



LITERACY IN BULGARIA

COUNTRY REPORT

CHILDREN AND ADOLESCENTS

March 2016

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1 Introduction

This report on the state of literacy in Bulgaria 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

Bulgaria participated in IEA's PIRLS (4th graders reading comprehension) in 2001, 2006 and 2011, and in OECD's PISA (15 year-olds' reading literacy) since 2000. Bulgaria performed just below the EU average in PIRLS 2011 (532 vs 535 EU-average) and significantly below the EU average in PISA 2012 (436 vs 489 EU average). The performance in PIRLS gradually decreased since the first cycle of the study (-19 score points between 2001 and 2011).

The proportion of pupils who can be considered as low-performing readers was very high in PISA in comparison with the EU average (nearly 40% vs 20%). In PIRLS, the proportion of low-performing readers was somewhat higher than the EU average (23% vs 20%). These students can read simple texts, retrieve explicit information, or make straightforward inferences, but they are not able to deal with longer or more complex texts, and are unable to interpret beyond what is explicitly stated in the text.

In Bulgaria, the percentage of students with a migrant background was extremely low (0.5%), far too low to compute a performance score for this group in PISA. However, data indicate that 11% of the students reported speaking another language at home. The gap between these students and those who spoke the test language at home was higher than the EU average (102 vs 54). 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 well above the EU average (62 vs 26).

In Bulgaria the gender difference tends to decrease over time in PIRLS, compared to the EU average. In PISA, the gap according to gender gradually increased (from 48 score points in 2000 to 69 in 2012), with girls' performance significantly increasing and boys' slightly decreasing (by 4 points).

In conclusion, Bulgaria has significantly decreased its performance in reading over time among 4th graders but still performs above the EU average. In PISA, its performance remained quite stable, and continuously very far under the EU average. In PISA, since the first cycle of the study, Bulgaria has a proportion of low-performing readers two times as high as the EU countries on average. It should be underlined that it is the only country continuously showing such a high percentage of readers in difficulty, which is a matter of concern. In PIRLS, the percentage of low-performing readers is just above the EU average but tends to increase over time. The proportion of top performers in PIRLS is slightly above the EU average but lower in PISA. The spread of achievement (gap between low and top performing readers) is higher than in the EU on average in PIRLS and much higher in PISA, which is linked to this very high proportion of low-performers and low percentage of top-performing readers.

The gap according to gender (in favour of girls) is smaller than the EU average in both studies. The gap according to socioeconomic status is much higher than in other European countries at both levels. The gap according to the language spoken at home is also much higher both in PIRLS and in PISA. Bulgaria shows then a low level of reading performance, especially among 15 year-old students and its pattern relative to equity is a great cause for concern.

In PISA, since the first cycle of the study, Bulgaria has a proportion of low-performing readers two times as high as the EU countries on average. Bulgaria is the only country continuously showing such a high percentage of readers in difficulty, which is a matter of concern. In PIRLS, the percentage of low-performing readers is just above the EU average but tends to increase over time.

The gap according to the language spoken at home is also much higher both in PIRLS and in PISA. Bulgaria shows low level of reading performance, especially among 15 year-old students and its pattern relative to equity is a great cause for concern.

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

Creating a Literate Environment

Pre-Primary Years

Compared to the European average the availability of children's books at home is rather low in Bulgaria. 27% of pupils report having 10 or fewer books at home. The achievement gap between those with 0-10 books and those with 200+ books is 92 points. This is greater than the EU average of 82 points.

The large proportions of students in Bulgaria with few books at home and with low levels of home educational resources for learning is a matter of concern. Lack of home educational resources could have a negative impact on future performance as reading content becomes more complex and abstract. It is a matter of concern that only 40 percent of the children are often read to by their parents. There is a need for programmes to raise awareness of all parents that literacy is a key to learning and life chances and that the basis for good literacy achievement is laid in early childhood.

Primary Children and Adolescents

Creating a literate environment in school: Based on data provided by their teachers, PIRLS 2011 shows that 48% of pupils in Bulgaria were in classrooms which had class libraries – well below the corresponding EU-24 average of 73%.

The broader understanding of literacy requires innovative approaches in creating a literate environment, including establishing sustainable partnerships among schools, libraries, bookshops, and NGOs, in order to promote, support and motivate students to read.

In the last years, many libraries in Bulgarian schools, especially in the small settlements, were closed. Three main problems could be identified for Bulgaria: a) Lack of sustainable political support for modernisation of school libraries; b) Lack of specific strategies for development of school libraries and c) Lack of financial support for buying new books or organising initiatives for promoting and encouraging reading and literacy.

Strengthening the role of public libraries: The Ministry of Culture is responsible for the coordination and methodological guidance of Bulgaria's public library network through the regional libraries. To this network belong 27 regional libraries and 19 municipal libraries, the vast majority are around 3000 chitalishte libraries. The chitalishte institutions are a unique Bulgarian phenomenon, which dates back to the 19th century. Initially organised and supported by their communities as libraries, reading-rooms and social spaces, with time the chitalishte developed as local educational and cultural institutions. There is a chitalishte in every Bulgarian town and almost in every village.

In 2009 public libraries in Bulgaria through Glob@l libraries - Bulgaria Programme became a part of the Global Libraries Initiative of Bill & Melinda Gates Foundation supported by a USD 15 million grant. The initiative facilitated access to information, knowledge, communication, e-contents and community services through Bulgaria's public libraries network⁶.

Still, the lack of a sustainable national policy for development of Bulgarian libraries is a serious challenge

Insufficient funding is also an obstacle for purchasing new books. Another challenge is insufficient capacity of libraries as institutions to manage advocacy campaigns, and fundraising, to diversify their income sources (incl. project-based).

Improving literate environments for children and adolescents: Different initiatives and programmes for attracting parents and children to libraries and bookshops and fostering reading engagement among children and adolescents in Bulgaria are taking place – for instance **“Summer reading is Fun”**, **“Marathon of reading”**, **“Reading Bulgaria”**, **„Read with me”**, **„Travelling boxes”**, **“Books for waste”** etc.

In addition to the above mentioned programmes and initiatives, a very attractive web platform **www.ucha.se** with educational videos and exercises in every subject was developed as a private initiative. Through this platform the students can study, find and discover everything that they could not understand in school. **Ucha.se** offers attractive reading materials for children and adolescents and motivates them to explore new opportunities for reading.

Offering digital literacy learning opportunities in schools: In July 2014 the Bulgarian government adopted a Strategy for Effective Implementation of ICT in Education and Science 2014-2020. Since early 2000 there has been significant progress in the modernisation of the educational environment, development of digital content and implementation of innovative technology in teaching methods and educational process, improving teachers' competence to use ICT for teaching and learning.

In addition to this, almost all schools have been provided with an internet connection. Most of the teachers have acquired basic levels of computer literacy. They usually develop skills to use word processing and presentation software, e-mail and internet browsers.

Some of the most significant obstacles stated in the survey “Implementation of ICT-based teaching in Bulgarian schools” are: the lack of teachers' training (43%), the lack of technical resources (39%) and the lack of appropriate products (36%) in schools.

Bulgaria has taken actions to strengthen IT education in schools and significantly improve digital literacy, but still one of the most significant obstacles indicated in the sphere of ICT-based teaching in Bulgarian schools is the lack of teachers' training (43%), the lack of technical resources (39%) and the lack of appropriate products (36%) in schools. Up-grading of ICT competences of teachers is still far behind the level needed for offering up-to-date curriculum and modern teaching methods.

⁶ See: www.glibulgaria.bg.

Improving the Quality of Teaching

Pre-Primary Years

The education expenditures in Bulgaria have registered a slight drop in the recent years, remaining far below the EU average (5.3% for EU27). It has substantially decreased from 4.3% in 2009 and is expected to decrease by a further 0.2% points by 2016 and become 3.4% of GDP⁷

The OECD recommends that a public investment of 1% of GDP is the minimum required to ensure provision of quality early childhood care and education services. Thus Bulgaria could consider a higher level of ECD financing to ensure the needs of young children are met.

In Bulgaria two programmes: "On the School's Threshold" and "Hand in Hand" anticipate children's participation in lessons covering several learning areas among which is children's preparation for reading and writing (Source: Unesco, International Bureau of Education (IBE) 2006, p.6). Educational process is supported with various teaching materials, learning aids and audiovisual materials (Eurypedia, 2014). Specifically, a series of interactive educational toys in Bulgarian language for children from six months to six years is provided (Tsonka & Paisiy 2012).

Primary Children and Adolescents

Improving Literacy Curricula and Reading instruction in schools: In 2011, pupils in Bulgaria spent fewer instructional hours in schools (673 hours per year) compared with students on average across EU-24 countries (850 hours), and allocation of time to teaching the language of the PIRLS test in Bulgaria (186 hours) is also less than on average across EU countries (241 hours), and, at 27% of total instructional time, comes in below the recommended level of 30%. Teachers in Bulgaria report allocating more time to teaching reading across the curriculum and in reading classes (189) than on average across EU countries (147 hours). Source: PIRLS 2011 (Mullis, Martin, Kennedy et al., 2012, p. 214, Exhibit 8.4). EU averages from PIRLS 2011 database (see ELINET PIRLS 2011 Appendix, Table I3).

According to Mavrodieva and Angelova (2012), Bulgarian language and literature receive 6½ hours of classroom instruction per week – two for Bulgarian language, three for literature, and 90 minutes for communication skills (writing and speaking). They also note that Bulgarian legislation recommends an additional 30 minutes per week of home reading.

PIRLS indicates that reading comprehension strategy instruction is widespread in Bulgarian classrooms. It would be important to evaluate the quality of this instruction, perhaps using qualitative investigative methods and ascertaining which aspects of instruction, if any, might be strengthened. As access to electronic texts increases, an increase in emphasis on comprehension of electronic texts might be warranted.

Improving the quality of pre-service and in-service teacher training: Initial teacher education needs a compulsory focus on developing literacy expertise among future primary and secondary teachers. It is a matter of concern that over half of the students in Bulgaria are taught by teachers who report that they had attended no professional development related to reading in the two years prior to PIRLS 2011.

⁷ Source: Convergence Programme (2013-2016); http://ec.europa.eu/europe2020/pdf/nd/cp2013_bulgaria_en.pdf.

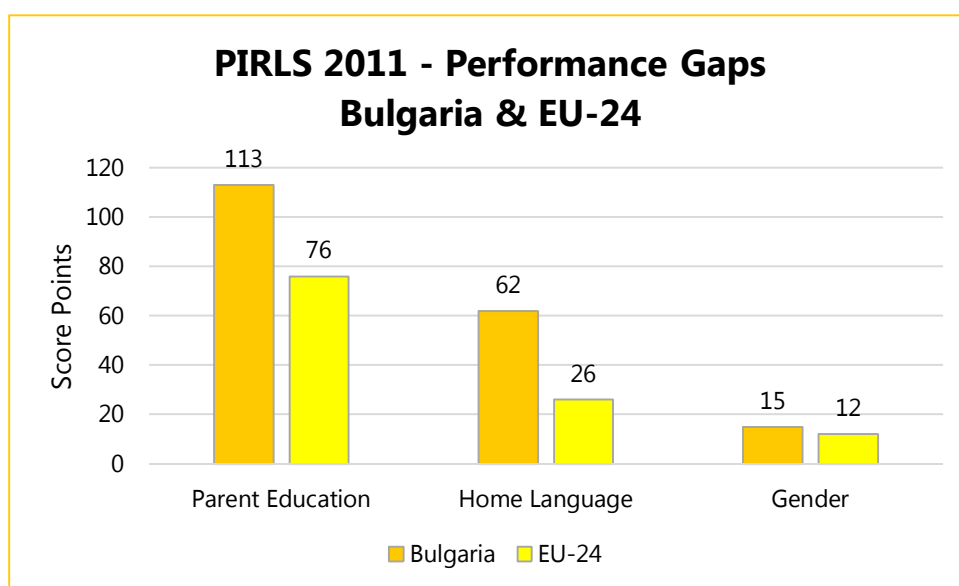
There is no compulsory continuing professional development (in-service training) for teachers which focuses on literacy development in Bulgaria⁸.

