive *Strategy for Digital Education* (as one part of *Strategy for Education Policy in the Czech Republic until 2020*). It aims at widening the use of modern digital technologies in education, developing teachers' and pupils' digital skills, and supporting innovative practices. The priorities of the Strategy are: non-discriminatory approach to digital education resources; development of digital skills and computational thinking of teachers; development and modification of school infrastructure to facilitate digital education; support

for the development and distributions of innovations (Strategy for Education Policy of the Czech Republic until 2020).

Digital environment of primary students

The Framework Educational Programme for Basic Education (FEP BE, 2005, p. 104), already incorporated into the primary school curriculum, describes a school subject called "Information and Communication Technology", which will be based on shaping literacy skills to retrieve, process and use information, and to communicate through modern technologies.

According to teachers' reports, 40% of students in the Czech Republic have a computer available for reading lessons, compared to the EU-average of 45% (ELINET PIRLS 2011 Appendix Table I6). One-third of students in the Czech Republic (33%) used a computer at least monthly to look up information. The corresponding EU-24 average is 39.9% (ibid). However, in Denmark, for example, over three-quarters of students use a computer to look up information on a monthly basis.

Digital environment of secondary students

Teaching by FEP BE in the Czech Republic on the second level of basic school (lower secondary school) will continue to develop pupils' literacy skills to search, process and use information and communicate through modern technologies.

The Czech government conducts various programs to support ICT in schools. The main objective is to achieve a high level of use of ICT in most subjects. Most important initiatives and projects are (Černochová, 2006):

- A major international event with a direct link to the research project in the circle objectives and linking with the school practice of coordinating Czech participation in associations (ESP European Schools Project). ESP is an international organisation connecting teachers who are interested in a beneficial way to use educational technology in their work, through educational projects. Since 1988, when the association was founded, projects have involved hundreds of teachers who prepared joint training programmes for tens of thousands of students and pupils. Working on ESP are also experts, top universities and research institutes. The contribution of the research plan and activities of the association and ESP solutions to linked projects such as Socrates Comenius was negligible. Besides the Czech participation in the coordination and presentation of educational projects, the creation of annotated Internet taxonomy of educational projects, whose English version is referenced mostly among foreign partners linked to research teams in the above-listed projects, can be particularly highlighted¹¹.
- To support the functional use of ICT in education of primary and secondary schools, and to improve the quality of information education in schools and spread modern methods of work with ICT, researchers designed and put in practice an information web portal called Teacher's helper¹², which helps teachers and students understand the problems of innovative methods for the application of educational technology. On the server, research results are published in the form of appropriate methodological materials and specific instructions on innovative teaching activities, including tenders for international cooperation

¹¹ See http://omicron.felk.cvut.cz/~bobr/roles /projects/.

¹² See http://www.spomocnik.cz.

under the coordination of the Czech participation in the association ESP. Teachers and students here can get acquainted with developments in educational technology in the world and with current events held in the Czech Republic. A significant part of the service, Teachers' helper is an extensive archive of classified and annotated links to educational materials directly usable in teaching and teacher education.

- An important service, oriented to support the functional use of ICT in teaching and running
 a server at WebQuest.cz¹³, was completed in 2007. The mission of this service is theoretically
 an exemplary manner to promote the practical implementation of ICT in the activities of
 primary and secondary schools. WebQuest.cz application is based on a combination of
 database and publishing systems that allows embedding, sharing and practical
 implementation of constructively oriented tutorials using the Internet.
- In examining the characteristics and possibilities of online teaching, model systems, distance learning and online courses for students and teachers have been developed and tested. ESP was experimentally investigating the possibilities of virtual learning, respectively for a study environment VLE (Virtual Learning Environment) available via the Internet for collaborative learning activities among secondary school students in the implementation of educational projects. An electronic VLE environment for implementing online teaching of school children via the Internet was also verified through the preparation and implementation of e-learning model eDIfALL (Education via the Internet for ALL), with emphasis placed on teaching based on a dialogue with the student teacher. The research project EDI (Education via Internet for Long Term Hospitalised Children) has experimentally verified the use of VLEs for distance education of primary school pupils through the Internet in support of teaching long-term hospitalised children. This subproject idea was about the role of virtual teachers, who involved also students of the faculty, who were thus given the opportunity to test the methodology of design, development and implementation of online courses. The research plan contributed not only to obtaining theoretical foundations of e-learning, but also to the development of practical skills and the pedagogical and technological competence of student teachers to apply e-learning in school practice.
- School libraries (School Library as MultiMedia Center) was a project to connect school libraries and ICT (Brdička, 2005).

At secondary level, ICT is part of the curriculum as a separate subject and also as a tool for tasks in other subjects. Media education in the Czech Republic must be present at the secondary level. It is a compulsory, interdisciplinary, cross-curricular subject. The authority to decide how to treat media education in class lies with the schools. In the FEP BE (2007), Media Education has a guaranteed place. It claims that media education is a necessary prerequisite for media communication and for media related work.

Czech pupils score well in digital literacy as shown by the 2013 International Computer and Information Literacy Study (IEA) (Education and Training – Monitor, 2015).

¹³ See http://www.webquest.cz.

5.1.4 The role of public libraries in reading promotion

Public libraries are an important agent in reading promotion.

Research (Quick et al. 2013) estimates that there are 5,408 public libraries in the Czech Republic, which equates to 5.1 libraries per 10,000 population, significantly higher than the average of 1.3 libraries per 10,000 population across the EU. Public library users in the Czech Republic were more likely than the EU average to be women and to have left full time education aged 19 or under. They were also more likely to live in a city or a large town.

Apart from the core service of 'books to read or borrow', users in the Czech Republic were much less likely than users across the EU to rate services as 4 or 5 on the scale. The core service of 'books to read or borrow' was considered the most important, rated as important by 92% of users in the Czech Republic (and 94% across the EU).

According to the Strategy of Library Development in the Czech Republic in 2004 - 2010 (government resolution No. 679 dated 7 July 2004), the mission of public libraries is to offer equal access to services to all people, including those coming from different backgrounds and those who require more attention than "regular" library patrons (Hořavová & Richterová, 2005).

It was reported to be difficult for libraries to encourage Roma children to use ICT for anything other than entertainment, although one library's project that involved working with schools to encourage children to use computers for learning had included Roma children (Quick et al. 2013).

The survey's results show that working with books on or about national minorities, theme-specific programmes or direct cooperation with minorities are activities that are still far from the ordinary in public libraries. Libraries lack adequate tools and cooperation with local minority. It is rather distressing that many libraries do not see improving services for minorities and foreigners as an important part of their function (Hořavová & Richterová, 2005).

On the other hand, results show that some libraries have taken a very proactive and creative approach, organising programmes about different cultures, procuring books for minorities or creating multilingual library websites. For the most part, libraries have a very good idea about where to get information about suitable upcoming books (Hořavová & Richterová, 2005).

SKIP (Association of Library and Information Professionals of the Czech Republic) is the profession's largest association in the Czech Republic: it has about 1,400 individual and institutional members and 11 regional organisations. SKIP e.g. organises social events for libraries and information professionals, promotes and supports reading / readership, book culture and libraries etc. – A Night with Andersen; A Week of Reading (an event promoting reading), Biblioweb (a competition for the best library pages); Library Workshop (meetings focusing on the current problems of public libraries); Children's Book Day; Library Week and other events in regions of the Czech Republic.

Since 1996, libraries have been organising an annual "Library Week" at the beginning of October. During the week, libraries nationwide try to attract their regular readers, as well as those who have not yet visited the libraries. Hundreds of libraries host meetings with writers and politicians, and organise lectures, courses, exhibitions, surveys and competitions. New readers can get a discount on registration fees. Discounts are also given on Internet access, and in some libraries, amnesty is offered on late returns. Library Week is also a time for the opening of new and reconstructed libraries¹⁴. The

¹⁴ See http://www.readingworldwide.com/index.php?id=44531.

Great October Group Reading is an event that is held on the first day of the Library Week. Both library users and the general public are invited to libraries to read a passage and introduce their favourite author or book. Authors, athletes, politicians and other celebrity figures also take part in the readings¹⁵.

"Library the Friend" (Kamarádka knihovna)¹⁶ is a national competition for the best children's library of the Czech Republic. It was established in 2007. It takes place every two years. The children produce reports – as at school – for the libraries at their towns and communities (with marks for library environment, librarian, collection quality, number and quality of ICT equipment for children in library, and for overall assessment). The competition jury assesses libraries based on criteria that include the extent of opening hours for children, ratio of children in the community registered as library users, number of loans per child in the community, number of events for children, number of public Internet working stations for children in the library, library collection increase, the library's membership in the SKIP Club of Children's Libraries, quality of web pages for children, library environment, partnership in the community¹⁷.

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

Family literacy programs

The non-profit organisation "Every Czech Reads to Kids" is to build strong family ties through reading together. "The Week of Reading to Children" in the Czech Republic is organised every June. Its goal is to motivate children, youth and adults to continually read and to develop a love of literature through a selection of good and valuable literature. Schools, kindergartens, libraries, parents, cafes, municipalities, and other organisations are preparing dozens of cultural, artistic and literary events to support the spread of the importance of reading to children¹⁸.

SKIP announced a competition to support reading. "Reader of the Year" is an award that was held in 2011. Every year is the new theme of the award announced: e.g. "Family of Readers" in 2014 and "Fathers of Readers" in 2015¹⁹.

Programmes for introducing parents and children to libraries and bookshops

There are many projects, mainly initiated by public libraries and carried out by librarians to coax preschool and older children and their parents into libraries – for example reading aloud, dramatisation of fairy tales, playing with books (speaking, reading and drawing), series of lectures on children's literature, need for reading etc. The Prague Municipal Library and the other municipal libraries offer Czech fairy tales for downloading in various formats, colouring books and games for children to download as PDF or bibliographies for parents and teachers (who what to read with

¹⁵ See http://www.readingworldwide.com/index.php?id=44532.

¹⁶ See http://kamaradkaknihovna.cz/.

¹⁷ See http://www.readingworldwide.com/index.php?id=44599.

¹⁸ See http://celeceskoctedetem.cz/en/about/every-czech-reads-to-kids; http://www.czech.cz/cz/Zivot-a-prace/Getting-parents-and-children-off-to-a-strong-start.

¹⁹ See http://www.skipcr.cz/akce-a-projekty/akce-skip/ctenar-roku.

children) (everything is online and free). They organise art workshops for children and parents, lectures, theatrical performances and many other things²⁰.

Children's Book Day is a day which is celebrated all around the world (including in the Czech Republic) to inspire a love of reading and to call attention to the quality of children's book²¹.

"Reading marathon" – literature buffs are reading continuously for several hours in Prague and other cities in the Czech Republic.

"Where the World Ends" is a project that is focused on the development and support of child reading through new ways of working with the target group at the children's departments of public libraries. There are activities such as literary and creative arts contests, courses on creative writing, various drama club activities, and the making of marionettes²².

"I'm a reader – The Book for Abecedarians" is a periodic project for the promotion of reading announced by SKIP. Schools in cooperation with public libraries enter this competition, with the pupils attending the first classes of primary schools. The library prepares at least one excursion and other rich programmes (joint reading, exhibitions, writer-reader meetings etc.). The award for children after a successful completion of programme is a book²³. It is organised by SKIP²⁴.