There is no compulsory continuing professional development (in-service training) for teachers which focuses on literacy development. Average age of the teaching staff in preschool education is very high. More than half of the teaching staff is around the age of 50 in pre-primary education in Bulgaria. This might make it difficult to introduce effectively radical changes. This problem is hard to solve because of two additional complications – the fact that young professionals are not interested to work as teachers in pre-primary education, on one hand, and the low level of payment in the sector (salaries are not adequate to the teacher’s qualification) – on the other.

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).

Figure 1: Performance Gaps –, Education and Language Spoken at Home

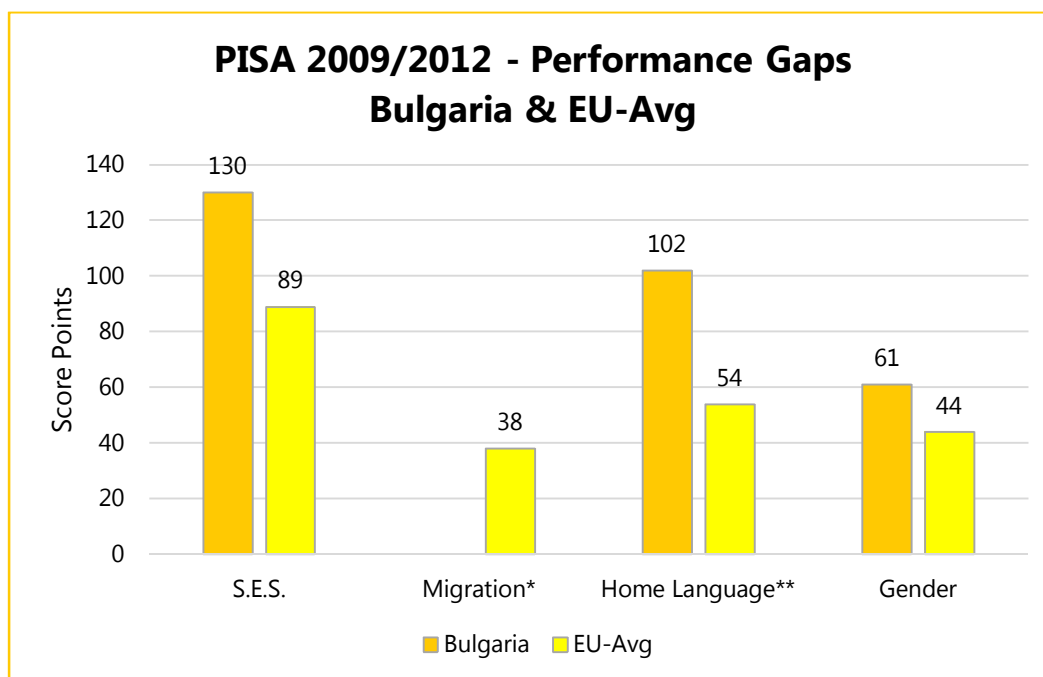


Education: Parent has University vs. Lower Secondary/Primary education; Language: Student speaks language of the test at home always vs. sometimes/never; Gender: Girls – boys;

Figure 2 below summarises the differences in performance between students in Bulgaria and on average across the participating EU countries on measures of Socio-Economic Status, Immigrant Background, Language Spoken at Home and Gender.

⁸ Source: Peycheva-Forsyth, R. (2010), the qualification and career development of Bulgarian teachers – current status, issues, perspectives http://ec.europa.eu/education/policies/2010/doc/jir_council_final.pdf.

Figure 2: Performance Gaps: SES, Migration, Language Spoken at Home and Gender



SES: Top – Bottom national quarters of the PISA index of economic, social and cultural status; Migration* (Insufficient data to compute score for Bulgaria): Native - Students with an immigrant background; Home Language** (Data from PISA 2012): Student speaks language of the test at home always - sometimes/never; Gender: Girl – Boy

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.

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). With 33.6% Bulgaria is at the lower end of the distribution, indicating a relatively high level of inequality.

Child poverty: Bulgaria is among the countries with the largest differences between the share of children at risk of poverty who live in a household with low and with high education level (71% of children in a household with low education level compared with 2% of children in a household with high education level)⁹.

Pre-Primary Years

Compensating socio-economic and cultural background factors: The child’s **socio-economic and cultural background** has a strong impact on literacy. Material poverty and educational level, particularly of the mother, are well-recognised main factors influencing literacy. 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.

⁹ Source: “Child poverty and social exclusion A framework for European action”, available at: [http://www.europarl.europa.eu/RegData/bibliotheque/briefing/2013/130537/LDM_BRI\(2013\)130537_REV1_EN.pdf](http://www.europarl.europa.eu/RegData/bibliotheque/briefing/2013/130537/LDM_BRI(2013)130537_REV1_EN.pdf).

With 33.6% Bulgaria is at the lower end of the distribution indicating a relatively high level of inequality. In 2011, the highest share of those under the age of 18 who were at risk of poverty or social exclusion registered in Bulgaria was 51.8%. In 2011 Bulgaria (28.9%) had one of the highest levels of children "at risk of poverty".

Children fall into category of "low work intensity" (LWI) if they live in a household where adults worked less than 20% of their work time for the previous year. This condition is usually common for households with a single parent and one or more children. In 2010 Bulgaria was among the countries with the highest rates.

Bulgaria is among the countries with the largest differences between the share of children at risk of poverty who live in a household with low and with high education level (71% of children in a household with low education level compared with 2% of children in a household with high education level).

Encouraging preschool attendance, especially for disadvantaged children: The benefit of preschool attendance in Bulgaria is proven by the fact that there is a significant difference in reading competence at grade 4: the reading score of pupils who attended pre-primary education for 3 years and more was 49 points higher than that of pupils who did not attend at all.

Identification of and support for preschool children with language difficulties: Literacy competence strongly builds on oral language proficiency, word knowledge, and syntactic knowledge. In preparatory class, children are evaluated through conversation or respective tests on their level of command of Bulgarian (for those children whose mother tongue is not Bulgarian) and for their general preparation for school. The teachers maintain direct contact with the parents and give recommendations, if there are gaps in the development and preparation of the children¹⁰.

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.

Primary Children and Adolescents

Early identification of and support for struggling literacy learners: In Bulgaria 22.9% of students in fourth grade performed at or below the PIRLS low benchmark on overall reading. Hence, the percentage of students in Bulgaria in receipt of remedial reading instruction (18.1%) is below the percentage that performed poorly on PIRLS.

Based on teacher responses to a series of questions in PIRLS 2011, 27% of students in Bulgaria 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%. Nine percent of students in Bulgaria are in classes where there is always access to teacher aides to work with children with reading difficulties, while a further 19% are in classes where there is access sometimes. Corresponding EU averages are 13% and 34%, indicating relatively greater use of teacher aides than in Bulgaria. Access to volunteers to work with children with reading difficulties is similar in Bulgaria as on average across EU countries.

¹⁰ See: https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Bulgaria:Assessment_in_Early_Childhood_Education_and_Care (accessed June 25, 2015).

Since about 40 percent of students have no access to specialised professionals to work with children with reading difficulties, remedial support should be strengthened.

Extra homework is assigned to a large degree in Bulgaria for pupils with reading difficulties, working on the assumption that parents support and help their child with the tasks. However, as struggling readers tend to have less well-educated parents and less encouraging home environments, they might lack effective support from their families (Eurydice, 2011).

For struggling readers in Bulgaria teachers report that they rely very much on parental help. This might be problematic as struggling readers tend to have less well-educated parents they might lack effective support from their families.

Support for migrant children and adolescents whose home language is not the language of school: In Bulgaria, 75% of pupils reported that they always spoke the language of the PIRLS reading test at home – slightly below the corresponding EU-24 Average (80%). Twenty-five percent in Bulgaria sometimes or never spoke the test language at home. The difference in achievement between students in Bulgaria reporting that they ‘always’ or ‘sometimes / never’ spoke the language of the test was 62 score points – 36 points higher than the corresponding EU-24 average difference (26).

It is noteworthy that even language minorities with high status in the society 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.

The relatively large proportion of pupils reporting that they never speak the language of the test at home in Bulgaria (7%, compared to an EU-24 average of 3%) indicates two challenges: low command of the language used at school and need to address this problem in a specific way involving in a proper way pupils, their parents and the teachers.

Preventing early school leaving: In the last decade Bulgaria has made significant progress in reducing the number of young people (at the age of 18 to 24 years old) who have completed only lower than secondary education and in reducing the number of young people who are out of the education system.

In 2012 the ESL rate was 12.5%, whilst in EU 27 it was 12.8%. By 2020 Bulgaria foresees to reduce ESL to below 11% on national level. .

In 2013 a National Strategy for Reducing Early School Leaving 2013-2020 was developed and adopted by the Council of Ministers. It uses the term ‘early school leavers’ to include ‘persons at the age between 18 and 24 years who have completed less than secondary education at the most and do not participate in education and training’. Additionally, the strategy covers school-age students and young people at the age of 18-24 years who have never enrolled in school according to the definition of ESL.

In terms of the balance between ESL strategies most of the measures to reduce ESL are directed towards *prevention* and *intervention*. The least developed measures are related to *compensation*.

Since the beginning of the school year 2012/2013, MES has launched a web-based register of movement of children and students for tracking the number of students in kindergartens and schools.

Reducing early school leaving envisages a compulsory component ‘working with parents’. Many NGOs and Centres work with Roma children and their parents under different projects.

By 2020 Bulgaria foresees to reduce ESL to below 11% on national level – in this respect high expectations are incorporated in the priorities formulated in EU funded national programmes (2014-2020) connected with human resources development.

As a preventive measure against dropping out from school of children from vulnerable ethnic communities, policies are implemented for overcoming the separating of children and students in groups /at kindergartens/ and classes /at schools/, for enhancing the intercultural competence of all participants in the educational process. Additional training in Bulgarian language is provided too.

Implementation of different projects supports the integration process and inclusion in the educational system of uncovered children from ethnic minorities. Under projects implemented by CEICSEM (Centre for educational integration of children and students from ethnic minorities) and projects for training of teachers are improved their skills for work in multicultural educational environment. The Ministry of Education and Science jointly with the Regional Education Inspectorates and with the municipalities controls the process of avoiding the establishment of ethnically separated groups and classes in kindergartens and schools.

Avoiding concentration of children from vulnerable ethnic communities in one and the same kindergarten or school is still not finalised. In this respect a lot more is needed to be done to achieve a multicultural educational environment. Potential motivating tools are envisaged in the new programme "Science and Education for Intelligent Development"¹¹.

¹¹ See: <http://sf.mon.bg/?go=page&pageId=32>.

3 General Information on the Bulgarian Education System¹²

The Public Education Act of the Republic of Bulgaria (1991) provides the legal foundation for the overall education system in the country and establishes the right of citizens to continuously enhance their education and qualifications.

The Act recognises the right to education for all children; guarantees equal treatment regardless of their ethnic or social background and residential locality; ensures conditions and provides opportunities for further development and accomplishment of a high level of knowledge in the system of education.

The Bulgarian education system has traditionally been organised within the public sector. However, a number of private schools exist at different levels of schooling. The education in Bulgaria is mainly supported by the state through the Ministry of Education and Science (MES). The MES is entirely responsible for the state policy of education in the public and private sectors, for setting education goals and controlling the national curriculum. It has the power to issue regulatory decrees and to exercise control over the activities of all schools.

Twenty eight Regional Inspectorates of Education, one in each of the 28 regions in Bulgaria, act as local subdivisions of the MES and exercise control and observation on the educational institutions in the respective region.

The MES directly funds state schools. Municipalities are responsible *inter alia* for the compulsory education of pupils up to the age of 16, and also have substantial financial autonomy.

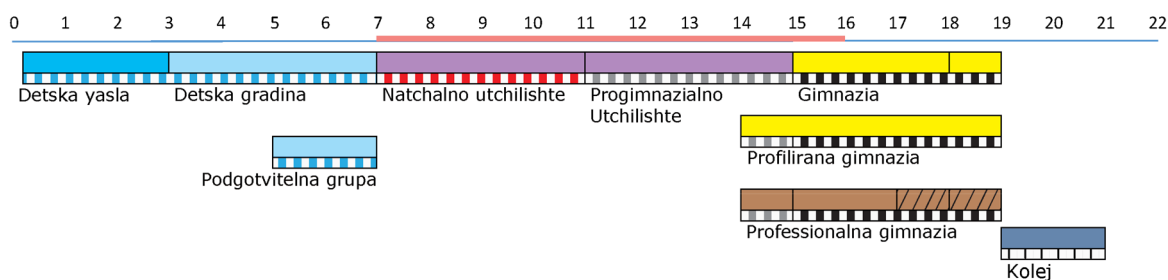
There are officially stipulated requirements for the minimum education, curriculum, and skills that students must attain in every subject by every grade. Schools have the autonomy to choose the school specialisations and elective classes. They also have some flexibility in curriculum delivery which is decided by the school pedagogical council.

According to the current Public Education Act (1991)¹³, full-time education is mandatory for all children at the age between 7 and 16, and the public education system includes kindergartens, schools and servicing units (Art.2 of the same Act).

¹² The information on the Education System is based on the Public Education Law, which is in force now. The recently adopted Pre-school and School Education Act will come into force from August 2016 (for the following school year).

¹³ On September 30, 2015, the Bulgarian Parliament voted on the entire new Pre-school and School Education Act, which will take effect on August 1, 2016 (except for the chapter on financing and assets which will become effective on January 1, 2017).

Figure 3: Structure of the Bulgarian School System



Source: http://eacea.ec.europa.eu/education/eurydice/documents/facts_and_figures/education_structures_EN.pdf

Pre-school education in kindergartens

By amendment of the Public Education Act for the school year 2010/2011, the mandatory two years of pre-primary education is compulsory either at kindergarten or in preparatory groups at primary schools: "The preschool preparation course for children two years before their admission to the first school grade is mandatory, but not earlier than the year of a child's fifth birthday" (Art.20, para.1). This regulation has been introduced into all municipalities in Bulgaria starting from the school year 2012/2013.

The measure aims at providing an equal start for every child and contributes to developing the skills being necessary upon admission to the first grade.

Kindergartens and schools are public, municipal or private, depending on the type of their funding. Kindergartens are for children at the age between 3 and 6 or 7 (when they begin the first grade). There are also nursery schools for children between the ages of 0 and 3.

Education is free for children in the compulsory pre-primary groups – it is provided by the state. Parents pay only a monthly fee for food. The size of the fee can be reduced for low-income households.

Since 2010, parents also pay for additional activities if they are not part of the state educational requirements (e.g. English classes, dance classes etc).

The Public Education Act contains texts guaranteeing equal access to education for children and students with disabilities: "Kindergartens are obliged to admit children with special educational needs and/or with chronic diseases" (Art.21, para.2). Children with special educational needs and/or with chronic diseases are integrated in public schools. The schools are obliged to admit children with special educational needs and/or with chronic diseases (Art. 27, para.1 and 2).

School education

School education is free at primary and secondary levels in the public sector. It is compulsory for children between the ages of 7 and 16 (1-8 grades).

The levels of schooling in Bulgaria are: primary education (grades 1-4); lower secondary education (grades 5-8); upper secondary education (grades 9-12)

The **primary education** starts normally when a child turns seven, but it is not uncommon for parents to consider their children able to start the 1st grade at the age of six. After finishing the fourth grade, students get a certificate for elementary education.

To get a basic education diploma, students can go to a **lower-secondary school** or choose to attend a general secondary school. Lower-secondary education is also four years (grades 5-8). At the end of the four years, the student receives a basic education diploma. It gives students the right to enroll in an upper-secondary education school.

The main types of **upper-secondary schools** are general educational, vocational, language schools and foreign schools.

Private schools have been also established and they are functioning successfully in parallel to the state schools.

Certificates are issued upon the completion of the primary and the elementary school. A diploma is issued upon the completion of a high school.

To ensure education for all children suffering from chronic diseases and for disabled children, special schools and servicing units have been established.

For the imprisoned with incomplete secondary education, schools are set up to conduct relevant education.

The Public Education Law indicates that education is carried out according to established **state educational requirements**.

These requirements comprise the study content, the type of school, the grading system, the documentation of education, the textbooks, out-of-class and out-of-school activities, material, cultural and environmental conditions, medical care and medical and hygiene education rendered in schools and kindergartens.

In most schools, the school year begins on 15th of September and continues till 15th or 30th of June. Each school year has two terms. In most of the secondary schools, competitive exams for admission are required. Pupils can choose from a number of various types of schools, each offering a different focus (such as mathematics and sciences or foreign languages).

Higher education

Higher education institutions are as follows: Universities, Colleges and Specialised Higher Schools. Universities offer three degrees: Bachelor (undergraduate), Master (graduate) and Doctoral degrees.

An Undergraduate degree covers at least four years of training and a graduate degree - five years after completion of secondary education or one year after obtaining a Bachelor Degree.

The third degree of higher education results in obtaining a PhD Degree.

The recently adopted **new Pre-school and School Education Act** aims to create a new educational system framework based on modern principles and mechanisms for work with children. There are a lot of innovative provisions incorporated in the law – they concern both the system as such and the methods of intervention.

According to the **Pre-school and School Education Act**, the school education is divided into: basic education – grades 1-8 and high education – grades 9-12. Basic education is divided into primary (1-4) and lower secondary (5-7) first high school (8-10) and second high school (11-12). The elementary education ends at grade 7. Pre-school education remains compulsory for all children at the age of 5-6, education is compulsory for all pupils until the age of 16.

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

Students in Bulgaria achieved an overall mean reading score of 532 in PIRLS 2011 (Table 1). Bulgaria's mean score is not significantly different from the EU-24 average. Performance in Bulgaria is similar across reading purposes (Literary, Informational) and reading processes, ('Interpret, Integrate & Evaluate; Retrieve & Inference) (Appendix Tables A2-A5).

Table 1: Overall Performance on PIRLS 2011 – Belgium (Fr) and EU-24 Average

	Overall Reading – Mean Score
Bulgaria	532
EU-24	535

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

In Bulgaria, 23% of students performed at or below the Low benchmark on overall reading. This is close to the EU average of 20% (Table 2). In Bulgaria, 11% of students achieve at the Advanced benchmark. Again this is slightly above the EU average of 9%.

Table 2: Performance by Overall PIRLS Reading Benchmarks 2011 - Percentages of Pupils

	Below 400	400-475 Low	475-550 Intermediate	550-625 High	Above 625 Advanced
Bulgaria	7	16	32	34	11
EU-24	5	15	36	35	9

Bulgaria's standard deviation of 82 is 12 points higher than the EU-24 average (70), indicating a greater spread of achievement in Bulgaria (Table 3). Among EU countries, England (82) had similar Standard Deviation. The difference between the scores of students at the 90th and 10th percentiles in Bulgaria – 209 points – is 29 points above the corresponding EU-24 average of 180, and is most similar to the spread of achievement in England, where the difference was 211.

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
Bulgaria	82	420	629	209
EU Avg	70	441	621	180

In 2001, students in Bulgaria achieved a mean score of 551 on the overall reading scale. There was a significant drop in performance of 19 points between 2001 and 2011. Most of this drop accrued between 2006 and 2011, when performance fell by 15 points. This drop in performance in Bulgaria is in contrast to the EU-24 average, for which performance was largely consistent across the three rounds of testing.

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

	2001	2006	Change (2006- 2001)	2006	2011	Change (2011- 2006)	2001	2011	Change (2011- 2001)
Bulgaria	551	547	-4	547	532	-15	551	532	-19
EU Countries	534	534	0	534	535	1	534	535	1

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 Bulgaria whose parent attended University or Higher achieved a mean score (580) that was some 113 points higher than students whose parents completed Lower Secondary or below (467) (Table 5). The average difference across the EU-24 was 76 points, indicating a relatively strong relationship between parents' educational attainment and performance in Bulgaria.

Table 3.5: 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 – Lower Sec)
	%	Mean	%	Mean	
Bulgaria	20	467	29	580	113
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 Bulgaria, 75% of pupils reported that they always spoke the language of the PIRLS reading test at home – slightly below the corresponding EU-24 Average (80%). Twenty-five percent in Bulgaria sometimes or never spoke the test language at home. The difference in achievement between students in Bulgaria reporting that they ‘always’ or ‘sometimes / never’ spoke the language of the test was 62 score points – 36 points higher than the corresponding EU-24 average difference (26). The relatively large proportion of pupils reporting that they never speak the language of the test at home in Bulgaria (7%, compared to an EU-24 average of 3%) suggests a particular challenge for educators in Bulgaria.

Table 6: Percentages of Students Reporting that They Always or Sometimes / Never Speak the Language of the PIRLS Test at Home, and Associated Mean Score Differences – Bulgaria and EU-24 Average

Language of the Test Spoken at Home	Always		Sometimes /Never		Mean Score Difference (Always – Sometimes/Never)
	%	Mean	%	Mean	
Bulgaria	75	549	25	488	62
EU-24 Avg	80	541	20	519	26

Statistically significant mean score differences in bold.

Gender

Girls in Bulgaria achieved a mean score on overall reading that was higher than boys by 15 points in 2011. This was about the same as the EU-24 average difference of 12 points (Table 7). Ireland and Romania also had 15 point difference between boys and girls. The gap between boys and girls in Bulgaria in 2011 was less than in 2006 (21) and 2001 (24). While the overall trend is consistent with that of the EU-24, the gap in Bulgaria was larger to begin with.

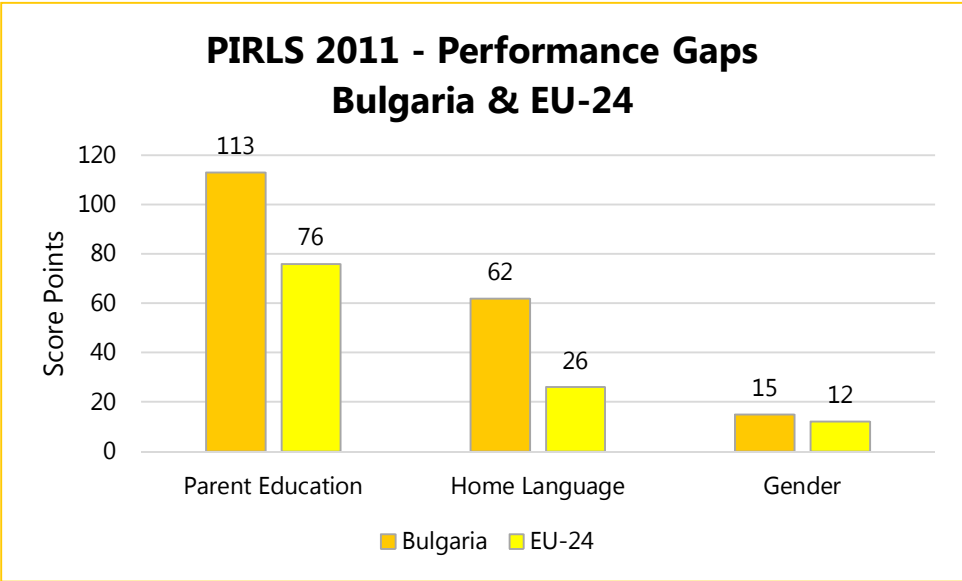
Table 7: Trends in Performance by Gender 2001-2011 (Overall Scale)

	Bulgaria			EU		
	Girls	Boys	Girls-Boys	Girls	Boys	Girls-Boys
2011	539	525	15	541	529	12
2006	558	537	21	541	528	13
2001	562	538	24	542	525	17

Significant differences in **bold**

Figure 1 below summarises the differences in performance between students in Bulgaria and on average across the participating EU countries on measures of Parent’s Education, Language Spoken at Home and Gender.