Bookshops have initiated some programmes to attract children and their parents into bookshops – for example authors' reading.

Initiatives to foster reading engagement among children and adolescents

There are projects and organisations that are focused on supporting parents and children in understanding the literacy development of their children and pupils: Non-profit organisation "IBBY" (The International Board on Books for Young People) represents an international network of people from all over the world who are committed to bringing books and children together. The Czech Section of IBBY and the Commission for Children's Book SČKN has been creating an annual project in which new Czech books for children and young people are recommended. The catalogue will serve to guide booksellers, libraries, schools, parents and the wider public²⁵.

The activities of the Czech Section of IBBY are undertaken completely by volunteers, without an office or any major resources. This means that the current activities are rather limited. Nevertheless, successful projects of national importance are aimed at reading and the support of quality publishing for children and young people: *Zlata stuha* (Golden Ribbon), a national competition for writers of original books for children and young people, annually since 1992; *SUK Cteme vsichni* (Let's read), started as a survey of libraries and their children's book sections. Its purpose was to find out what kind of books young readers are really interested in. Another main activity is *Magnesia Litera*, the Czech Section of IBBY is a member of this civic society, allocating awards for the best books annually.

²⁰ For more information see https://www.mlp.cz/en/services/.

²¹ See http://www.skipcr.cz/akce-a-projekty/akce-skip/den-pro-detskou-knihu.

²² See: http://www.readingworldwide.com/index.php?id=44539.

²³ See https://napleblog.wordpress.com/2011/11/29/czech-republic-i%C2%B4m-a-reader-project/.

²⁴ For more information see: http://www.skipcr.cz/akce-a-projekty/akce-skip/projekt-uz-jsem-ctenar-knizka-proprvnacka.

²⁵ For more information visit http://www.ibby.org/416.0.html?&L=2%2F\\.

Czech libraries, schools and classes are integrated in "Night with Andersen". In 2015, 610 Czech libraries, 538 Czech schools and other 83 institutions were registered in the "Night with Andersen". Teachers and educators prepare an interesting programme for children²⁶.

"Growing with a book" is a campaign that was founded in 2005 to support reading in the Czech Republic. It was started by the Union of Czech publishers, bookstores and the company called World of Books to inspire young learners, pupils and students and educate them through reading competitions, discussions, meetings, exhibitions, conferences, author readings, workshops or web pages²⁷. To support the project, many professionals and media subjects are cooperating. The main objectives of the campaign: to raise awareness of low literacy levels in your country or region; to raise awareness of the benefits of improving literacy; to raise awareness of literacy services; to make people with literacy difficulties more aware of education programmes to help them; to increase the involvement of intermediaries; to increase the government's involvement; to increase funding for literacy services; to recruit volunteers to help people with literacy difficulties. The following activities were used to raise awareness of the project: TV or Radio programmes/spots on literature and reading; competitions and other programmes in public; programmes with famous celebrities talking about themselves and their attitude to reading and books; an interactive internet portal; cooperation with kindergartens and schools, child psychologists and advisors; cooperation with families; methodology seminars for teachers, parents and the public; co-operation with reading clubs led by publishers; involvement of libraries (local, regional or city) and web pages for readers; active participation of sponsors and partners; international cooperation with Visegrad countries and the EU; campaign; leaflets and billboards with the logo of the project around the country with entertaining content; broad media coverage; display in libraries; a common internet portal; presentation in the biggest book fair in Prague and other events around the country. Target groups are children 0-11 years, young people 12-18 years and adults 19-65 years²⁸.

The foundation "Reading helps" (Čtení pomáhá) raises literacy awareness, and gives 10 million Czech crowns to charity purposes. The purpose of the project is to motivate children to achieve three goals at the same time – to read more, to evaluate the books and to engage in charity. The children select one or more of the books listed, and they then answer four questions on the website to demonstrate that they really read the book. For each book read the children receive a virtual amount of CZK 50.-(approx. € 2) and select a charitable project from a list to which they want to contribute²⁹.

The project of "Listování" is a series of scenic readings which turn unique books into a multi-sense experience. The programme is meant for preschool children to adolescents³⁰.

The ESF project Development of reading literacy competencies in the inclusive education was implemented in 2010-2012 and its aim was to increase the level of literacy, according to current scientific knowledge. Further, it aimed to improve the professional development of teachers, innovations in methodology, diagnostic and didactic materials, as well as to create a supportive environment for further teacher training, enabling professional and personal meetings for exchange of experience and good practice. The project was focused on several target groups. It was divided into nine key activities: pupils and teachers of schools outside of Prague, 20 pilot schools (about 3000)

²⁶ For more information see http://www.nocsandersenem.cz/english.html.

²⁷ Information is available at http://www.rostemesknihou.cz.

²⁸ For more information, see http://www.rostemesknihou.cz/cz/o-kampani/aktuality/.

²⁹ For more information visit http://www.readinghelps.com/.

 $^{^{\}rm 30}$ For more information see http://www.listovani.cz/.

pupils), potentially all primary schools pupils - "Read and create" activity, pilot school teachers, Czech School Inspectorate staff. Its key activities were: analysis of selected SEP (school curricula) in terms of reading competence, specifying recommendations for upgrading the SEP; education of teachers via lifelong learning courses to support the development of literacy; evaluation tools for assessment of reading competence - for pupils, teachers and parents; national project "Read and Create" - a competition for pupils with activities for the development of reading; publication "I read and I know" three workbooks for pupils; a national meeting of teachers and students involved in the project, publication of examples of good practice; an international conference for reading competence development, a monograph from the conference; a web portal for development of reading competence support³¹; cooperation of primary and lower secondary schools in the process of reading competence development (meeting, joint reading tasks, story dramatisations, etc.). The portfolios and workbooks for primary education pupils include tasks for mapping the various levels of literacy. Material is accompanied by didactic materials for teachers and a questionnaire for parents. Simultaneously there exist an entry handbook that acquaints the reader with aims and instruments of the programme, and a handbook for Czech School Inspectorate workers, who deal with the evaluation of elementary schools' fulfilment of the reading literacy area within their inspection activities. Produced material is intended for all primary education pupils, and it should serve the promotion of inclusive education. Consequently, it can be used by pupils with reading difficulties, such as pupils with specific learning disabilities, weak readers, pupils from minority groups, and pupils from socially disadvantaged groups.

"Gate To Education – school reading clubs" are promoting equal opportunities for children and pupils with special educational needs. The three-year project was funded by the European Social Fund (ESF) as well as the Czech state budget, and was aimed at the development of emergent literacy at preschool, and literacy in primary schools. The Reading Clubs (21 clubs in the Czech Republic) were created within the project as a leisure activity in 13 primary schools all over the Czech Republic. Children were offered an opportunity to read books of their own choice, talk about books, and take books home for free (so called three pillars of club work). Every week children, parents, teachers, librarians and volunteers meet in clubrooms, where they read together and talk about books. The programme is optional and offers courses for preschools, workshops, and provides literacy materials and guides. The reading clubs are free and open to everyone. At www.ctenarskekluby.cz you can find the guide how to start and run a new club in your school or anywhere in your city or neighbourhood. 300 children were involved in the project. The created system of the school reading clubs is possible to implement in future on a much broader scale. The project was mainly targeted at children from different cultural backgrounds and/or a socially disadvantaged environment, and children with special learning needs. The activities were aimed at stimulating the development of reading literacy in order to help compensate for the lack of stimulating environment in the families, i.e. the lack of experience with books and reading. Project objectives were: organising school reading clubs - collaboration with primary schools and libraries; support of leisure activities - regular meetings of the school clubs leaders with the children from the target groups; activities aimed at promoting and development of reading literacy, support of a positive approach, encouragement of positive attitudes towards reading, development and improvement of reading competences; establishment of the school reading clubs tool kit³².

³¹ See http://www.cteme.eu.

³² Other information available at http://www.novaskolaops.cz/projekty/ or http://ctenarskekluby.cz/.

5.2 Improving the quality of teaching

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

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

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

5.2.1 Quality of preschool

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

The EU High Level Group of Experts on Literacy stated:

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

While there is no international or Europe-wide agreed concept of ECEC quality, there is agreement that quality is a complex concept and has different dimensions which are interrelated. In this report we focus on *structural quality* which refers to characteristics of the whole system, e.g. the financing of preprimary 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.

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 the Czech Republic is 0.5 %. 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).

Ratio of children to teachers in pre-primary school

According to Education at a Glance (2014), the student/teacher ratio in pre-primary schools for children at the age of four in the Czech Republic is 13.9%. For the other European countries OECD

(2014 p.324) provides information about the student/teacher ratio in pre-primary schools (for an overview of European countries see table D2 in Appendix B).

Percentage of males among preschool teachers

According to Pordata (2014), 0.4% of the pre-primary teachers in the Czech Republic are males. The range is from 0.2% in Bulgaria and Hungary to 17.7% in France (for an overview of European countries see table D3 in Appendix B).

Challenges: The Czech Republic needs to improve the quality of staff, and to attract more staff, especially males.

Preschool teachers' qualifications

The minimum required level to become a qualified teacher is Upper Secondary level (ISCED 3). Length of training 4 years (European Commission/ EACEA/Eurydice/Eurostat 2014, p. 101).

In Czech kindergartens, children are taught by teachers of nursery schools, who mainly have completed secondary education with a school-leaving examination specialised in preschool pedagogy (graduates of secondary pedagogical schools, ISCED 3). They can also gain education at higher vocational schools or higher education institutions in a bachelor's or master's study programme. The education must always be specialised in preschool pedagogy.

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 from 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).

The Framework Educational Program for Pre-school Education (FEP EP) seeks to develop the basis of key competences for children since babyhood so that the prerequisites for life-long learning education would be made. These competences are phrased in terms of learning competencies, problem solving competencies, communication skills, social and personal skills and active participation in activities.

The FEP EP contains:

- a description of features of pre-primary education, methods and forms of work and a
 description of the general objectives of pre-primary education and key competencies to be
 developed;
- a description of the general content of pre-primary education in five areas;
- the conditions of pre-primary education (material conditions, daily regime, psychosocial conditions, management of a nursery school, educational and other staff and parent participation);
- guidelines for educating children with special educational needs and exceptionally gifted children;

- requirements for the educational assessment of children and self-evaluation of the nursery school;
- principles and recommendations for designing a SEP;
- duties of a pre-primary teacher.

In FEP EP, the educational content is divided into five educational areas:

- biological (The child and his/her body),
- psychological (The child and his/her psyche: Language and speech, Cognitive abilities and functions, imagination and fantasy, thought operations and Self-concept, emotions and will),
- interpersonal (The child and the others),
- socio-cultural (The child and society) and
- environmental (The child and the world).

Fostering the development of emergent literacy skills is an important function of pre-school institutions, providing a basis for formal literacy instruction in primary school. We consider the following to be key components: oral language development, including vocabulary learning and grammar, familiarisation with the language of books (e.g. through hearing stories read and told), being engaged and motivated in literacy-related activities, experiencing a literacy-rich environment, developing concepts of print, and language awareness.