Figure 1: Performance Gaps –, Education and Language Spoken at Home



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

Attitudes to Reading

There was a difference of 53 points between the top and bottom quartiles of the like Reading Scale in Bulgaria in 2011 (Table 8). On average across the EU-24, the difference between students in the top and bottom quarters of the Like Reading scale was 52 points, indicating a similar relationship between liking reading and reading performance in Bulgaria.

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

Like Reading	Overall Reading Score		Difference (Q4-Q1)
	Top Quartile	Bottom Quartile	
Bulgaria	562	510	53
EU-24	563	511	52

Significant differences in **bold**

Students in Bulgaria in the top quarter of the Confidence in Reading scale achieved a mean score (573) that was some 92 points higher than students in the bottom quarter (481) (Table 9). The average difference across the EU-24 was 80 points, again indicating a relatively stronger relationship between Confidence and performance in Bulgaria.

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

Confidence in Reading	Overall Reading Score		
	Top Quartile	Bottom Quartile	Difference (Q4-Q1)
Bulgaria	573	481	92
EU-24	570	490	80

Significant differences in **bold**

4.2 Performance Data for Adolescents

The performance data are derived from the OECD PISA study.

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

Bulgaria has participated in PISA since 2000. It is therefore possible to describe the change in reading performance over twelve years on average, according to different characteristics of the readers. In PISA 2012, Bulgaria performed significantly below the average across the participating EU countries, by 53 score points, which is equivalent to almost one and one-half year of schooling (Table 10).

Table 10: Reading performance in PISA 2012

	Mean	S.E.
Bulgaria	436	(6.0)
EU-27	489	(0.6)

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

Table 11 below shows the reading performance of students in Bulgaria in the 2000, 2009 and 2012 PISA assessments and the corresponding EU-27 averages. Reading performance of students in Bulgaria improved marginally, although not significantly, between 2000 and 2012.

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

	2000		2009		2012		Change 2000–2009		Change 2009–2012		Change 2000–2012	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
Bulgaria	430	(4.9)	429	(6.7)	436	(6.0)	-1	(9.6)	7	(9.4)	6	(9.8)
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 PISA 2012, the spread of achievement between those students who performed in the 10th and 90th percentiles in Bulgaria was significantly greater than on average across the participating EU countries (Table 12). For girls in Bulgaria, the spread of achievement was 279 compared with 230 for the EU-27 countries, a difference of 49 score points. Similarly, the spread of achievement for boys in Bulgaria was higher (310) than the EU-27 average (259), by 51 score points. In comparison to the average across the participating EU countries, the difference between best-performing and least performing students (90th and 10th percentiles) is relatively high in Bulgaria.

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

	Difference 90 th –10 th for all students		Difference 90 th –10 th for girls		Difference 90 th –10 th for boys	
	Score diff.	S.E.	Score diff.	S.E.	Score diff.	S.E.
Bulgaria	310	(8.4)	279	(7.0)	310	(9.2)
EU-27	251	(1.3)	230	(1.2)	259	(1.6)

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

In Bulgaria, the proportion of high performing students is relatively low while the rates of low performing students are relatively high, compared to the EU-27 average (Table 13). The percentage of low performing students in Bulgaria (39.4%) is twice that on average across the EU-27 (19.7%). Performance of students in Bulgaria appears to be clustered in the lower levels, which is consistent with the country's overall lower mean in reading performance, compared to the EU-27 average. This indicates that students in Bulgaria are less proficient readers, and thus, less able to deal with complex texts and achieve a deep understanding, than EU-27 averages.

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

	Below level 2		Levels 5 and 6	
	%	S.E.	%	S.E.
Bulgaria	39.4	(2.2)	4,3	(0.6)
EU-27	19.7	(0.2)	7,0	(0.1)

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

Unfortunately, the proportion of students performing below level 2 has not improved since Bulgaria joined PISA in 2000 (Table 14). Overall between 2000 and 2012, the proportion of low performing students has remained relatively stable, with a negligible decrease of less than 1%. However, the trends are not even across gender. The proportion of low performing female students decreased slightly, by 2.8%, whereas the proportion of low performing male students increasing by, albeit a negligible, 0.6%.

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

	Proportion of students below level 2 in reading					
	All students		Girls		Boys	
	%	S.E.	%	S.E.	%	S.E.
2000	40.3	(2.1)	29.8	(2.3)	50.3	(2.4)
2009	41.0	(2.6)	29.2	(2.2)	52.0	(3.0)
2012	39.4	(2.2)	27.0	(2.1)	50.9	(2.4)

Significant differences between assessment cycles in **bold**

4.2.2 Gaps in literacy

Socio-Economic Status

In Bulgaria, the gap in reading performance according to the students' socioeconomic background is more pronounced than on average across the participating EU countries, by 41 score points (Table 15). The gap between those in the bottom and top national quarters of the PISA index of economic, social and cultural status in Bulgaria is 130 points – which is equivalent to more than three years of schooling-between the quarter of the most socially privileged and the quarter least socially-privileged students. Thus, these figures indicate that Bulgaria performs less well and is also less equitable than on average across the EU-26.

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

	Score diff.	S.E.
Bulgaria	130	8.5
EU-26	89	0.9

Significant differences in reading performance between bottom and top national quarters in **bold**

Migration

In PISA 2009, the percentage of students in Bulgaria with an immigrant background was very low (0.5%), considerably less than the EU-26 average, and far too low to compute a reliable performance score for this group (Table 16).

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

	Native students				Students with an immigrant background (first- or second-generation)				Difference in reading performance between native and students with an immigrant background	
	Percentage of students	S.E.	Performance on the reading scale		Percentage of students	S.E.	Performance on the reading scale		Score diff.	S.E.
			Mean	S.E.			Mean	S.E.		
Bulgaria	99.5	(0.1)	433	(6.7)	0.5	(0.1)	-	-	-	-
EU-26	91.7	(0.0)	490	(0.4)	8.3	(0.0)	452	(6.4)	38	(6.4)

Language Spoken at home

In PISA 2012, 11% of students in Bulgaria did not speak the language of the test at home, compared to 13% on average across the EU-27. The gap in performance between those who did and did not speak the test language at home was considerably higher in Bulgaria (102 score points) than the EU-27 average (54), by 48 score points. This gap is equivalent to two and a half years of schooling. Taken in conjunction with Bulgaria's wide performance gap according to socio-economic status, Language Spoken at Home may be a key contributing factor to the country's relatively low overall mean in reading performance.

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

	Speak test language at home				Speak another language at home				Difference in reading according to language spoken at home	
	Percentage of students	S.E.	Performance on the reading scale		Percentage of students	S.E.	Performance on the reading scale		Score dif.	S.E.
			Mean	S.E.			Mean	S.E.		
Bulgaria	89.1	(1.7)	444	(6.5)	10.9	(1.7)	359	(12.8)	102	(10.1)
EU-27	86.7	(0.02)	494	(0.4)	13.3	(0.02)	441	(5.4)	54	(5.4)

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

Gender

In PISA 2009, similar to the majority of countries, girls in Bulgaria significantly outperformed boys. Gender differences in reading performance was higher in Bulgaria than on average across the participating EU countries (Table 18). On average, girls in Bulgaria performed 61 score points higher than boys, which is equivalent to one and one-half year of additional schooling.

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

	Boys		Girls		Difference (G – B)	
	Mean	S.E.	Mean	S.E.	Score diff.	S.E.
Bulgaria	400	(7.3)	461	(5.8)	61	(4.7)
EU-26	463	(0.5)	506	(0.4)	44	(0.5)

Significant differences between boys and girls in **bold**

Table 19 shows the variation in trends in reading performance between girls and boys in Bulgaria, between 2000 and 2012. Girls' reading performance in Bulgaria improved by 17 score points over the 3 assessment cycles, whereas the boys' performance in reading decreased marginally, by 4 score points. The trend was somewhat similar across the EU-27 countries on average: between 2000 and 2012 the girls' performance increased by 5 score points while the boys' decreased by the same value.

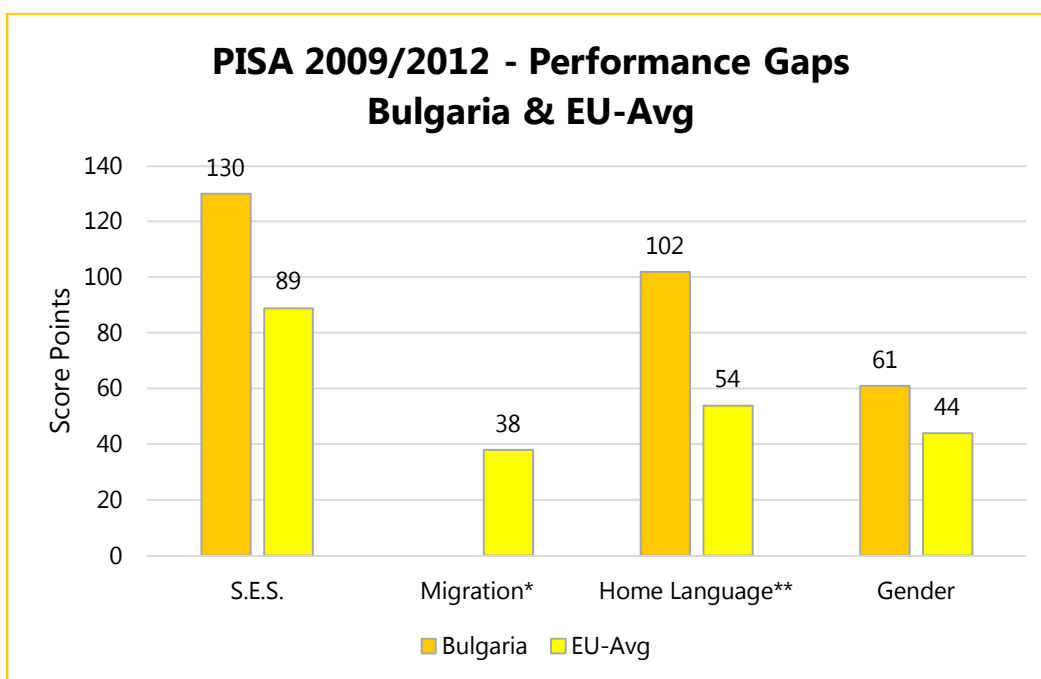
Table 19: Trends in reading performance by gender – PISA 2000-2012

	Bulgaria				EU-27			
	Girls		Boys		Girls		Boys	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
2000	455	(6,3)	407	(4,9)	506*	(0,8)	473*	(0,9)
2009	461	(5,8)	400	(7,3)	507**	(0,7)	464**	(0,8)
2012	472	(5,7)	403	(6,4)	511***	(0,6)	468***	(0,8)

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

Figure 2 below summarises the differences in performance between students in Bulgaria and on average across the participating EU countries on measures of Socio-Economic Status, Immigrant Background, Language Spoken at Home and Gender.

Figure 2: Performance Gaps: SES, Migration, Language Spoken at Home and Gender



SES: Top – Bottom national quarters of the PISA index of economic, social and cultural status; Migration* (Insufficient data to compute score for Bulgaria): Native - Students with an immigrant background; Home Language** (Data from PISA 2012): Student speaks language of the test at home always - sometimes/never; Gender: Girl – Boy

Reading engagement and reading literacy

In Bulgaria, students who reported being highly engaged in reading (top quarter) performed 96 score points higher than those who reported being poorly engaged (bottom quarter) in that activity (Table 20). This gap is equivalent to roughly two years and a half of additional schooling. Not surprisingly, students who report being engaged in reading perform better in the PISA test. The difference between the most and the least engaged readers in Bulgaria is similar to the EU-26 average.

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

	Low quarter		Top quarter		Difference
	Mean	S.E.	Mean	S.E.	
Bulgaria	391	(6,3)	487	(7,8)	96
EU-26	444	(0,8)	543	(0,8)	99

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

Additionally, results from PISA 2009 found that in Bulgaria there was a gap of 111 score points between students who knew which strategies were the most efficient to understand and remember a text and those who had a limited knowledge of effective strategies (Table 3.22). This gap is equivalent to approximately three years of schooling. On average, across the participating EU countries, the gap

was somewhat lower (98 score points). This difference reflects how closely reading proficiency and awareness of efficient reading strategies are linked.

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

	Low quarter		Top quarter		Difference
	Mean	S.E.	Mean	S.E.	
Bulgaria	374	(5,9)	485	(6,8)	111
EU-26	433	(0.8)	531	(0.8)	98

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

Furthermore, in Bulgaria, students who knew which strategies were the most efficient to summarize a text performed 125 score points higher than those who had a limited knowledge of the most effective strategies (Table 22). This gap is equivalent to three years of additional schooling. The corresponding average across the EU-26 was considerably lower, by 35 score points lower (90 score points). Again, this difference reflects how closely reading proficiency and awareness of efficient reading strategies are linked.

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

	Low quarter		Top quarter		Difference
	Mean	S.E.	Mean	S.E.	
Bulgaria	369	(4,7)	494	(6,8)	125
EU-26	440	(0.8)	530	(0.7)	90

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

5 Policy areas

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

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

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

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

5.1 Creating a literate environment for children and adolescents

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

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

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

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

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

Adolescence is a crucial phase in life where young people develop long-term *identities and self-concepts* which include media preferences and practices (*media identity*). In this perspective, it is of

great importance that families, schools and communities offer young people rich opportunities to encounter the *culture of reading* and develop a stable *self-concept as a reader/writer* and member of a literary culture. This includes access to a broad variety of reading materials (in print and electronic forms) and stimulating literate environments in and outside of schools; it also includes opportunities to get actively involved in engaging with texts, and communicating, reflecting on and exchanging ideas about texts with peers and ‘competent others’, such as teachers or parents (Ibid., pp. 45f).

5.1.1 Providing a literate environment at home

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

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

Parental attitudes to reading

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

- Like: 35.8% (European average 35.3 %)
- Somewhat like: 48.7% (European average 52.6 %)
- Do not like: 15.5% (European average 17.9 %)

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

Compared to the European average, the number of pupils in Bulgaria whose parents have positive attitudes towards reading (like or somewhat like reading) is slightly lower than the EU average. The importance of parental attitudes to reading is shown by the fact that in Bulgaria there are huge differences in reading performance at grade 4 between children whose parents like to read (average achievement 563) and those who do not (average achievement 482).

Home Educational Resources

In PIRLS 2011 thirty-nine percent of parents in Bulgaria reported having few home resources for learning – well above the EU Average of 25% (Table 23). Similarly, a 9 percentage point gap between the EU-24 Average (25) for many resources and the Bulgarian average (16) suggests that pupils in Bulgaria have less access to home resources.

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

Level of Home Resources	Few Resources		Many Resources		Difference (Many - Few)
	%	Mean	%	Mean	
Bulgaria	39	491	16	593	102
EU-24	25	495	25	573	79

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

Students in Bulgaria at the bottom quartile of the PIRLS home resources scale (which is based on number of books at home, number of children’s books at home, access to a quiet room to study, Internet access, and parent education and job status) had a mean score on PIRLS reading literacy that was significantly lower, by 110.0 points, compared with those who in the top quartile. The corresponding difference on average across the EU-24 was 78.8, indicating that the association between home resources and reading achievement is somewhat stronger in Bulgaria than on average across the EU-24.

Number of (children’s) books in the home

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

The PIRLS 2011 database provides the figures below about the number of children’s books in the home:

- 0-10: 30.0% (European average 11.8%)
- 11-25: 27.3% (European average 19.7%)
- 26-50: 26.1% (European average 29.4%)
- 51-100: 10.8% (European average 23.4%)
- >100: 5.0% (European average 15.7%).

Compared to the European average (for an overview of European countries see table B2 in Appendix B), the availability of children's books in the home is rather low in Bulgaria.

In Bulgaria, 27% of pupils reporting having 10 or fewer books at home, which is well above the EU-24 average of 11% (Table 24). Eleven percent of pupils in Bulgaria reported having over 200 books, and this is very close to the EU-24 country average of 12%. The achievement gap between those with 0-10 books and those with 200+ books is 92 points. This is greater than the EU average of 82 points (ELINET PIRLS Appendix, Table E1).

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

Books in the Home	None or Few Books (0-10)		More than 200 Books		Mean Score Difference (More than 200 – None or few)
	Percent of Students	Mean Reading Score	Percent of Students	Mean Reading Score	
Bulgaria	27	479	11	571	92
EU-24	11	482	12	563	82

Significant differences in **bold**.

Challenges: The large proportion of students in Bulgaria with few books at home and with low levels of home educational resources for learning is a matter of concern. Lack of home educational resources could have a negative impact on future performance as students who do not experience a home environment that is conducive to learning may struggle as reading content becomes more complex and abstract.

Early Literacy Activity Scale

PIRLS 2011 reports the percentages of students whose parents (often, never or almost never) engaged in literacy-relevant activities with them before the beginning of primary school (Mullis et al. 2012a, exhibit 4.6 - Early Literacy Activities Before Beginning Primary School, p. 126). Nine activities are considered: reading books, telling stories, singing songs, playing with alphabet toys, talking about things done, talking about things read, playing word games, writing letters or words, reading signs and labels aloud.

The figures for Bulgaria in the composite score for all these activities are below (for an overview of European countries see table B3 in Appendix B):

- Often: 39.3% (European average 40.7%)
- Sometimes: 51.3% (European average 57.4)
- Never or almost never: 9.4% (European average 1.9%).

This means that, in Bulgaria, there are more parents (9%) 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 559, as compared with 529 and 455 respectively for those pupils who sometimes or never or almost never were engaged in these activities with their parents before the beginning of primary school. These figures 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 is a composite score, it is of interest to look at single items. If only the category “often” is considered, the percentage of pupils in Bulgaria whose parents engaged in literacy-related activities with them before the beginning of primary school is comparatively low compared with the European average:

- read books to them often: 40.6% (European average 58.4 %)
- told stories to them often: 46.9% (European average 51.5%)

- sang songs to them often: 46.9% (European average 50.6%)
- played games involving shapes (toys and puzzles) with them often: 60.6% (European average 63.5%). (For more details and an overview of European countries see table B 4 – B 7 in Appendix B).

In Bulgaria, fewer parents (41%) than the EU-average (58%) often read to their children before the beginning of primary school (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 only 40 percent of the children are often read to by their parents. There is a need for programmes to raise awareness of all parents that literacy is a key to learning and life chances, and that the basis for good literacy achievement is laid in early childhood.

5.1.2 Providing a literate environment in school

Reading for pleasure

According to PIRLS 2011 Encyclopedia, Bulgaria belongs to the countries where reading for enjoyment is given some emphasis in the intended Language/Reading curriculum (Mullis et al. 2012b, Vol.1, exhibit 9, p. 36).

Resources teachers use for teaching reading

Since the type of reading materials teachers use in literacy instruction may influence the motivation of students, it is of interest to have a closer look at this matter. PIRLS 2011 provides some data. (Mullis et al. 2012a, exh. 8.12, p. 236, EU averages obtained from PIRLS 2011 database, s. Table H1 in Appendix C). There was considerable variation in the types of materials used as a basis for reading instruction versus being considered as supplementary.

Just 4 percent of students in Bulgaria are taught by teachers who use a variety of children’s books as a basis for reading instruction, compared with an EU average of 29%, 38% in Ireland and 83% in England. Nearly all pupils in Grade 4 in Bulgaria (98%) are taught by teachers who use textbooks as the basis of reading instruction, compared with an EU average of 70%. According to the PIRLS data no computer software is used as a basis of reading instruction –while 20 percent of students in Bulgaria use computer software as a supplement, compared with 47% on average across EU countries, 60% in Finland and 71% in Denmark (Mullis et al. 2012a, exh. 8.12, p. 236, EU averages obtained from Table H1 in Appendix C).

Availability and use of classroom library

Based on data provided by their teachers, PIRLS shows that 48% of pupils in Bulgaria were in classrooms which had class libraries – well below the corresponding EU-24 average of 73% (ELINET PIRLS 2011 Appendix, Table H2).

Challenges: In the last years many libraries in Bulgarian schools, especially in the small settlements, were closed. Three main problems can be identified for Bulgaria:

- 1) Lack of sustainable political support for modernisation of school libraries,
- 2) Lack of specific strategies for development of school libraries,

- 3) Lack of financial support for buying new books or organising initiatives for promoting and encouraging reading and literacy

Traditional school libraries should be transformed into modern interactive spaces for reading, meetings and discussions. The broader understanding of literacy – not just as a simple process of acquiring basic cognitive skills but also to use them for critical personal and social reflection - requires innovative approaches in creating a literate environment, including environment in schools: establishing sustainable partnerships among schools, libraries, bookshops, NGOs in order to promote, support and motivate students to read. How the school library looks and how teachers and librarians interact with students plays a critical role in engaging students with reading. Thus, creating reading corners in the schools would encourage students not only to read, but also to share and debate on different topics.

5.1.3 Creating a digital environment

Digital environment of primary students

A literate environment can also be created by incorporating digital devices into the school environment.

According to teachers' reports, 17% of students in Bulgaria have a computer available for reading lessons, compared to the EU-average of 45% (ELINET PIRLS 2011 Appendix Table I6). Just 15.3% use 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.

According to Mavrodieva and Angelova (2012), ICT has been successfully introduced in nearly all Bulgarian schools as part of compulsory instruction in Grades 1-4. However, they also note that "the use of modern technologies is still not a popular supplemental tool in reading instruction in primary grades" (p. 115).

Digital environment of secondary students

In July 2014, the Bulgarian government adopted a Strategy for Effective Implementation of ICT in Education and Science 2014-2020.

The Strategy was developed with a package of specific measures to create a unified system for school education, higher education and science.

Bulgaria has taken actions to strengthen IT education in schools and improve digital literacy.

Main objectives of the Strategy are creating equal opportunities for everyone to obtain a quality education corresponding to the modern requirements and trends through using modern ICT; forming of personalities adapted to life in the information society; implementing a smooth, efficient and manageable transition of society to economy of knowledge¹⁴.

Below are some basic data related to the digital environment in Bulgarian schools from an online research conducted in several schools of different types (state or municipal, primary or secondary) and from bigger and smaller towns or capital of Bulgaria within a project "Implementation of ICT-based

¹⁴ See: National Strategy for implementation of ICT in education and science 2014-2020 available at: <http://www.mon.bg/?go=page&pageId=74&subpageId=143>.

teaching in Bulgarian schools", partly supported by the project AComIn "Advanced Computing for Innovation", grant 316087, funded by the European Commission in FP7 Capacity Programme.

The report is prepared by a team of experts from the Institute of Information and Communication Technologies, Bulgarian Academy of Sciences.

Since the launch of the National strategy for the introduction of ICT in education in Bulgaria in early 2000, there has been significant progress in all determined priority aspects – modernisation of educational environment, development of digital content and implementation of innovative technology in teaching methods and educational process, improving teachers' competence to use ICT for teaching and learning.

In addition, almost all schools are provided with internet connection. Most of the teachers have acquired basic levels of computer literacy. They usually develop skills to use word processing and presentation software, e-mail and internet browsers. The teachers themselves assessed these competences positively

Usage of ICT in teachers' work

As stated by the survey, more than 55% of the respondents have used ICT resources specifically designed for a particular subject, which demonstrates that ICT offer teachers a powerful set of tools to support educational process.