In the Czech Republic the individual education lines that the Framework Education Programme for Preprimary Education (2004) sets for early education aim at: a) the development of children's communicative and language skills (receptive and productive), b) the enhancement of their interest in the written form of language, and c) the adoption of some empiric knowledge and skills preceding reading and writing (FEP PE, 2004, p. 17).

In present teaching of reading and writing is linked directly to the pre-school language development of the child. Before leaving kindergarten the children should know their whole name (first name and surname), their address, all the colours, which is right/left, forward/backward, up/down, their family members, names of domestic animals and their young, names of the days of the week and months, parts of the human body; they should be able to count up to 10, they should be able to hold their pencil correctly, they should be able to connect dots into a solid line. At the age of 5 the children should be able to draw a human figure, a house, basic geometrical shapes (circle, square, oblong, triangle), and, only occasionally, they are taught to recognise the letters in their own first names. In addition, kindergarten children are taught to sing folk songs and memorise nursery rhymes and short poems, they are read or narrated fairy tales or interesting stories (usually to be continued), and they play. (Kropáčková, 2007, 2012).

Maintaining this developmental continuity from the pre-school period to the school period is accentuated. Most Czech children attend the kindergarten. So far, kindergarten attendance has always been voluntary. However, at present, the CR Parliament are discussing a bill according to which kindergarten attendance may become compulsory in the last year before the compulsory school attendance, i.e. at the age of 5, because it has been proved that children going to kindergarten are usually mentally ahead of their peers when they start their school at the age of 6 (Source: MEYS). Some recent statistics (ČSÚ 2013/2014):

- 87.4% of 3-4-year-old children attend the kindergarten;
- 90.4% of 5-year-old children out of the whole 5-year-old cohort go to the kindergarten.

At registration for compulsory formal school attendance, children are asked questions based on the above mentioned activities. The aim is to assess whether the child is mature enough for starting school attendance. If not, their going to school is postponed for 1 year, which according to the recent statistics happens in 22% of cases (very high). The most common causes of school attendance postponement are: logopaedic faults and speech deficiencies – 31.9%; attention and concentration defects – 31.3%; underdeveloped graph-motor activity – 14.6% subnormal speech development – 11.6%. The most frequent problems of first-graders from the point of view of the primary school are: lack of independence; lack of concentration; disrespect for rules; insufficient level of graph-motor activity; insufficient level of speech production; problems in communication; faulty grasp of the pencil; specific learning problems.

Challenges: Improving the quality of preschool education could include: providing feedback to teachers on the quality of their work and development of literacy skills; more male teachers in kindergartens; parental participation in preschool education, which can also improve the quality of preschool education and literacy as well.

Teaching reading and writing

Actual teaching of reading and writing in accordance with the established tradition starts at the age of 6 in the first year of compulsory school attendance.

In the Czech Republic, there are two most frequently used methods of teaching reading. The analytical-synthetic method, which is a fundamental principle of syllabication and the genetic method which is based on composing phonemes/letters into words (Wildová & Vykoukalová, 2014). Both methods have different development and may cause different problems for pupils in reading especially in the early stage of development of literacy. Eventually the quality of the reading will even out (Kucharská et al, 2015).

The development of initial writing literacy belonged previously to one of the most difficult areas of education in primary school. In the past period, pupils' writing competencies have been defined with appreciation of their educational needs and abilities. The Czech Republic has changed towards giving preference to active and creative aspects of instruction: emphasis on legible writing as opposed to neat and well-organised writing (which used to be the aim of the "traditional" writing) has become the aim of teaching. The debate started over letter shapes of the handwriting alphabet in terms of their difficulty and legibility. In 2009, R. Lancová, a graphic designer, introduced a new unlinked vertical script – Comenia Script³³, which is very similar to the shapes used in Western Europe. Teachers became interested in teaching their first graders this particular script very quickly. "Based on requirements of the MYES a pilot implementation of Comenia Script has been carried out in the teaching of writing in the first grader" (Wildová, 2014, 817). The experiment also shows that a number of experimental group teachers noticed that pupils have improved reading skills while using Comenia Script Writing, which is definitely worth further investigation (Wildová, 2014, p. 821).

³³ See http://www.lencova.eu/cs/gal_ukazky_cs.

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

The Czech Republic does not have a special curriculum on reading (Mullis et al. 2012, Vol.1, exhibit 5, p. 31). Among the European countries participating in PIRLS 2011, only six countries had a national curriculum specifically for reading, namely France, Hungary, the Netherlands, Northern Ireland, the Russian Federation, and Sweden. In all other countries reading usually is taught as part of the national language curriculum that also includes writing and other communication skills (Mullis et al. 2012, Vol.1, exhibit 5, p. 30, 31).

In the Czech Republic, the Language and Language Communication educational area occupies a pivotal position in the education process. The content of the Czech Language and Literature field is complex but, for the sake of clarity, has been separated into three parts: Communication and Composition, Language, and Literature. However, the educational content of these individual parts is interconnected through instruction (Mullis et al. 2012, Vol.1, p. 173).

The Framework Educational Programme for Elementary Education (established in 2007) specifies concrete objectives, form, length and basic curricular content of education. According to Kramplová (2012), expected learning outcomes for the end of Grade 3 (indicative) and Grade 5 (binding) are "... activity-based, practical in focus, applicable in everyday life and verifiable. They specify the expected capabilities of utilizing the acquired subject matter in practical situations and everyday life" (p. 172). Kramplová (2012) also notes that, while a new concept of reading is being promoted, specifically a change from technical reading towards functional reading, a traditional approach to reading still remains in many Czech schools.

Reading for pleasure

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. 2012, Vol.1, exhibit 9, p. 36). According these data, reading for pleasure was given a little or no emphasis in the Czech Republic. This fact can be the reason why Czech student also do not reach a high score on reading performance in PISA (OECD, 2010). The survey in PISA 2012 shows the significant downgrade of the relationship of Czech pupils to the school (Palečková & Tomášek, 2013). More than half of the Czech 15-year-old pupils perceive school as a place where they are often bored. A third of all Czech pupils said that they would prefer not to go to school at all (OECD, 2013).

Challenges: The Czech Republic needs to build a stronger focus on reading for pleasure (free choice of a book topic, more spare time activities, usage of efficacious opinion makers, good practice, wide supply etc.) and on motivating pupils to read.

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

From the perspective of language genealogy, Czech is a West Slavic language (like Slovak or Polish).

The Czech orthographic system is diacritic. The Czech orthography is considered the model for many other Slavic languages using the Latin alphabet. The háček / $\check{}$ / is added to standard Latin letters for expressing sounds which are foreign to the Latin language. The acute accent is used for long vowels. There are two ways in Czech to write long [u:]: \acute{u} or \mathring{u} . Czech has orthography with a high graphemeto-phoneme and phoneme-to-grapheme correspondence (apart from \check{e} , \mathring{u} , y, \acute{y}). Czech orthography is primarily phonemic (an individual grapheme usually correspondents to an individual phoneme). With a highly phonemic orthography, it may be described as having regular spelling.

The Czech alphabet consists of 42 letters (including the digraph ch, which is considered a single letter in Czech): a á b c č d ď e é ě f g h ch i í j k l m n ň o ó p q r ř s š t ť u ú ů v w x y ý z ž

In terms of phonology, Czech has a big variety and frequency of complex onsets relative to most other languages - 258 onset types (with only 32 in English). In addition, in normal speech there exists a set of prepositions of 1 consonant that combine with word onsets (as "clitics"; that is, unstressed words that are incapable of standing on their own and attach to a stressed word to form a single phonological unit). It is speculated that the increase of onset complexity may sensitise children to the separability of speech sounds. Studies comparing Czech, English-Canadian and Austrian-German children demonstrate that language-specific characteristics affect phonemic awareness in preliterate children. In comparison to Czech children, for example, English- and German-speaking children have lower levels of phonemic awareness of onsets. Importantly, children from various linguistic and cultural backgrounds have shown moderate to good levels of phoneme awareness before knowing how to read and write (OECD, 2005). Although phonological awareness is a critical precursor of reading development, especially in alphabetic languages, a study on the phoneme awareness skills of Czech and English children with dyslexia found that children with dyslexia in grades 3 to 7 experienced significant and persistent phoneme awareness difficulties regardless of orthographic consistency. One of the presenters demonstrated how, with slower dysfluent German dyslexic children, there is not (as with English dyslexics) a purely phonological deficit, but rather that it is accompanied and predicted by a deficiency in the rapid, automatised naming of visual stimuli (OECD, 2005).

From the point of language typology, Czech is a flectional language (like Latin, for example), which means that language morphology is rather complex: there are 7 cases in both singular and plural noun declination patterns and 6 forms in verbal conjugation (3 in the singular and 3 in the plural). In addition, the language uses the illogical grammar gender system (table=masculine, chair=feminine, window=neuter).

Eurydice identifies the Czech Republic as a country in which phonics instruction is continued throughout the entire primary period (European Commission/EACEA/Eurydice 2011, Figure 1.2, p. 56). Linking sounds to letters, naming and sounding the letters of the alphabet; drawing the forms of letters, and combining letters, understanding that same sound can have a different spelling are taught during primary education in the Czech Republic. Kramplová (2012) notes the strong emphasis given to

reading aloud throughout the primary grades in the Czech Republic. This is consistent with a continuing emphasis on phonics knowledge and reading fluency.

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 may improve reading comprehension among readers with different levels of ability. These strategies include:

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

According to the analysis of steering documents by Eurydice (2011, p. 60, figure 1.4) the following reading strategies are mentioned in literacy curricula in the Czech Republic: Drawing inferences, Summarising text, Making connections between parts of a text, Constructing visual representations. Not mentioned are: Pupils reflect on own reading process. This last strategy is rarely mentioned in literacy curricula in European countries (Eurydice 2011), a remarkable result because self-monitoring of comprehension or reflecting on one's own reading process is a very important aspect in reading comprehension. The Framework Educational Programme for Elementary Education outlines in detail the learning outcomes to be achieved by the end of Grades 3 and 5.The outcomes for the end of Grade 3 include what might be described as basic reading skills, including:

- Fluently read and comprehend texts of appropriate length and difficulty
- Understand written and oral instruction of reasonable difficulty
- Read literacy texts suitable to the given age, and recite them by heart, with proper phrasing and pace
- Work creatively with a literacy text, following teacher instructions and according to individual abilities
- The outcomes for the end of Grade 5 include a broader range of skills, including those relating to comprehension:
- Read texts of appropriate difficulty with comprehension, both silently and aloud.
- Recognize main ideas and details in age-appropriate texts, and take notes on main ideas
- Assess the completeness or incompleteness of simple texts
- Express and record personal impressions from reading.

Kramplová (2012) also notes an emphasis on factual reading, experiential reading and creative activities with literacy texts throughout the primary grades, and notes that functional reading (active work with texts, reading for understanding, and critical thinking) are emphasised in all subject areas, in line with the goals of the Framework Educational Programme for Elementary Education.

There are no detailed standards at each grade (school years) which form the basis of assessments allowing early identification of reading difficulties in the Czech Republic (ELINET PIRLS 2011 Appendix, Table I5).

In 2011, pupils in the Czech Republic spent fewer instructional hours in schools (782 hours per year) compared with students on average across EU-24 countries (850 hours), though allocation of time to teaching the language of the PIRLS test in the Czech Republic (283 hours) is greater than the average across EU-24 countries (241 hours). The time to be allocated to language/reading is not specified in the Czech Republic curriculum. The average number of hours allocated to teaching reading each year in the Czech Republic as part of language instruction (72 hours) is also above the EU-24 average (68), though the EU average is itself low, relative to, for example, the United States and New Zealand (both 131 hours). Teachers in the Czech Republic report allocating about the same amount of time to teaching reading across the curriculum and in reading classes as on average across EU countries (Mullis et al., 2012, p. 214, Exhibit 8.4).

Literacy curricula in secondary schools

As was mentioned in the Executive Summary, basic schools are divided into two levels in the Czech Republic: ISCED 1 and ISCED 2. After the obligatory elementary stage, pupils continue on to higher types of schools (ISCED 2). The higher type varies in number of years, in type of qualification and in possibility of university studies.

The second stage of basic schools covers sixth to ninth grades and subjects are taught by teachers specialising in two subjects, classes are coeducational. The document for education in basic school as well as in the lower stage of multi-year secondary general school is the Framework Educational Programme for Basic Education (FEP BE). On the basis of the FEP BE, schools have to prepare their own school education programmes (SEPs BE). FEP BE defines nine main educational areas consisting of one or more educational fields, cross-curricular topics, complementary educational fields and key competences of a school leaver. It specifies the curriculum of the fields, i.e. the recommended content and expected outcomes at the end of every period (the second stage is not divided into periods).

The educational areas are: 1) Language and Language Communication; 2) Mathematics and Its Applications; 3) ICT; 4) People and Their World; 5) People and Society; 6) People and Nature; 7) Art and Culture; 8) People and Their Health; 9) People and the World of Work. The cross-curricular topics comprise: 1) Personal and Social Education; 2) Education for Democratic Citizenship; 3) Education towards thinking in the European and Global context; 4) Multicultural Education; 5) Environmental Education; 6) Media Studies. The SEP BE divides the curriculum into particular years and into subjects, and specifies the syllabus. One educational field can form part of one or more subjects or the educational content of different fields can be combined into an integrated subject. Teachers can choose their own teaching methods, within the scope of the proposals or recommendations articulated in the educational programme, and according to the general policy of the school.

The educational area "Language and Language Communication" occupies a pivotal position in the educational process. Language instruction provides the pupil with such knowledge and skills that make it possible for him/her to perceive various kinds of messages, understand them, express himself/herself appropriately as well as utilise the results of his/her learning effectively. The educational area Language and Language Communication contains the following educational fields: Czech Language and Literature, Foreign Language and Second Foreign Language. The educational content of the educational field Czech Language and Literature is complex, but for the sake of clarity has been separated into three parts: Communication and Composition, Language, and Literature. In Communication and Composition, the pupil learns to perceive and understand various language messages, to read with comprehension, to write in a cultivated manner, to speak and to make

decisions on the basis of various texts related to diverse situations which he/she read or listened to, to analyse the texts and to evaluate their content critically. At higher forms, the pupil learns to assess the formal aspect of the text and its structure. In Language, the pupil acquires the knowledge and skills necessary to master standard Czech and learns to distinguish between its other forms. In developing the necessary knowledge and skills, the pupils' general intellectual skills are also applied and augmented, including the skill of comparing various phenomena, identifying similarities and differences, classifying them according to certain aspects and arriving at a generalisation. From the beginning of instruction, Czech thus becomes not only an instrument for obtaining most information, but also a subject of learning. In Literature, the pupil familiarises himself/herself by means of reading with the basic types of literature and learns to perceive their specific features, express the artistic intention of the author and formulate his/her own opinions on the work which he/she read. The pupil also learns to distinguish fiction from reality. Pupils develop basic reading habits as well as the capacity for creative reception, reception, interpretation and production of a literary text. Pupils arrive at such knowledge and experience that may positively influence their attitudes and value orientations and enrich their spiritual life. Verbal as well as non-verbal communication can also be developed by means of Drama, which is included in the FEP EE as a complementary educational field (Source: FEP BE).

Expected outcomes, in *Literature*: The pupil shall: retell coherently a text which he/she has read; describe in simple words the structure and language of a literary work and interpret its meaning in his/her own words; identify the basic features of a significant individual style; formulate both orally and in writing his/her impressions from reading and from having attended a theatre or film performance and his/her abilities and acquired knowledge of the basics of literary theory; differentiate between literature and pulp fiction; support his/her opinions with arguments; recognise the basic literary styles and genres, compare them and their function, list their major representatives; list the basic literary styles and their significant representatives in Czech and world literature; compare various literary, dramatic and film treatments of the same idea; search for information in various types of catalogues, in a library and other information resources³⁴.

Some schools provide instruction in some or all subjects in a foreign language – CLIL (Content and Language Integrated Learning; so-called bilingual secondary general schools). CLIL belongs to recent educational trends. Its beginnings in the Czech Republic are challenging due to the high percentage of foreign language teachers without full qualification and rather low foreign language communicative competences of subject teachers. The key to success is through teacher education at both the preservice and in-service level (Hanušová, 2010; Novotná, Hadj-Moussová & Hofmannová, 2001; Novotná & Hofmanová, 2004)

Some information about upper secondary education are added. Several types of upper secondary education exist in the Czech Republic: secondary general school (gymnázium; upper secondary general education; ISCED 3A), lyceum (upper secondary education with several specialisations: pedagogical, economical, technical, etc.; ISCED 3A), secondary technical school (střední odborná škola, upper secondary technical education; ISCED 3A), conservatorire (konzervatoř; art education, ISCED 3A), secondary vocational school (střední odborné učitliště, upper secondary vocational education, very practically oriented; ISCED 3C), secondary vocational school or practical school (upper secondary general and vocational education acquired through complementation of an educational programme lasting 1-2 years, ISCED 2C/3C) (Source: MEYS)

³⁴ For more information about FEP BE visit: http://www.vuppraha.cz/wp-content/uploads/2009/12/RVP_ZV_EN final.pdf

The school leaving examination (maturitní zkouška) consists of a common part (defined by the state) and a profile part (defined by the school). The common part consists of Czech language, a foreign language and an optional subject. The final examination (závěrečná zkouška) is characteristic for three-year or two-year courses (ISCED 3C) or shortened study (ISCED 4C), the part of the examination is practical. Leavers are awarded the final examination certificate and the apprenticeship certificate (výuční list) which attests to their skills in a given field. A central (national) section is also being prepared for this exam (Source: MEYS).

Reading literacy (or its components) does not figure as a major goal of FEP for Primary Education, FEP for Basic Education and FEP for Secondary Education. FEPs do not require systematic development of pupils, FEP do not integrate reading literacy in general aims of education, FEP do not explicitly specify reading literacy in key components of Czech Educational system. Only implicit references to development of reading literacy is added. FEPs do not systematically affect Czech pupils, and therefore can not bring improvements in reading across the board. The development of literacy is significantly influenced by the personality of the teacher (Laufková & Novotná, 2014).

Challenges: The Czech Republic needs to build systematically support for the development of reading literacy in national documents, especially in FEPs or through development of a National Strategy for Development of Reading Literacy, which does not currently exist.

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 Germany or other European countries. 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 offer some data for primary schools, albeit based on self-reports by teachers (PIRLS) which might not be valid and may be biased by social desirability.

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

- Type 1: Teacher-directed instruction in the whole class without individual support
- Type 2: 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 & Carstensen 2007). Also, the analysis of PIRLS 2011 teacher self-reports revealed differences between the approaches to reading instruction in European countries (Mullis et al. 2012, Tarelli et al. 2012).

No comparable data for the Czech Republic in PIRLS 2006; no comparable data are available for secondary schools.

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

In 2011, pupils in the Czech Republic spent fewer instructional hours in schools (782 hours per year) compared with students on average across EU-24 countries (850 hours), though allocation of time to teaching the language of the PIRLS test in the Czech Republic (283 hours) is greater than the average across EU-24 countries (241 hours). The time to be allocated to language/reading is not specified the Czech Republic curriculum. The average number of hours allocated to teaching reading each year in the Czech Republic a as part of language instruction (72 hours) is also above the EU-24 average (68), though the EU average is itself low relative to, for example, the United States and New Zealand (both 131 hours). Teachers in the Czech Republic report allocating about the same amount of time to teaching reading across the curriculum and in reading classes (146 hours) as on average across EU countries (147 hours).

Source: PIRLS 2011 (Mullis et al. 2012, p. 214, Exhibit 8.4). EU averages from PIRLS 2011 database (see ELINET PIRLS 2011 Appendix, Tables I3).

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

In PIRLS teachers were asked which activities they use to develop students' reading comprehension skills. These are the figures based on the report of reading teachers in PIRLS 2011: The following are the percentages of students in Grade 4 in the Czech Republic and on average across the EU-24 who engage in specified comprehension activities 'every day or almost every day':

- Locate information within the text: 75.0% (EU-24 = 65.5%)
- Identify main ideas of what they have read: 52.2% (EU-24 = 55.5%)
- Explain or support their understanding of what they have read: 74.0% (EU-24 = 61.6%)
- Compare what they have read with experiences they have had: 28.2% (EU-24 = 34.7%)
- Compare what they have read with other things they have read: 4.5% (EU-24 = (22.4%))
- Make predictions about what will happen next in the text: 5.9% (EU-24 = 22.4%)
- Make generalisations and inferences: 17.8% (EU-24 = 36.5%)
- Describe the style or structure of the text: 2.3% (EU-24 = 22.7%)
- Determine the author's perspective or intention: 4.7% (EU-24 = 21.0%)

While similar proportions of students in the Czech Republic as on average across the EU-24 are engaged in activities such as locating information in a text and identifying main ideas, students in the Czech Republic have lower levels of involvement on a daily basis with activities such as describing the style or structure of a text, or determining the author's perspective or intention. Higher-level strategies tended to be taught less frequently in the Czech Republic than on average across the EU-24.

PISA results show that students perform better in reading, if they understand and use certain strategies for learning. Having a deep understanding of reading strategies, and using those strategies, are even stronger predictors of reading performance than whether students read widely for pleasure (OECD, 2013).

Challenges; According to PIRLS 2011 higher-level reading strategies tend to be taught less frequently in the Czech Republic than on average across the EU-24. It is well documented in research studies that explicit teaching of comprehension strategies may improve reading comprehension among readers with different levels of ability. While there are no data available for secondary schools, some PISA data

also suggest that there is a need for explicit instruction of reading strategies: in the Czech Republic there is no specified instructional time of reading strategies in the curriculum. Czech teachers traditionally tend to concentrate mainly on the technical aspects of teaching reading, giving the functional aspects less attention (Najvarová, 2007). Czech literacy competences are associated with linguistic models of school literature, teachers learned more about the literature (Hník, 2014). In the Czech Republic, the textbooks' aim to develop higher-level reading strategies is missing³⁵.