In addition, nearly 18% of the teachers have information about such resources, but still do not use them in their practice. Only 20% of teachers do not know about ICT-based educational products, which can support their teaching process.

Furthermore, the tendency for teachers to use ICT in their work seems to be increasing – almost 46% use technical tools and applications and nearly 36% use learning resources.

Usually teachers use ICT when they prepare their lessons (34% almost always and over 40% often) and when search for additional resources (36% almost always and about 48% often).

A considerable part (almost 60%) of the teachers use ICT both in classroom work (over 29% almost always and 34% often) and for exercises (27% almost always and about 32% – often).

Very few respondents believe that ICT are useful in preparing exams - about 23% use them every day or often, while in composing tests over 45% use computer-based resources every day/often.

Another activity where teachers prefer to use ICT is making projects and presentations (over 27 % almost always and 18% often).

Usage of ICT in different learning contexts

Another issue on which teachers were asked to comment was to determine the learning contexts appropriate for ICT use. Most of the respondents admit that ICT should be used in class lessons (77%), at home (61%) or in extracurricular activities (52%). Another significant area for ICT implementation is the sphere of achieving specific learning goals – about 39% or in alternative education forms – about 41%.

Main obstacles to use ICT tools in the school practice

Some of the most significant obstacles, which draw our attention, are the lack of teachers' training (43%), the lack of technical resources (39%) and the lack of appropriate products (36%) in the schools.

According to the survey, almost 80% of teachers declare relatively high basic computer skills in e-mail, word processing and finding learning resources on the internet (more than 60% are self-assured, while others are sure to some extent). These results don't correspond to those in our survey, where 43% of respondents declare lack of teachers' training as a primary obstacle to the implementation of ICT in schools.

Application of ICT tools in education

The usage of modern technologies in the educational process influences the development of students as individuals and members of the society. It is important for teachers to incorporate a range of ICT-based teaching and learning resources into their teaching practices, because such resources usually are easily adaptable according to the individual needs and preferences of the students. In addition, ICT educational tools and resources offer teachers and learners an enriched learning environment which supports a different curriculum, teaching methods and objectives (Terzieva,V., Paunova,E., Kademova-Katzarova,P.and Stoimenova,Y. (2014)).

Challenges: In general, the teaching methods applied in Bulgarian schools are not relevant to the new technologies already available. The methodology is out-of-date and does not meet the expectations and needs of today's students. That is one of the reasons for absence from school, lack of motivation for studying and even early school leaving (in Bulgaria, for 2012, the share of early school leavers is 12.5%). Radical changes and innovations in methodology and approach are needed to be introduced to the entire school system.

5.1.4 The role of public libraries in reading promotion

Public libraries are an important agent in reading promotion. Public libraries are key players in reading promotion, providing an attractive learning environment for children and adolescents, students and families.

Public libraries in Bulgaria invite people in local communities to read books and to use computers and the Internet.

The Ministry of Culture is responsible for the coordination and methodological guidance of Bulgaria's public library network through the regional libraries. To this network belong 27 regional libraries (serving the 28 regions) and 19 municipal libraries, the vast majority are around 3000 chitalishte libraries. The chitalishte institutions are a unique Bulgarian phenomenon, which dates back to the 19th century. Initially organised and supported by their communities as libraries, reading-rooms and social spaces, with time the chitalishte developed as local educational and cultural institutions. There is a chitalishte in every Bulgarian town and almost in every village.

According to data of NSI, in 2014, there were 48 libraries with a library collection of over 200 thousand library units, or 2 more than the previous year. The library collection contained 33,595,000 units (books, continued editions - newspapers, magazines, bulletins and other).

In 2014, there were 250,000 registered readers (library users), which was 16.3% more in comparison with the previous year. The visitors to libraries increased by 21.6% or 4,009,000. The total library loan collection per reader decreased to 27 units by 29 in 2013¹⁵.

In 2009, public libraries in Bulgaria - through Glob@l libraries - Bulgaria Programme became a part of the Global Libraries Initiative of the Bill & Melinda Gates Foundation aimed to open the world of knowledge, information, and opportunity to many more people. The initiative is helping transform public libraries into vital resources that can help improve the lives of millions of people.

Glob@l Libraries - Bulgaria Programme (2009-2013) was a joint initiative of the Bulgarian Ministry of Culture, the United Nations Development Programme, the Bulgarian Ministry of Transport, Information Technology and Communications, the National Association of Municipalities in Bulgaria and the Bulgarian Library and Information Association, supported by a USD 15 million grant from the Bill & Melinda Gates Foundation.

Glob@l Libraries - Bulgaria has been established to facilitate access to information, knowledge, communication, e-contents and community services through Bulgaria's public libraries network.

Within five years (2009-2013), the programme increased library usage throughout the country and helped Bulgarian citizens integrate into the global information society. Public libraries working under the programme have expanded their reach and activities, becoming more attractive places for visitors and playing an increasingly important local development role. The programme supported fund-raising and advocacy to help public libraries gain recognition as agents of change and knowledge resource centres.

The programme fosters the development of human capital, institutional capacity and digital inclusion of Bulgarian citizens, particularly in smaller settlements.

As a result of the combined efforts of local communities and the key programme partners, the program helped modernise Bulgaria's public libraries and established in the public space the image of the new library - one that provides an innovative package of services including computers and access to the Internet for users, on-line information, local e-content, computer and information literacy training for library visitors, implementation of community projects, space for community work and events, response to specific user needs (children, unemployed people, entrepreneurs); as well as a welcoming environment and client-oriented librarians.

Approximately 5,000 computer stations and additional peripheral equipment were installed in 960 public libraries in 911 towns and villages, in 260 municipalities (out of 264) of Bulgaria; 3,740 library workers from 1,600+ libraries were trained in IT skills, provision of modern library services, library management and advocacy. New ICT based services in 8 thematic areas (e-education, e-health, e-employment, e-culture, e-entertainment, e-government, e-communication, e-business) were introduced to citizens.

The final assessment study shows that as a result of the programme, the number of visits to libraries has increased (over 5,900,000 library visits in 2013, which is 35% growth on visits from 2009 to 2013, and 4 times more internet users in public libraries.); internet usage in the libraries has been encouraged; usage of technologies has been stimulated; users have been motivated to use more services at the libraries.

¹⁵ See: http://www.nsi.bg/sites/default/files/files/pressreleases/Culture2014_en_6E286MU.pdf.

Among the top e-services is e-education for young people. A 2014 survey has shown that two-thirds of students, using public libraries, agreed that their academic performance has increased as a result of their use of library facilities¹⁶.

Challenges: Lack of a sustainable national policy for development of Bulgarian libraries is a serious challenge on their way to function not only as reading centres, but also as information, communication and life-long learning centres for local communities.

Insufficient funding is an obstacle for purchasing new books.

Another challenge is insufficient capacity of libraries as institutions to manage advocacy campaigns, fundraising, to diversify their income sources (incl. project-based).

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

Outlined below are some initiatives and programmes for attracting parents and children to libraries and bookshops and fostering reading engagement among children and adolescents in Bulgaria:

“Summer reading is Fun”

“Summer Reading is Fun” is the title of an initiative with national coverage for children, held annually during the summer school vacation (1st of June – 15th of September).

The summer reading events are held by the web portal for children Az-deteto.bg (Me-the child.bg).

The objective is to promote reading as entertainment in and out of school among children of all age groups – from those in the first grade to teenagers. At the beginning of the summer, a series of events is held in several towns across Bulgaria to present the initiative and encourage children to register the books they read in online readers’ diaries at Az-deteto.bg.

At the end of the summer, the data on registered books is gathered and Az-deteto.bg awards children and schools who have read the largest amount of books. GLB provides presents for children who are recognised as “best readers” and helps in the online promotion of the initiative.

The initiative is conducted in partnership with regional and local libraries and secondary schools which organise events to introduce children in their local communities to the Az-deteto.bg online readers’ diary and help them in choosing books to read and register.

“Marathon of reading”

Since 2006, the Bulgarian Library and Information Association (BLIA) conducts a National Library Week (NLW).

The idea is to focus the attention of politicians, media, general public and the readers on libraries. Every year, under a different motto, BLIA organises an intense programme of discussions on the future of libraries, meetings with Members of the Parliament, mayors, members of city councils and media.

During the NLW many Bulgarian libraries and librarians organise and develop different initiatives, encouraging librarians to work with local authorities and NGOs for the visibility of libraries in the community and for promoting reading for pleasure among different target groups, including adults.

¹⁶ See: www.glibulgaria.bg.

Exhibitions, meetings with authors, and numerous other initiatives aimed at specific target groups also take place.

Based on this campaign, BLIA started to organise annual "Reading Marathons" – one of the most significant national initiatives.

In recent years, the "Reading Marathon" is lasting longer than three full weeks. Many libraries in the country, municipalities, NGOs, local and national media, schools and museums participate, hosting a variety of programmes for children and adults.

"Reading Bulgaria"

One of the most interesting initiatives - "Reading Bulgaria", took place for the first time in 2006. Starting as a several days event, in the last years it continued over three full weeks. Besides libraries, the participants include municipalities, members of Bulgarian Book Association, local and national media, and in some cities – schools and museums, where a variety of programmes for children and teenagers takes place.

The primary goal of this campaign was to create basic structures for adequate and effective encouragement of reading.

In the days of the campaign, mayors, writers and other prominent figures, read parts of their favourite books in the library, schools and kindergardens or on the "literary tram", which tours the streets.

Under the mottos "**Kids read for kids**", "**Kids read for grandparents**", "**Grannies read for children**", readers of all ages, kids and school classes read poems and short stories and participate in activities such as competitions for best reading performance and quizzes.

"Read with me"

Another national campaign encouraging reading for pleasure, "Read with me", is initiated under the patronage of the President of the Republic of Bulgaria. It is supported by the Ministry of Education and Science, the Ministry of Culture, Bulgarian Book Association, the Union of Community Centres, Bulgarian Library and Information Association, the websites "I Read", "Knigolandia", "Love Theatre", "BG-Mamma" etc. During the campaign the President of the Republic of Bulgaria, the Prime Minister and other high-level officials read for pleasure, in public institutions and spaces, extracts of their favourite books - together with authors, publishers, and librarians.

"Travelling boxes"

The Bulgarian Library and Information Association, in collaboration with the Foundation "Detski knigi" (Books for kids), collect books for kids from sponsors (publishers, private persons etc.). The books are sent to libraries in the country in special boxes under the programme "Travelling boxes".

For several years BLIA has been a partner of the Goethe Institute for programmes for promoting reading to the youngest kids.

Occasionally, local campaigns for collecting used books are organised aimed at delivering donations to schools and orphanages.

“Books for waste”

This campaign is an innovative approach that brings together reading and recycling, as a responsible attitude to the environment. People of various ages collect and bring plastic waste and get books in return. The campaign is organised by the Credo Bonum Foundation and their partners since 2013. Four days in 2015, in different towns of the country, the partners are giving books for 1 kg plastic waste. A new campaign is planned again for 2016¹⁷.

Lions Clubs in Bulgaria have developed a nation-wide programme of events called **Reading Action Program**. The Reading Action Program is a 10-year commitment of Lions Clubs around the world for increasing reading and literacy. Lions Clubs Bulgaria organised projects and activities that underline the importance of reading and address specific needs related to illiteracy within their own communities.

www.ucha.se

In addition to the above programmes and initiatives, a very attractive web platform www.ucha.se with educational videos and exercises in every subject was developed as a private initiative. Through this platform, the students can study, find and discover everything that they could not understand in school. Ucha.se offers attractive reading materials for children and adolescents and motivates them to explore new opportunities for reading.

Read me

This is an informal initiative which started as a single classroom activity of a BulRA member but quickly expanded to a school and city level to reach a much wider scope involving close to 500 individuals, teachers mainly, from schools and towns all over the country. The initiator of the group identified their goal as creating a platform for sharing ideas oriented to encouraging reading among young students. The participants share feedback from their activities illustrated with pictures, comment on other activities; students from a school/town challenge other students to various book/reading oriented activities. BulRA strongly supports this network and encourages the initiator and participants to summarise good practice so that it will continue and expand¹⁸.