PIRLS also assessed which instructional practices teachers use to engage students in learning (for an overview of responses in the Czech Republic and other European countries s. Table I.2 in Appendix I). PIRLS 2011 demonstrates that students whose teachers used instructional practices to engage students learning in most lessons (items: summarising the lesson's goals, relating the lesson to students' daily lives, questioning to elicit reasons and explanations, encouraging students to show improvement, praising students for good effort, bringing interesting things to class) had higher scores in reading than those with such practices used in only about half the lessons or less (Mullis et al. 2012, exh. 8.6, p.220). In PIRLS 2011, teachers were asked a series of questions designed to ascertain the extent to which students are engaged in learning. Based on a scale summarising frequencies across all six items, 74% of students in the Czech Republic were deemed to be taught by teachers who implemented instructional practices to engage learning in "most lessons". This is about the same as EU-24 average of 70% (ELINET PIRLS 2011 Appendix, Table I2).

Digital literacy part of the curriculum for primary and secondary schools

At secondary level, ICT is part of the curriculum as a separate subject and also as a tool for tasks in other subjects. Digital literacy is not a part of the curriculum for primary and secondary schools.

Media education in the Czech Republic must be present at the secondary level. It is a compulsory, interdisciplinary, cross-curricular subject. The authority to decide how to treat media education in class lies with the schools. In the Framework Education Programme for Secondary General Education (2007), media education has a guaranteed place. It claims that media education is a necessary prerequisite for media communication and for media related work.

The second compulsory subject is ICT which must be present at the secondary level as well.

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 pupils 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).

Children with specific learning difficulties (SpLD) are the largest group of children with special educational needs (SEN). Attention is paid to them since the 1970s, when it started to deal with the specialised education of these pupils. The professional literature from the 1970s shows the occurrence of 2-3% children with specific learning difficulties in the population (Matějček, 1995). In the 1990s, the issue had gone through transformation relating to the integration of pupils with SpLD. Schools and

³⁵ The percentage of students in schools whose principals and/or teachers have considerable responsibility in choosing which textbooks are used is one of the highest among PISA-participating countries and economies.

parents began to apply increasingly for the establishment of this diagnosis and the number of pupils with specific learning difficulties had dramatically increased since the school had the opportunity to increase the funding formulas per pupil to support the education of this group of children. In 2005 a special report by the Czech School Inspectorate (CSI) was published and recommended to tighten the diagnostic criteria due to the above developments. In the following years due to the idea of tightening the criteria as a response to an intervention (Mertin, 2008) and the Three-stage model of care (Mertin, Kucharská et al., 2007) the situation began to improve and numbers of children with specific learning difficulties do not increase any more. For instance the thematic report by CSI from 2014 talks about 9% of students with disabilities, the proportion of children with specific learning difficulties amounted to about half of these.

A new and insistent trend is an inclusive approach to support all children with specific learning difficulties. In the Czech Republic, there is a minimum amount of children with SpLD who are educated in specialised schools, most of them are placed in elementary schools (89%, CSI, 2014). Part of the inclusive approach is to make a change of paradigm in supporting children with difficulties in reading. Nowadays it implements the preventive intervention model based on the initiation of support for children with difficulties in reading independently of their defined diagnosis. This is in contrast to the past, when the diagnosis of dyslexia resulted in specialised care and interventions (Diagnostic and therapeutic model of care) (Kucharská, 2014). The emphasis is now on providing timely support measures that are implemented in schools with the support of school counselors even before the given diagnosis of specific disorders of reading by school advisory centres. This approach allows to notice the beginnings of education for those pupils whose development in their reading skills is not progressing as fast as other classmates. In other words not waiting until the problem is significant and its solution is based on expert diagnosis (mostly realised in the 2nd and 3rd year of elementary school).

The teacher should recognise whether the child needs assistance with developing their reading skills and this skill should be part of the teacher professionalism and their didactic ability. There are no exact outcome standards for each class and this deficit is compensated for by a professional approach of the teacher who monitors compliance in the development of the pupil and his peers and follows relevant indicators according to the specific methodology for teaching reading (Wildová & Vykoukalová, 2014).

Standards as basis of assessment of reading difficulties

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

All EU countries have defined learning objectives in reading to be reached at the end of primary and secondary education cycles. However, only a few Member States have detailed standards (benchmarks) at each grade (school year) which form the basis of assessments allowing for early identification of reading difficulties and subsequent allocation of attention and resources. These standard-based assessments allow teachers and school leaders to judge children's progress and to target additional reading support. In the Czech Republic there are no detailed standards at each grade (school years)

which form the basis of assessments allowing early identification of reading difficulties in the Czech Republic (ELINET PIRLS 2011 Appendix, Table I5).

Reading instruction has a focus on the early detection of possible reading disabilities, such as slower reading development or dyslexia. Teachers in the Czech Republic identify reading difficulties by listening to students read aloud and by observing other features. Educational and psychological counsellors or school pedagogues and psychologists then investigate and provide individual remedial programs, which involve intensive cooperation with teachers and parents (Mullis et al. 2012, Vol.1, p. 177).

Screenings for reading competence to identify struggling readers

Teachers do not have the diagnostic tools in the field of reading skills, with the exception of the possible use of published PISA / PIRLS tests designed for respective ages. The evaluation is based on knowledge of the educational practices in reading and from the set goals of literacy according to school educational programmes. Teachers are more focused on technical aspects of reading (such as speed, accuracy, error rate, technology) rather than on *reading with comprehension*. (PIRLS, 2011; results of the analysis of the school education program in the project development of reading competencies, Charles University in Prague Faculty of Education, 2012). In the case of making new assessment tools for literacy skills, they should cover a wide range of specific reading skills (technology, understanding, reading strategies and application) and they could be the basis for intervention changes for a specific pupil.

One solution might be some kind of test after a certain time. Age groups should be wider, for instance after the end of the 3rd class (basics of literacy), after 5th class (developed literacy) and after 9th class (functional literacy). The possible benefits in the field of increasing support for pupils to develop literacy skills can be expected in connection with the verification of a Developmental reading continuum (Project Helping Schools Succeed³⁶) through which teachers can differentiate children's attained level of reading skills and plan new educational goals for them.

The tools which are used for a professional dyslexia diagnostics are becoming outdated (Matějček et al, 1987) and their validity should be discussed. The newly created instruments that are used for the diagnosis can be included in the Diagnostic battery of literacy skills of 2nd-5th class (Caravolas & Volín, 2005). In recent years, several instruments were published which are intended for the area of language development as a prerequisite for the development of reading and writing skills (example: Seidlová Málková, 2013) and which are related to the age of beginning school attendance and pupils in their early stage of reading development.

According to Kramplová (2012), all primary teachers are trained to recognise and diagnose reading difficulties. School psychologists and special pedagogues are also involved, though they are not strongly represented in Czech schools. Reading instruction has a focus on the early detection of possible reading disabilities, such as slower reading development or dyslexia. Teachers in the Czech Republic identify reading difficulties by listening to students read aloud and by observing other features. Educational and psychological counsellors or school pedagogues and psychologists then investigate and provide individual remedial programs, which involve intensive cooperation with teachers and parents (Mullis et al. 2012, Vol.1, p. 177).

³⁶ See http://www.kellnerfoundation.cz/en/helping-schools-succeed.

Supporting struggling literacy learners

Number of struggling readers receiving remedial instruction

Based on a question that class teachers answered in PIRLS 2011, it is estimated that 15.9% of students in Fourth grade in the Czech Republic are considered to be in need of remedial reading instruction. It is also estimated by teachers that 5.3% are in receipt of remedial reading instruction (ELINET PIRLS 2011 Appendix, Table K1). Hence, there is a shortfall of 10.6% between those in need and those in receipt. On average across EU 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 the Czech Republic 12.7% of students in Fourth grade performed at or below the PIRLS low benchmark on overall reading (ELINET PIRLS 2011 Appendix, Table A.6).

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, 26% of students in the Czech Republic are 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 6.12). This finding is surprising given that just 5.3% of students are in receipt of remedial teaching, and may suggest that help is sought or available for only those children who have very significant reading difficulties.

Four percent of students in the Czech Republic are in classes where there is always access to teacher aides to work with children with reading difficulties, while a further 8% are in classes where there is access sometimes. Corresponding EU averages are 13% and 34%, indicating relatively greater use of teacher aides than in the Czech Republic. Access to volunteers to work with children with reading difficulties is similar in the Czech Republic as on average across EU countries.

The CSI Thematic Report (2014) states as part of inspection activities that teacher assistants were identified in 15% of attended lessons. This issue it very underrated in our country. But it is due to the fact that the teacher assistant must always be recommended by the school counselling facility (in case he is paid by parents themselves) and regional directives often dictate that this measure is only possible from a certain level of disability onwards - pupils with specific learning difficulties, especially in combination with multiple difficulties, serious difficulties and presence of other types of disabilities. The new law of MEYS, which is expected to be implemented from 2016, promises more funding for teaching assistants.

Table 30: Percentages of Students in Classrooms with Access to Additional Personal to Work with Children with Reading Difficulties, Czech Republic and EU-24 Average

Access to	Czech Republic			EU-24 Average		
	Always	Sometimes	Never	Always	Some-times	Never
Specialised professional	26.0	34.3	39.7	24.9	41.8	33.3
Teacher aide	3.9	8.4	27.7	13.2	33.6	53.2
Adult/parent volunteer		2.8	97.4	2.8	17.5	79.7

Source: ELINET PIRLS 2011 Appendix, Tables K2-K4

According to responses provided by teachers in PIRLS 2011, 60.4%% of students in the Czech Republic are in classes where the teacher arranges for students falling behind in reading to work with a specialised professional such as a reading professional (Table 6.13). The corresponding EU average is 55%. About the same proportions of students in the Czech Republic (34%) as on average across the EU-24 (37%) are taught by teachers who wait to see if performance improves with maturation. Over 80% of students in the Czech Republic (81.9%) are taught by teachers who spend more time working on reading individually with a student who falls behind – - just under the EU-24 average (90%). Finally, almost all students in the Czech Republic (97%) and 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 31: Percentages of Students in Classrooms Where Teachers Engage in Specified Activities to Support Students Who Begin to Fall Behind in Reading, Czech Public and EU Average

	3	
	Czech Republic (Yes)	EU-24 Average (Yes)
I have students work with a specialised professional	60.4	55.2
I wait to see if performance improves with maturation	34.0	36.6
I spend more time working on reading individually with the student	81.9	90.1
I ask the parents to help the students with reading	96.5	96.9

Source: ELINET PIRLS 2011 Appendix, Tables K5-K8.

Supportive measures used depend on the extent and structure of the pupil's special needs. Supportive measures are provided by:

the school itself, through educational support and organizational measures, i.e.: selecting
adequate teaching methods and procedures, creating individual education plans, giving
extra time for education, reducing class sizes, and increasing the number of educational
staff, such as assistants, additional teachers, school advisers, school prevention specialists,
psychologists and special education teachers;

- school guidance and counselling facilities pedagogical and psychological counselling centers and special-pedagogical centers;
- diagnostic institutes and centres for educational care;
- non-government organizations.

In addition, an individual education plan can be created to pupils and the duration of education may be prolonged. (Eurydice, 2013c).

Professional intervention for pupils with reading difficulties includes the development of reading skills and overcoming barriers to reading. But it also covers the sub-functions (perceptual function, speech and language skills and abilities, attention, memory), that are the basis of specific learning disabilities. The intervention programme is based on diagnosis, depending on the severity and duration of solving difficulties. Its preparation is under leadership of education specialist, psychologists or special education teachers in the School Advisory Centre. It can be implemented individually or in a group, and trained teachers may also be involved. It is therefore an individual programme or a group programme. Recently the Czech Republic started being involved in global development programmes, for example: Feuersteins Instrumental Enrichment, Elkonins method. From the perspective of diagnosis, there is a large dynamic development of diagnostics that mingle with intervention.

Currently, the Government is implementing projects that promote equal access and quality in education, supported by European Social Fund. Projects aiming to improve the system of support and compensatory measures are also carried out, particularly with regard to special educational needs and education of gifted students. (Eurydice, 2014b).

The development of school guidance centres, i.e. advisory services provided by the school, will be even greater in the system of inclusive education, which has been planned since September 1st 2016 (Common learning)³⁷. The first stage of the support measures (before diagnosis from the school counseling facilities) includes support and assistance to the teacher who has to provide the individualised and differentiated aid to the pupil in cooperation with their parents (consultations, useful materials for the development of reading). If it is determined after a certain time (3-6 months) that this approach does not work, school should have a plan of educational support which is already structured and brings several expert insights. A pupil may already be included in the support group forms implemented in the school³⁸. And if there is no change after this intervention then there comes a recommendation to diagnose by School Advisory Centres.

Support for pupils with difficulties in reading and writing is also provided by non-government organisations. For instance: group of dys-centres³⁹, which offer assistance to pupils, parents, schools and teachers. It is a comprehensive approach, preventive and educational activities (lectures, discussions), diagnostics and intervention. In addition, there are some publishing activities for the benefit of professional materials for correcting special learning disabilities (methodologies, tools, textbooks).

Professional intervention for pupils with reading difficulties includes the development of reading skills and overcoming barriers to reading. But it also covers the sub-functions (perceptual function, speech and language skills and abilities, attention, memory), that are the basis of specific learning disabilities. The intervention programme is based on diagnosis depending on the severity and duration of solving

³⁷ Source: MEYS; http://www.msmt.cz/o-webu-msmt/spolecne-vzdelavani.

³⁸ Source: National Institute for Education, http://www.nuv.cz/t/in.

³⁹ See www.dyscentrum.org.

difficulties. Its preparation is under leadership of education specialists, psychologists or special education teachers in the School Advisory Centre.

The Czech Republic was part of the project of the International Dyslexia Association that effectively focuses resources on providing information, supporting research, professional development as well as advocacy and public policy. Reading instruction has a focus on the early detection of possible reading disabilities. Children, pupils and students with special educational needs can be integrated into regular classes. Some schools provide dyslexic students with divided instruction in separate working groups. Some teachers, often in cooperation with psychological experts, create individual development programmes for students with reading difficulties. Teachers can attend special seminars, lectures and courses on reading disabilities and their remedies. These courses are organized by the National Institute of Further Education, educational faculty, or the Czech Association for Dyslexia (Mullis et al., 2012)

Support for struggling readers - a legal right?

Currently, the Education Act defines three target groups of pupils with special educational needs:

- disabled pupils
- health disadvantaged pupils
- socially disadvantaged pupils

Recently, the position of gifted pupils has also been taken into account. Children with intellectual, speech or language disorders fall into the category of disabled pupils. According to the School Act, the school head is responsible for creating appropriate conditions for pupils with special educational needs in compliance with the recommendation of the school guidance and counselling facilities and in cooperation with them (Eurydice, 2013b).

The division into different groups will be replaced by the principle of support measures for each pupil (common learning). Inclusion and individual support is prioritised by the common MYES. The underlying work on this already started in 2013, and continues in 2014, 2015 and 2016.

In the Czech Republic we are able to deal with with children's developmental difficulties at the very beginning of the pre-school age from which some specific learning disabilities might develop. One of those methods is logopaedic care for children with impaired communication abilities. The most common disabilities are developmental dyslalia and dysphasia. In recent years we talk about children having predispositions for forming specific learning disabilities coming from their family background. A diagnostic tool to indicate children with risk of dyslexia was created (Kucharská, 2014). Even the school counselling facilities are working with preschoolers trying to avoid future school problems through timely diagnosis and intervention. Among the widely-used precaution is the postponement of school attendance which is usually implemented for approximately 15-20% of the population (source: MEYS). This step gives the possibility to provide professional interventions or gives the child time for their natural development, it may also be support for children who might have problems with reading and writing at school. However, there is a big question about support for children from socially and culturally different environments. Especially in their favour is now a legally regulated compulsory year of preschool attendance in school facilities - nursery school (source: MEYS).

It is obvious that the problem with oncoming inclusion will soon be necessary to deal institutionally with the support of school counselling services. Nowadays the school has no obligation to the involvement of school psychologists and school special education teachers, and the headmaster

should ensure funding for the salaries of the experts from different sources. However the increased involvement of these professionals will be based on the economic state potential and capabilities of the Czech Republic to draw European grants. Today there are school specialists paid from ESF projects, development projects from MEYS, the founder of regional resources, etc.⁴⁰.

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

According to PIRLS 2011, fourth-grade students are typically taught reading by general-purpose primary teachers who are responsible for teaching all basic subjects. The Master's level to upper and lower secondary teachers takes five years (European Commission/EACEA/Eurydice, 2013). 93% of fourth grade pupils have teachers who completed a Postgraduate University Degree, 1% had teachers who completed a Bachelor's Degree or equivalent but not a Postgraduate Degree; 3% had teachers with no further than upper secondary education. The EU-24 average for the last category is 6% (indicating that level of qualification of teachers of reading in the Czech Republic is quite high).

Introducing and maintaining systematic support for novice teachers after their graduation is needed. The appointed mentors should also be trained for their role – school managers shouldn't rely only on the experience of mentors (Vítečková & Gadušová, 2014).

The Czech Republic needs to identify the key competences that are specific to the work of Czech mentor-teachers and to develop tools for shaping mentors' competencies through specially developed sets of practical training materials. The Czech Republic also needs the development of support networks and mentoring programmes, through which teachers of proven experience and capacity can play a key role in new colleagues' training, passing on knowledge acquired throughout successful careers, promoting team-learning and helping to tackle drop-out rates among new recruits; believes that by working and learning together, teachers can help improve a school's performance and overall learning environment.

The importance of continuous professional development for teachers is recognised in legal documents in the Czech Republic, with Act No. 563. The continuous professional development of teachers (CPD) is an indispensable part of the professional development of teachers in the Czech Republic. It is a systematic and coordinated process which builds on pregradual education and lasts throughout the whole professional career of teaching staff and is part of lifelong learning. Nowadays a teacher has the right and obligation to participate in CPD which performs two main functions: standardisation and development. New tasks require good preparation for teachers in training schools as well as continuing education, gaining experience and improvement of skills not only in the field but also in the methodology, didactics, pedagogy, psychology and specialised activities. The law allows all teaching staff 12 working days off for self-study with salary compensation for lost salary⁴¹.

In the last year, higher education insitutions (e.g. Charles University in Prague, Faculty of Education) and other private institutions provide (e.g. Hello⁴²) as part of their educational activities, life long learning programmes focusing on professional development of teachers (for a fee)⁴³.

⁴⁰ Source: CSI, http://www.csicr.cz/getattachment/641b5628-ee0a-4120-b090-01dcf1779a7a, p. 9.

⁴¹ For more information visit: http://www.dvmonitor.cz/aktuality/575-plan-dalsiho-vzdelavani-pedagogickych-pracovniku.

⁴² See http://www.hello.cz/cs/projekty-a-vzdelavani/programy-dalsiho-vzdelavani-pedagogickych-

However, the provision appears fragmented and not systematically linked to teacher appraisal. Due to missing a clear link to professional development opportunities, the impact of performance review processes on teacher performance has been relatively limited. Professional development is predominantly a choice by individual teachers and is not systematically associated with school development needs (Santiago et al., 2012).

A teacher standards and career system is being prepared for implementation in the Czech Republic. A teacher standards and career system could encourage a systematic approach also in countinuous professional development of teachers and teachers professional induction (Vítečková a Gadušová, 2014).

Challenges: The Czech Republic needs a systematic approach in continuous professional development of teachers, and the induction support for new teachers also needs to improved and extended. This issue is widely discussed within the design of a quality standard for the teaching profession and currently also within the national project *Career System*.

Entry requirements for Initial Teacher Education

According to the EURYDICE 2013 study Key Data on Teachers and School Leaders in Europe (EURYDICE, 2013), enrolment in Initial Teacher Training is based on:

- certificate of final examination of upper secondary education decided at the level of the education authority;
- performance at upper secondary level decided at institutional level;
- a general entrance examination to tertiary education decided at institutional level;
- performance at bachelor level decided at institutional level;
- a (written or oral) examination specifically for admission to teacher education decided at institutional level;
- an interview specifically for admission to teacher education decided at institutional level;
- no exam in language skills (European Commission/EACEA/Eurydice, 2011. Teaching Reading in Europe: Contexts, Policies and Practices).

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

The Master's level to upper and lower secondary teachers takes five years. (European Commission/EACEA/Eurydice, 2013. Key Data on Teachers and School Leaders in Europe) 93% of fourth grade pupils have teachers who completed a Postgraduate University Degree, 1% had teachers who completed a Bachelor's Degree or equivalent but not a Postgraduate Degree; 3% had teachers with no further than upper secondary education. The EU-24 average for the last category is 6% (indicating that level of qualification of teachers of reading in the Czech Republic is quite high).

More information about reading teachers' formal education is offered by PIRLS 2011 (Mullis et al., 2012, p. 188, Exhibit 7.1).

Primary-level teachers are qualified to teach all subjects at the primary level, obtain training in reading instruction, and work with dyslexic pupils. These teachers are very well prepared.

pracovniku/dvpp-prehled-vsech-akreditovanych-programu).

⁴³ For more information see: http://www.msmt.cz/vzdelavani/dalsi-vzdelavani/databaze-akci-dvpp; http://www.msmt.cz/vzdelavani/dalsi-vzdelavani/standardy-a-metodicka-doporuceni.

Length of required training of secondary teachers

The Master's level to upper and lower secondary teachers takes five years. (European Commission/EACEA/Eurydice, 2013. Key Data on Teachers and School Leaders in Europe)

The role of literacy expertise in Initial Teacher Training

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

In PIRLS 2011, primary teachers were asked to indicate the level of emphasis given to a number of topics deemed relevant to teaching literacy in their pre-service teacher education. In PIRLS 2011, teachers reported about their areas of specialisation in their formal education and training (Mullis, Martin, Foy & Drucker, 2012, exh. 7.2, p. 190). In the Czech Republic 87% of the fourth grade students had reading teachers with an educational emphasis on language, 67% had teachers with an emphasis on pedagogy/ teaching reading, and 31% had teachers with an emphasis on reading theory. These figures are above the corresponding EU-24 means. 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 (PIRLS 2011 Database).

There is no compulsory programme to take up, but literacy development is the major topic of inservice teacher training programme such as Reading and Writing for Critical Thinking (RWCT). This global community of educators collaborate across countries. The main aim is to help children, pupils, students and adults think reflectively, take ownership of their personal learning, understand the logic arguments and become independent, life-long learners⁴⁴. The Czech members play an important role in reading education and introduces new methods of instruction in workshops (e.g. methods and strategies for promoting critical thinking; the reading workshops; the writing workshop; the evaluation and assessment of students' work, lesson planning, etc.)⁴⁵.