¹⁷ See: <http://www.credobonum.bg/bg/news/928/KNIGI-ZA-SMET-OTNOVO-V-SOFIYa-NA-11-MAJ-ZA-PRAV-PAT-V-BURGAS-I-VARNA-NA-17-I-18-MAJ>.

¹⁸ See: <https://www.facebook.com/groups/432285836963689/>.

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 labour market participation; increased fertility rates; and better social and economic development for the society at large” (OECD 2012 *Starting Strong III*, p. 9). In all European countries pre-primary education is an important part of political reflection and action.

The EU High Level Group of Experts on Literacy stated:

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

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

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 Bulgaria is 0.92%. 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).

Challenge: The OECD recommends that a public investment of 1% of GDP is the minimum required to ensure provision of quality early childhood care and education services. Thus Bulgaria could consider a higher level of ECD financing to ensure the needs of young children are met.

The education expenditures in Bulgaria have registered a slight drop in recent years, remaining far below the EU average. Bulgaria's government expenditure on education amounted to a mere 3.6% of GDP in 2011 – this is the second-lowest in the EU and well below the EU average (5.3% for EU27). It has substantially decreased from 4.3% in 2009 and is expected to decrease by a further 0.2% points by 2016 and become 3.4% of GDP (Source: Convergence Programme (2013-2016)¹⁹).

Public expenditure per student is also among the lowest in EU. Investment in a number of areas, including early childhood care and education, basic skills, early leavers from education and training and higher education has decreased in comparison to the EU average²⁰.

Ratio of children to teachers in pre-primary school

No data are available concerning the ratio. According to the group size regulations the maximum number of children per group for the 4 and 5 year olds is 22. The financing institutions can increase the number of children in the group up to 10 % of the specified number. According to the National Statistical Institute, in 2014/15, the average number of children in one group was 24 (European Commission/EACEA/Eurydice, 2015, p. 14).

Percentage of males among preschool teachers

According to Pordata (2014), 0.2% of the pre-primary teachers in Bulgaria 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).

The data on gender ratio in education professionals²¹ in Bulgaria show that women dominate, particularly in primary and pre-primary education. There is a high feminisation of a pre-school teacher profession. Female teachers were largely over-represented in the early education stages. Bulgaria is among the ten EU member states, where the share of female teachers at pre-primary level exceeded 99%.

Table 25: Share of female teaching staff by education level (%), 2013:

	Total (all education levels)	Pre - primary education	Primary education	Secondary education	Tertiary education
Bulgaria	77.8	99.8	94.3	79.2	47.8

Preschool teachers' qualifications

The minimum required level to become a qualified teacher is Bachelor level (ISCED 5). Length of training is 4 years (European Commission/ EACEA/Eurydice/Eurostat 2014, p. 101).

Continuing Professional Development is obligatory in Bulgaria (Eurostat 2014, pp. 104–105).

Challenges: The average age of the teaching staff in preschool education is very high. More than half of the teaching staff is aged 50 or over in pre-primary education in Bulgaria. This might make it

¹⁹ See: http://ec.europa.eu/europe2020/pdf/nd/cp2013_bulgaria_en.pdf.

²⁰ See: http://ec.europa.eu/education/tools/docs/2014/monitor2014-bg_en.pdf

²¹ See: <http://ec.europa.eu/eurostat/documents/2995521/7017572/3-02102015-BP-EN.pdf/5a7b5406-4a0d-445b-8fa3-3558a8495020>.

difficult to introduce effectively radical changes. This problem is hard to solve because of two additional complications – the fact that young professionals are not interested to work as teachers in pre-primary education, on one hand, and the low level of payment in the sector (salaries are not adequate to the teacher’s qualification) – on the other.

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 that are sometimes different to those of school children.

The main goal of pre-primary education in Bulgaria is to ensure the child's development by using educational interaction. The ultimate aim of the kindergarten is to offer the necessary conditions for the development of each child’s abilities and to make them ready for school. “The education of children at kindergartens aims to develop vital concepts and practical skills and habits, which are very important for further studying. The successful acquisition of these concepts, skills and habits is guaranteed by a variety of interactive methods and contemporary pedagogical technologies within the expertise of pre-primary teachers”²².

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. (For more information see the frame text of country reports). In our analysis of steering documents we ask whether these components are included in the preschool curriculum.

For the following aspects no information was found: familiarisation with the language of books (e.g. through stories read and told), and concepts of print.

For these components some information was found:

Does the curriculum include emergent literacy? If yes, what are the overall aims?

Children are anticipated to recognise words, write their own name from memory, and draw the forms of letters (Eurydice 2011, p. 55). In addition, children use various interactive educational toys and through playful activities learn the letters of the Bulgarian language. The most varied, with a total of eight games is the game "Interactive Primer" (Tsonka & Paisiy 2012).

Engaging and motivating children in literacy-related activities

In Bulgaria the two programmes: “On the School’s Threshold” and “Hand in Hand” anticipate children’s participation in lessons covering several learning areas among which is children’s preparation for reading and writing (Unesco, International Bureau of Education (IBE) 2006, p.6).

²² See: https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Bulgaria:Early_Childhood_Education_and_Care

Providing a literacy-rich environment

The educational process is supported through various teaching materials, learning aids and audiovisual materials (Eurypedia, 2014). Specifically, a series of interactive educational toys in the Bulgarian language for children from six months to six years is provided (Tsonka & Paisiy 2012).

Language awareness

Children should be able to play with language, using nonsense words and rhyming, exploring and experimenting with sounds, words and texts, breaking down speech into small units, blending syllables or sounds in sounds, linking sounds to letters as well as naming and sounding the letters of the alphabet (Eurydice 2011, p. 55-56).

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 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: According to Mavrodieva and Angelova (2012), language instruction in Grade 1 in Bulgaria covers the following basic literacy skills:

- Learning letters and connecting them to sounds
- Learning to read letters, syllables, words and sentences
- Writing parts of letters and whole letters
- Writing syllables, words and sentences.

Formal reading instruction begins in Grade 2, with the focus shifting to higher-level language, sociocultural and communicative competencies. According to Mavrodieva and Angelova (2012), the Bulgarian State Education Content Standards lay out the competencies that students achieve. For example, the following are included among the language, socio-cultural and sociolinguistic competencies that students should have achieved by the end of Grade 4:

- Reading with adequate intonation and comprehension of meaning
- Explaining, asking questions, and replying analytically
- Analysing and comparing literary texts

Planning and creating self-generated written texts. *Instruction 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), only two of these strategies are mentioned in literacy curricula in Bulgaria: drawing inferences, and making connections between parts of a text.

Literacy curricula in secondary schools

Literacy skills in general are addressed mainly in primary school. Afterwards there is no literacy curriculum oriented to the development of reading skills.

Experimental research among 6th graders was carried out in 2013 by the Centre for Control and Assessment of the Quality of School Education²³

The results registered at all three levels (low, intermediate and high) lead to the conclusion that the existing curriculum as a whole (not only for Bulgarian language and literature) does not foster the improvement of reading skills in a way that is statistically significant (p.18).

The researchers conclude also that the existing state educational requirements in Bulgarian language and literature for grade 6 as a whole, and the curriculum based on them, do not assist the development of skills in functional literacy. Therefore, the researchers indicate that the metacognitive skills as the basic element of reading literacy could be realised during the various elective classes financed through various projects (e.g. Programme Success, Operative Programme for HR Development (p.25).

School education provides conditions for mastering the standard (codified) Bulgarian language being the language of instruction at school. The students whose mother tongue is not Bulgarian are entitled to study their native tongue as well at the municipal school with the protection of and controlled by the state.

The primary stage of basic education guarantees the mastering of basic knowledge, skills and competencies, without which successful education at the pre-secondary level is impossible. The tasks of study during this period are related to building initial literacy and further upgrading with skills which presuppose the mastering of both the functional and the key competencies necessary for life in a modern democratic and knowledge-based society.

Through the National Programme *Caring for Every Student*, an individual approach is ensured in the training of every child, as well as additional teaching for children who have difficulties in mastering the core syllabus. During the 2013-2014 school year, additional training was provided to more than **4,000 pupils** at the primary stage of basic education, **2,919** out of whom have increased their achievements.

²³ See: http://www.ckoko.bg/upload/docs/2014-12/Analiz_CKOKUO_FZVC.pdf.

There is a list of projects countrywide that aim at assuring literacy and education for all through integrating children from ethnic minorities in vulnerable communities with early drop outs (e.g. **National programme At school without absences, the National Programme School grid optimization**, projects under Operational Programme *HR Development 2007-2013* /OP HRD, Operation BG051PO001-4.1.06 **Reintegration of dropped-out pupils in the educational system under OP HRD**). However, activities are predominantly within the social sphere, oriented towards encouraging a friendly environment.

The school curricula in Bulgaria miss a strong focus on literacy. In a discussion in April 2016, for the basic level of literacy of students grades 1-4, the Minister of Education registered that, at that stage, the goal is to achieve a basic level of literacy. In grade 7 however, Literature is the only subject studied²⁴.

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 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 and Carstensen 2007). Bulgaria was not included in this analysis, however.

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 Bulgaria spent fewer instructional hours in schools (673 hours per year) compared with students on average across EU-24 countries (850 hours), and allocation of time to teaching the language of the PIRLS test in Bulgaria (186 hours) is also less than on average across EU countries (241 hours), and, at 27% of total instructional time, comes in below the recommended level of 30%. The average number of hours allocated to teaching reading each year in Bulgaria as part of language instruction (56 hours) is below 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 Bulgaria report allocating more time to teaching reading across the curriculum and in reading classes (189) than on average across EU countries (147 hours).

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

²⁴ See: <http://www.mon.bg>.

According to Mavrodieva and Angelova (2012), Bulgarian language and literature receive 6½ hours of classroom instruction per week – two for Bulgarian language, three for literature, and 90 minutes for communication skills (writing and speaking). They also note that Bulgarian legislation recommends an additional 30 minutes per week of home reading.

Activities teachers use to develop students' reading comprehension skills

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

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

- Locate information within the text: 92.0% (EU-24 = 65.5%)
- Identify main ideas of what they have read: 88.8% (EU-24 = 55.5%)
- Explain or support their understanding of what they have read: 87.6% (EU-24 = 61.6%)
- Compare what they have read with experiences they have had: 51.4% (EU-24 = 34.7%)
- Compare what they have read with other things they have read: 40.5% (EU-24 = 22.4%)
- Make predictions about what will happen next in the text: 44.9% (EU-24 = 22.4%)
- Make generalisations and inferences: 89.6% (EU-24 = 36.5%)
- Describe the style or structure of the text: 50.6% (EU-24 = 22.7%)
- Determine the Author's Perspective or Intention: 62.1% (EU-24 = 21.0%)

Bulgaria is well above the EU-24 average on the frequency with which students engage in activities such as locating information in the text, identifying the main idea and explaining or supporting their understanding.

Challenge: PIRLS indicates that reading comprehension strategy instruction is widespread in Bulgarian classrooms. It would be important to evaluate the quality of this instruction, perhaps using qualitative investigative methods and ascertaining which aspects of instruction, if any, might be strengthened. As access to electronic texts increases, an increase in emphasis on comprehension of electronic texts might be warranted.

Instructional practices teachers use to engage students' learning

In PIRLS 2011, teachers were asked a series of questions designed to ascertain the extent to which students are engaged in learning. These included: "I summarise what students should have learned from the lesson"; "I relate the lesson to students' daily lives" and "I use questions to elicit reasons and explanations". Based on a scale summarising frequencies across all six items 90% of students in Bulgaria were deemed to be taught by teachers who implemented instructional practices to engage learning in "most lessons". The corresponding EU-24 average was 70% (ELINET PIRLS 2011 Appendix, Table I2). This points to a high level of engagement

PIRLS also examined engagement in reading lessons from the perspective of students (for an overview of responses in Bulgaria and other European countries S. Table I.7 in Appendix C).