Time spent on professional development related to literacy

No internationally-comparable 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. It should be noted that professional development here is defined in terms of attendance at seminars, and that other forms of professional development (for example, collaborative planning among teachers in a school) are not included.

In the Czech Republic, 9% pupils in grade 4 have teachers who spent 16 hours or more (EU-24 average: 18%) engaged in professional development related to reading in the previous two years, 52% had teachers who spent some time but less than 16 hours (EU-24 average 53%), and 40% had teachers who spent no time in professional development related to reading in the previous two years (EU-24 average 29%) (Mullis at al., 2012, p. 196, Exhibit 7.4) These figures show a low engagement of Czech teachers.

⁴⁴ For more information see: http://www.rwctic.org/#!about/clokv.

⁴⁵ For more information visit http://www.kritickemysleni.cz/facelift_index.php; http://www.kritickemysleni.cz/english_details.php).

According to Teaching and Learning International Survey (TALIS, 2013): a smaller proportion of teachers report having a mentor assigned compared to most other TALIS countries (only 3.8 %); a smaller proportion of teachers report having undertaken professional development in the 12 months prior to the survey than in most other TALIS countries (82.5 %).

Challenges: The Czech Republic needs to improve the quality and participation rates of professional development related to reading. It needs to target at building literacy expertise of teachers and mentors which are specified in development related to literacy.

5.2.6 Digital literacy as part of initial teacher education

The TALIS survey shows an overall proportion of teachers undertaking some professional development in the previous 12 months close to the EU average (82.5% compared to 84.7%). Participation in training to develop information and communication technologies skills for teaching (53.4%) or using ICT for student projects or class work (36.5%) is slightly above the EU average (European Commission, Education and Training – Monitor 2015, Czech Republic).

As a part of a drive to boost information technology, the Czech Ministry of Education, Youth and Sports (MEYS) has programme to spread the use of technology beyond the school computer laboratory and into all classrooms. The challenge is to educate teachers in the use of new technologies such as interactive whiteboards or tablets (Source: MYES).

According to Kramplová (2012), access to ICT resources depends on the finances of the school and the progressiveness of the teacher or head teacher. She notes that use is made of audio recordings of Czech literature and word literature, while CD-ROMS and PC programmes are also widely used with students who have dyslexic difficulties.

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

The problem is also the very small number of male teachers in kindergartens. In 2008 the share of male teachers in kindergartens was 0.1% (and they were mainly in alternative military services). The non-governmental organisation LOM (The League of Open Men) has initiated programmes called "Men to School" and "Fathers read to children" 46.

The project "Reading Fathers and Others" (Čte táta (netáta)) lies in introducing a possible way of incorporating positive male role models into leading children towards reading. Regular public readings were conducted by fathers in a municipal library in a town Ústí nad Labem. The aim of this project is to present their own literary references of literature and inspire young readers and adults⁴⁷.

Challenges: According to closing the gender gap in reading literacy, where the disadvantaged group are clearly the boys, the Czech Republic needs some programmes to support reading among boys. More acceptable archetypes in contemporary literature are needed.

⁴⁶ For more information visit http://ilom.cz/kdo-jsme/the-league-of-open-men/.

⁴⁷ for more information see http://svkul-blog.blogspot.cz/search/label/%C4%8Cte%20t%C3%A1ta%20net%C3%A1ta.

5.3 Increasing participation, inclusion and equity

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

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

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

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

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

In the section below we address the following questions:

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

This section refers to children and adolescents who out of different reasons can be considered as a group "at risk" (from disadvantaged homes, those whose home language is not the language of school, or those with "special needs"). The focus is on preventing literacy difficulties among members of these groups. There is a certain overlap with the topic "Identification of and support for struggling literacy learners", dealt with in the section, "Improving the quality of teaching", which is concerned with those who have already developed literacy difficulties (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-recognized 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 24. 9% the Czech Republic has a relatively a low level of inequality.

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). 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). With 7.4% the Czech Republic is very close to the average of the European countries participating in ELINET.

Mother's education level

The PIRLS 2011 database offers information about mother's level of education referring to ISCED levels. The figures for the Czech Republic are presented below (the European average of countries participating in PIRLS shown in parentheses; or an overview of European countries see table A3 in Appendix B):

No schooling: no data are available (0.6 %)

ISCED 1: primary education: 0.1 % (5.3%)

ISCED 2: Lower secondary education: 4.8 % (16.7 %)

ISCED 3: Upper secondary education: 70.9 % (36.1%)

ISCED 4: Post-secondary non-tertiary education: 7.2 % (7.1 %)

ISCED 5B: Tertiary education (first stage) with occupation orientation: 2.3 % (9.5%)

ISCED 5A: Tertiary education (first stage) with academic orientation 2.1 % (13.9%)

BEYOND: 12.3 % (10.1%)

Teenage mothers

According to UNICEF (2001) the percentage of teenage mothers is 10.4 for the Czech Republic. The range for the European countries participating in ELINET 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

According to Eurostat (2012, Figure A 7), in the Czech Republic the percentage of children living mainly with a single parent is 8.4%. The range for the European countries participating in ELINET is from 1.4% in Croatia to 30% in Denmark (for an overview of European countries see table A5 in Appendix B).

Migrant parents

No data are available (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. 2012, 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 the lowest in the Czech Republic, at 1.0 % (for an overview of European countries see table A7 in Appendix B).

Related policies

In the Czech Republic, support for poor children in the form of food supports (school meals) is planned to be provided in the future. Some schools already provide this support on their own.

META (Association for Opportunities of Young Migrants) is focused on supporting young migrants, teachers at all types of schools, that working with children with different mother tongues. The association also provides teachers with counselling and methodical support etc.⁴⁸.

Non-governmental, non-profit organization "People in Need" pays also attention to children and their education, it prepares children for school enrolment in pre-school clubs (12 preschool clubs in the Czech Republic), through which roughly 250 children pass annually. As part of 'Come to Preschool!' project "People in Need" collaborates with eight other non-profit organizations⁴⁹.

Non-governmental, non-profit organisation, foundation "Agrofert foundation" helps single mothers or fathers raising children up to 18 years old in suddenly hard economic situation⁵⁰.

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.

⁴⁸ For more information see http://www.meta-ops.cz/en.

⁴⁹ For more information see http://www.romea.cz/en/news/czech/czech-ngo-says-new-law-will-force-preschool-clubs-for-impoverished-children-to-close.

⁵⁰ For more information visit www.agrofert-deutschland.de/.../pdf/0 Brochure AGF 2014 EN.pdf.

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 the Czech Republic was 6.5%. The range is from 3.0% in Iceland to 8.8% in Cyprus (for an overview of European countries see table E1 in Appendix B).

According to the same source (PERISTAT 2010, Figure 7.14, p.155) the percentage of live births with a gestational age <32 weeks is 1% in the Czech Republic (with a range from 0.7% in Iceland to 1.4% in Hungary). The percentage of live births with a gestational age between 32 and 36 weeks was 7.1% (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

The Czech Republic has only data of mental, physical, developmental and sensory (vision impairment and hearing impairment) disabilities of pre-school children.

Table 32: Mental, Physical, Developmental and Sensory Disabilities of Pre-School Children

Disabilities	Total	Percent of pre-school children
Vision impairment	487	4.82
Hearing impairment	283	2.74
Mental disabilities	498	4.83
Physical disabilities	350	3.39
Developmental disabilities	705	6.84

Data source: MEYS (Czech Republic, 2014/2015)

Children with special educational needs, such as those facing language development delays, can be educated in kindergartens for children with speech and language disorders - nursery school with speech therapy (Eurypedia 2013b)⁵¹.

Hard data can comment on the attitude of the MEYS. Nowadays we can talk about the transformation of the understanding of students with special needs. According the Education Act 561/2004 Coll., Par. 16, there are three categories of pupils with special educational needs: students with health disabilities, students with health disadvantaged and socially disadvantaged pupils. Pupils with specific learning difficulties, including developmental dyslexia, belong to the first group. This categorisation was based on custom that first a professional diagnosis must be performed in order to provide professional and financed assistance for the pupils.

After 2005 it began to show (CSI thematic report from r. 2005) that this approach - diagnostic and therapeutic care model began to be drained (Mertin, Kucharská et al., 2007). The current emphasis on inclusion is supported by the envisaged legislative changes, including modifications to Section 16th. Children with special needs are no longer pupils with a diagnosis, they are pupils who need intervention. They are scheduled in five stages. The first is the entry level and it is common to all pupils with special needs. It is in the competence of the school and been implemented before the diagnosis

⁵¹ See https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Czech-Republic:Separate_Special_ Education Needs Provision in Early Childhood and School Education#Pre-primary education.

by School Advisory Centres. Each school must ensure the provision of consultancy services for the students' benefit at least in the form of school counselors (school counselor, school prevention). Over the past 10 years the number of schools having consulting workers in other professions besides teachers gradually increased. According to the thematic report CSI from 2014, special education teachers have been working in 16% of schools, speech therapists in 15% and school psychologists in 9% of Czech schools. It is the responsibility of these professionals to find the solution to educational difficulties of pupils, among which is the development literacy skills (Kucharská et al., 2014).

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 at age 4 is 87.8 %. The Czech Republic does not yet reach 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).

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 94.3% for 5-year-olds, 86% for 4-year-olds, and 57.5% for 3-year-olds (OECD 2014) (for an overview of European countries see table C2 in Appendix B).

In spite of this fact, the MYEP plans to introduce compulsory kindergarten school attendance for 5-year-old children from September 2017. There is a positive relationship between the length of preschool education attendance in the Czech Republic and the average reading score in grade 4, as PIRLS 2011 data show (Mullis et al. 2012, Exhibit 4.7, p. 128). No child should be excluded from preschool because parents cannot afford to send their children to preschool/kindergarten institutions if they have to pay. The Czech Republic belongs to the half of the European countries where the entire period of ECEC is free.

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. 2012).

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

- 3 years and more: 68% (average reading score 549)
- Between 1 and 3 years: 28% (average reading score 543)
- 1 year or less: 3% (average reading score 551)
- Did not attend: 1% (average reading score no data)
 (For an overview of European countries s. table C3 in Appendix B.)

No child should be excluded from preschool because parents cannot afford to send their children to preschool/kindergarten institutions if they have to pay. The Czech Republic belongs to the half of the European countries where the entire period of ECEC is free. Many countries provide at least one year of free pre-primary education⁵².

⁵² See https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Czech-Republic:Early_Childhood_Education _and_Care.

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 the Czech Republic there is no particular description of how teachers should assess their learners, there is no systematic assessment of children in order to identify language development problems (Eurypedia 2013b). General assessment responsibilities are assigned to teachers.

Challenges: The Czech Republic needs to create systematic assessment for children in order to identify language development problems.

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

Legislation enacted in 2000 authorises schools to provide free Czech language teaching during compulsory education to children whose parents are foreign citizens. Regional authorities provide professional development for this purpose. Students can receive language training at any time during their schooling at the request of students' legal guardians, and the school is required to act within 30 days of receiving the request.

According to Kramplová (2012), "languages classes enrol a maximum of ten students, and the actual language training lasts a minimum of 70 lessons over no more than six months of schooling. In principle, the *Framework Educational Programme for Elementary Education* determines the content of these classes, and the content and methods of teaching take into account the needs of individual students" (p. 176).

Students of ethnic minorities in the Czech Republic can also access education in their mother tongue from pre-primary to upper-secondary education. In practice, only Poles exercise this right. In schools accommodating such students, the Czech language is introduced in Second grade, and is taught as a second mother tongue. Students receive 3-4 lessons in the Czech language per week, based on materials similar to those used in mainstream schools.

Challenges: The Czech immigrant population has extremely diverse integration needs. The Curriculum Framework for Romani was piloted in the Czech Republic. A crucial policy goal will be to define a vision for integration policy in the Czech Republic and formulate a clear and systematic action plan to put the integration strategy and support for children and adolescents whose home language is not the language of school in force.

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 of the opportunities for adolescents to improve their literacy performance, especially related to basic functional literacy.

According to Eurostat (2014), in the Czech Republic, the rate of early school leavers was 5.4 % in 2013, down from 5.5% a year before. The target value of the early school leaving (ESL) rate set for 2020 is 5.5%. The percentage of 18-year olds in education was 90.3% in 2011, which situated the Czech Republic above the EU-27 average (80.7%). By 2012, this indicator dropped to 89.9%. Since 2001, the Czech Republic has consistently exceeded the EU average value for this indicator. The detailed data were collected from a key study, *Reducing Early School Leaving* (European Commission, 2013).

5.3.7 Addressing the gender gap among adolescents

The gender gap (in favour of girls) was lower in the Czech Republic than the corresponding EU average differences in PIRLS 2011 (7 vs 12 on average) whereas in PISA, it was slightly higher (48 vs 44 on average). The gender difference was somewhat smaller in PIRLS 2011 than in PIRLS 2001 (by 13 points). In PISA, no change was observed in the performance of both boys and girls between 2000 and 2012, whereas a decrease of performance had been observed in 2009 among boys (-17 points) as well as a decline among girls, to a smaller extent (-6 points).

Over 90 % of boys and girls attend secondary school. A gender gap emerges in tertiary education, with 2013 data reporting over 70 % of girls but only 51 % of boys attending. Similar patterns exist throughout Eastern Europe (Population Reference Bureau, 2013). In the Czech Republic, the segregation of school subjects influences gender differences in subject choices, so reinforcing typical male and female roles (Matějů et al. 2012).

In 2012, girls perform better than boys with a statistically significant difference of 39 points⁵³ (PISA 2012). Ernestová (2004) pointed out that the gap between girls and boys is caused by a lack of acceptable male archetypes in contemporary literature. The research shows that boys need specific texts (shorter texts, a lot of illustrations, facts). Czech teachers don't respect these particular needs. While girls prefer horses, magic and mysteries, boys focus on football or adventures. Girls read more frequently than boys. The most frequent readers are girls from 8-9 years of age. With the growing age the learners are reading less. Learners need to be motivated for everyday reading. 50% of learners read less than 4 books a year. Stronger readers have better competence to become more successful in education. Parents, institutions and educators have the efficient tools to motivate the learners (Ronková & Wildová, 2014).

Challenges: The Czech Republic needs to build a stronger focus on giving some emphasis to reading for pleasure and to motivating pupils for reading, especially boys. More research and projects (where male archetypes are represented), oriented on support of reading of boys, are needed.

⁵³ OECD average: 38 points higher for girls.

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

Programmes against poverty

For programmes and initiatives against poverty see the "European platform against poverty and social exclusion", one of seven flagship initiatives of the Europe 2020 strategy for smart, sustainable and inclusive growth⁵⁴.

In the Czech Republic, support for poor children in the form of food supports (school meals) is planned to be provided in the future. Some schools already provide this support on their own.

Non-governmental, non-profit organisation, foundation "Agrofert foundation" helps single mothers or fathers raising children up to 18 years old in suddenly hard economic situation⁵⁵.

Family literacy programmes for migrant parents

META (Association for Opportunities of Young Migrants) is focused on supporting young migrants, teachers at all types of schools, that working with children with different mother tongues. The association also provides teachers with counselling and methodical support etc.⁵⁶.

Non-governmental, non-profit organization "People in Need" pays also attention to children and their education, it prepares children for school enrolment in pre-school clubs (12 preschool clubs in the Czech Republic), through which roughly 250 children pass annually. As part of 'Come to Preschool!' project "People in Need" collaborates with eight other non-profit organizations⁵⁷

"Together and Better - Centres to support the integration of foreigners" support the integration of immigrants from third countries and focus on providing information, legal advice, courses of the Czech language and assist socio-cultural orientation of immigrants in the Czech society. They create platforms for cooperation with NGOs and other subjects in the individual regions.

The Concept of Integration of Foreigners was approved by the CR government first in 2000 and then it was updated in 2006 and 2011. Between 2000 and 2008 its realisation was limited by given possibilities and availability of financial means because the Concept was supported mainly by the cooperation of NGOs and local schools. Despite those restrictions, a number of good pilot projects and innovative approaches were developed at that time. After the CR joined the EU in 2004, the situation improved, however, one problematic point still remained: namely the lack of implementers of the Concept of Integration at regional and local levels. There was a big fragmentation of projects and the provision of the basic integration services to immigrants was not always secured. The activities of the non-profit sector did not cover the whole of the CR and it was mainly concentrated in the capital city of Prague.

A key point for the formation of the Regional Centres was the possibility to use the European Fund for Integration of Third Country Nationals 2007-2013 for their financing. Without this possibility, it would have been very difficult using just the state budget of the Czech Republic. At present, apart from the resources from the European Integration Fund, the Centres' projects are supported by the state budget and further by money provided by statutory towns and some regions.

⁵⁴ See http://ec.europa.eu/social/main.jsp?catId=961.

⁵⁵ For more information visit www.agrofert-deutschland.de/.../pdf/0_Brochure_AGF_2014_EN.pdf).

⁵⁶ For more information see http://www.meta-ops.cz/en.

⁵⁷ For more information see http://www.romea.cz/en/news/czech/czech-ngo-says-new-law-will-force-preschool-clubs-for-impoverished-children-to-close.

The Centres offer their services in accordance with Law No. 108/2006 of the Digest of Laws on social services. Working with the clients fully respects the obligations stated in the Ethical Codex of social workers of the CR. The basic principles are: individual approach, equality and respect, discretion, safety, liberty and cooperation.

Even though the Centres have different operators, their basic tasks and activities are the same, or very similar, united in fulfilling the national policy of immigrant integration. Apart from that, they provide specific services and activities with regard to regional diversities. The services aim mainly at language, social and self-sufficiency of the foreign clients, and their ability to orientate themselves in the Czech society and at mutual relationships between them and the major society. The most frequent forms of services used are legal advice and social counselling which mainly solve the clients' residency issues and uneasy life situations ensuing from cultural differences or insufficient orientation in the new country. There is a great interest in Czech language courses, since speaking the language is one of the basic prerequisites for successful integration into society. The services are in most cases provided free of charge or for a low motivation fee.

Basic activities of the Centres: social counselling- both ambulant and field, legal advice, Czech language courses, socio-cultural courses, internet access, PC courses, library.

Additional activities of the Centres: Educational events for foreign nationals, lectures, discussions, cultural and sports events with the aim to support mutual relationships between foreigners and the major society, conferences, seminars and round tables, thematic evenings with the presentation of photographs from their own countries, singing performances, tasting their national cuisine.

Legal advice is mostly provided in the areas of: residence and visa issues; employment relationships (Labour Code, contract of employment, running a business); family issues; debt and property seizure issues.

Czech language courses are divided into two types: a) basic – designed for foreigners who know the Czech language. The aim is to be able to communicate better in basic situations (at the doctor's, at the office, in a shop, etc.); b) intensive – designed for foreigners with intermediate knowledge of Czech. The aim is to learn how to communicate more effectively in more complicated situations (e.g. a job interview) by means of regular, continuous lessons. The course serves as preparation for an examination in the Czech language at A1 level, which is required for obtaining the permanent residence permit.

Socio-cultural courses: The aim is to gain basic information about the Czech Republic, especially about the social, health and education systems, communication and employers. Using simple examples and model situations, it is possible to practise how to respond correctly when shopping, ordering a meal in a restaurant, travelling by public transport, etc.

Internet workplace and library: Each Centre to support the integration of foreigners offers the possibility to use free internet access, library, newspapers and magazines in English, French, Russian, Ukrainian, Vietnamese and Chinese.

Services within the Centres are provided by qualified employees who are continuously educated in the newest trends or changes of laws and regulations⁵⁸.

⁵⁸ For more information about the Centres visit: http://cizincihradec.cz/en/info-centre/.

Policies/programmes to prevent early school leaving

There is no complex strategy for early ending of school attendance in the Czech Republic. This conceptual strategy should consist of a wide variety of pre-emptive measures as well as a targeted identification of pupils at risk along with a solution to specific individual problems. The Czech Republic needs to strengthen its systematic approach inside schools, cooperation with parents, counselling institutions, psychologists, non-profit organisations and other institutions. The state needs to implement a measure which would pressure parents into being more rigorous about regular school attendance of their children (including a requirement of children's school attendance in order to be eligible for social security benefits) and to develop a career counselling so that pupils can opt for a suitable field of study and an appropriate level of education (Trhlíková, 2015).

As concerns vocational education in the Czech Republic, the 2012-2015 project Podpora spolupráce škol a firem se zaměřením na odborné vzdělávání v praxi – Pospolu (Supporting Cooperation between Schools and Companies – Project Aimed at Vocational Education in Practice) aims to increase the collaboration between vocational schools and companies and thus enhance the quality of vocational education. This project is carried out by the Ministry of Education, Youth and Sports in cooperation with the National Institute for Education (Education and Training in Europe 2020, p. 99).

The National Institute for Education, Education Counselling Centre and Centre for Continuing Education of Teachers (National Institute for Education) has developed an interactive on-line labour market information system (ISA) for teaching staff, advisors and graduates to support them in making informed career choices or in giving career advice⁵⁹. In addition, the Institute has developed learning facilities on issues like how to write a CV, how to behave in a job interview etc. E-learning tools have been made available to train educational counsellors and teachers.

As concerns individual support to prevent ESL in the Czech Republic, a pilot programme was implemented from 2010 to 2013 in two regions (Romodrom for Education), funded by ESF and the state budget. It aimed at providing individual support to children from socially disadvantaged backgrounds, and was run by an NGO in cooperation with teachers, SEN teachers, headmasters (primary and secondary schools), local social departments and families of children. The programme included regular activities with children and their parents, based on mentoring, tutoring, peer group activities of children, motivation weekends and visits to future possible workplaces and local companies. (European Commission, 2013, p.44).

Challenges: The Czech Republic needs to build a complex strategy for early ending of school attendance and to strengthen not only a systematic approach inside schools, but also cooperation with parents, counselling institutions, psychologists, non-profit organisations and other institutions as well.

⁵⁹ For more information see: http://ekariera.nuov.cz/studium.html.

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