- 71% of students in Bulgaria 'agree a lot' that they like what they read about in school. This is above the corresponding EU-24 average of 46%.
- 75% of students in Bulgaria 'agree a lot' that their teacher gives them interesting things to read, compared with 48% on average across EU countries.

Students in Bulgaria had a mean score of 11.0 on a scale measuring overall student engagement in reading lessons. The average across EU countries is 9.9. A score above 10.5 can be interpreted as indicating that students are 'engaged', while a score of between 7.4 and 10.5 indicates that students are 'somewhat engaged'. Hence, students in Bulgaria are 'engaged' in their reading lessons.

Digital literacy part of the curriculum for primary and secondary schools

IT curriculum for grade 5 was under discussion during November and the beginning of December 2015. It was initiated by the Ministry of Education and Science (MOES), and it is published on the MOES website²⁵. The IT curriculum is described via content/topics, expected results and students' evaluation. For grade 5, it is suggested to cover 34 IT lessons, incl. exercises. The curricula are planned as a basis for further development of IT training in grades 6 and 7.

5.2.4 Early identification of and support for struggling literacy learners

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

Standards as basis of assessment of reading difficulties

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

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

Assessment standards and methods are prescribed by the language/reading curriculum (Mullis, Martin, Minnich et al., 2012, Vol. 1, p. 99, Exhibit 7) in half of the European countries that participated in PIRLS 2011. Bulgaria is identified as a country in which goals and objectives, and instructional methods or

²⁵ See: <http://www.mon.bg/?go=page&pageId=7&subpageId=63>.

processes, but no assessment standards are prescribed in the language/reading curriculum. However, in the PIRLS Encyclopaedia, Mavrodieva and Angelova note (Encyclopaedia, Table I2): “the Center for Control and Assessment of the Quality in School Education has developed standards for classroom assessment for every grade and every subject to increase the quality of the classroom evaluation of students. These standards will be published as a manual for teacher use” (2012, Vol. 1, p. 118).

Mavrodieva and Angelova (2012) note that teachers conduct student evaluations using oral and written examinations as well as non-standardised tests, and that they grade student achievement on a scale ranging from 2–6 points: 6 is excellent, 5 is very good, 4 is good, 3 is satisfactory, and 2 is poor.

How is adolescents’ progress in reading and writing assessed?

At the beginning of the 2006–07 school year, a national assessment was introduced at the fourth grade using standardised tests in four subjects (Bulgarian language and literature, Mathematics, Man and Society, and Man and Nature).

In the following years, the national assessment was extended to include successive grades, so that by the 2009–10 school year, the national assessment was conducted at each of Grades 4–7. Since the 2003–04 school year, a national assessment at the 8th grade has been offered for students with intensive instruction in a foreign language (English, German, French, Spanish, Italian, and Russian). However, at that educational level, no specific attention is paid to reading in the curricula of the above four subjects listed. The same applies to assessments in writing.

In the 2007–08 school year, the state Matura, or national end-of-secondary-school examinations, were introduced after more than 40 years. Students should pass two examinations to receive a secondary education diploma. **Bulgarian language and literature is compulsory**, as is the second examination in one of the following subjects, chosen by the student: Mathematics, Geography, Physics, Chemistry, Biology, History, Philosophy, or a foreign language.

In the 2010–11 school year, following a change in legislation, national assessments were conducted in Grades 4, 7, 8, and 12 (the latter being the end-of-secondary-school examinations). Admission examinations for specialised upper-secondary schools at the end of Grade 7 are now included as non-compulsory portions of the external evaluations of Bulgarian language and Literature, and Mathematics.

As a result of those incoherent changes and lack of specific focus on reading and writing assessment in the curricula, Bulgaria is 47th among 65 developed countries in the world in terms of the functional literacy of 15-year-olds, the PISA survey carried out in 2012 reveals (PISA examines levels in reading literacy, mathematics and science with this year's focus being on mathematics). According to the latest results, 44% of the Bulgarian ninth graders (compared with 41% in 2009) have no key cognitive skills required for their inclusion in the labour market and for their full participation as citizens.

The average result of BG students in reading was 436 points compared to 429 in the previous survey in 2009. Still, Bulgarian ninth graders are seriously lagging behind the OECD average level of 496 points.

At which level (classroom, school, regional, national) is the adolescents' progress in literacy monitored and by whom (teachers, principals, inspectors, other)?

Teachers conduct student evaluations in their classroom.

National evaluation examinations and end-of-secondary-school examinations are conducted using standardised tests developed by experts from the Ministry of Education and Science and the Center for Control and Assessment of the Quality of School Education. Two of the examinations are obligatory – one is defined and that is Bulgarian Language and Literature, and the second one could be chosen amongst mathematics, foreign language, physics and astronomy, biology and health education, chemistry and protection of environment, history and civilization, geography and economics or philosophy. Tests consist of open and closed questions, however those in Bulgarian Language and Literature, history, geography, philosophy, foreign language and mathematics include also solving a task or writing an essay. The examinations are 4 hours long and they take place twice every year – in May and in September, according to preliminary designed scheme.

Screenings for reading competence to identify struggling readers

According to Mavrodieva and Angelova (2012), pre-primary or primary teachers are responsible for identifying students with reading difficulties. Once identified, such students get support, such as individual instruction from the teacher, small group teaching, or various kinds of art therapy. Students who fail to make progress are taught individually by pedagogical, psychological, and medical specialists, and, where relevant, by specialists at therapy and resource centres.

Supporting struggling literacy learners

Number of struggling readers receiving remedial instruction

PIRLS offers some data concerning issues of remedial instruction in primary schools. One question was whether all pupils receive remedial instruction when needed.

Based on a question that class teachers answered in PIRLS 2011, it is estimated that 20.5% of students in Fourth grade in Bulgaria are considered to be in need of remedial reading instruction. It is also estimated by teachers that 18.1% are in receipt of remedial reading instruction (ELINET PIRLS 2011 Appendix, Table K1). Hence, there is a shortfall of 2.4% 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 Bulgaria, 22.9% of students in fourth grade performed at or below the PIRLS low benchmark on overall reading. Hence, the percentage of students in Bulgaria in receipt of remedial reading instruction (18.1%) is below the percentage that performed poorly on PIRLS.

Kinds of support offered

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

PIRLS 2011 provides information about additional staff and availability of support persons for reading. Based on teacher responses to a series of questions in PIRLS 2011, 27% of students in Bulgaria 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 26). Nine percent of students in Bulgaria are in classes where there is always access to teacher aides to work with children with reading difficulties, while a further 19% are in classes where there is access sometimes. Corresponding EU averages are 13% and 34%, indicating relatively greater use of teacher aides than in Bulgaria. Access to volunteers to work with children with reading difficulties is similar in Bulgaria as on average across EU countries.

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

Access to...	Bulgaria			EU-24 Average		
	Always	Sometimes	Never	Always	Some-times	Never
Specialised professional	26.9	31.1	42.0	24.9	41.8	33.3
Teacher aides	9.4	14.0	76.7	13.2	33.6	53.2
Adult/parent volunteer	1.4	19.4	79.2	2.8	17.5	79.7

Source: ELINET PIRLS 2011 Appendix, Tables K2-K4

Challenge: Since about 40 percent of students have no access to specialised professionals to work with children with reading difficulties, remedial support should be strengthened.

According to responses provided by teachers in PIRLS 2011, 26% of students in Bulgaria 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 27). The corresponding EU average is higher at 55%. A larger proportion of students in Bulgaria (43%) than on average across the EU-24 (37%) are taught by teachers who wait to see if performance improves with maturation. All students in Bulgaria (100%) are taught by teachers who spend more time working on reading individually with a student who falls behind – above the EU-24 average (90%). Finally, almost all students in Bulgaria (95%) 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 27: Percentages of Students in Classrooms Where Teachers Engage in Specified Activities to Support Students Who Begin to Fall Behind in Reading, Bulgaria and EU Average

	Bulgaria (Yes)	EU-24 Average (Yes)
I have students work with a specialised professional	26.2	55.2
I wait to see if performance improves with maturation	42.9	36.6

	Bulgaria (Yes)	EU-24 Average (Yes)
I spend more time working on reading individually with the student	100.0	90.1
I ask the parents to help the students with reading	95.3	96.9

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

Extra homework is assigned to a large degree in Bulgaria for pupils with reading difficulties, working on the assumption that parents support and help their child with the tasks. However, as struggling readers tend to have less well-educated parents and less encouraging home environments, they might lack effective support from their families (Eurydice, 2011). According to Eurydice (2011), Bulgaria did not report any initiatives as good practice for helping pupils with reading difficulties. However, the same report quotes a national programme started in 2008 called 'With care for each student', which included a module called 'Ensuring extra-training for students aimed at improving their achievements in the general education subjects'. The objectives were to provide support for students with learning difficulties; to foster motivation of teachers to work with the students taking into account their personal abilities and interests; to promote the application of innovative approaches in teaching and learning for children with different abilities (Eurydice, 2011).

Challenge: For struggling readers in Bulgaria, teachers report that they rely very much on parental help. This might be problematic - since struggling readers tend to have less well-educated parents, they might lack effective support from their families. There is no legal right for support for struggling readers in Bulgaria.

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

Entry requirements for Initial Teacher Education

The European Commission/EACEA/Eurydice (2013, Fig. A5, p. 32) provides the following information:

- Certificate of final examination of upper secondary education (decided at the level of the education authority)
- A general entrance examination to tertiary education (decided at the level of the education authority)
- Performance at bachelor level (decided at the level of the education authority).

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

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

The minimum time allotted to in-school placements during ITE in Bulgaria is 150 hours. There is considerable variation in Europe: For prospective primary teachers, this time ranges from 40 hours in Latvia to 900 hours in Austria (European Commission/EACEA/Eurydice, 2011, Fig. 2.6: P. 102). ISCED level 1 data relate to the Master's programmes in pedagogy.

More information about reading teachers' formal education is offered by PIRLS 2011 (Mullis, Martin, Foy, & Ducker, 2011, p. 188, exhibit 7.1). In Bulgaria, 9.3% of students are taught by teachers with a certificate/diploma beyond upper-secondary, but not a degree (EU-24 average = 13.6%). In Bulgaria, 23.5% are taught by teachers with a B. Ed. Degree or equivalent but not a post-graduate degree (EU-24 average = 54.4%), while 67.2% are taught by teachers with a post-graduate university degree (EU-24 average = 27.0%). No students in Bulgaria are taught by teachers who have gone no further than upper secondary education (EU-24 average = 6.1%).

Length of required training of secondary teachers

Secondary teachers in Bulgaria are obliged to have a university degree – i.e. the length of their training required is 4 or 5 years, depending on the subject they study.

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.

According to official policy, eligibility to teach is offered only by universities. To qualify as a teacher, a candidate must undergo a course of study that includes at least 60 hours pedagogy, 45 hours psychology, 15 hours IT learning methods and 60 hours of educational methodology. A practical part of the degree programme is also obligatory, and it must include 30 hours visiting classes, 45 hours teaching practice, 75 hours pre-graduation teaching practice. All teachers should obtain a teaching certificate after an obligatory exam in the form of a sample lesson in front of a commission. It is important to note that there is no evidence these programmes are selective, or that one needs to demonstrate any specific competencies, rather than credentials, in order to gain admission.

Teachers of students participating in PIRLS 2011 provided some data on their initial teacher education in the area of reading. In Bulgaria, 96.8% of students in fourth grade were taught by teachers who reported that the language of the PIRLS test was an area of emphasis, compared with an EU-24 average of 73.7%. Equivalent data for other aspects were:

- Studying reading pedagogy: 96.9% (EU-24 average = 59.2%)
- Studying reading theory: 50.4% (EU-24 average = 29.6%)
- Second language learning: 22.3% (EU-24 average = 13.5%)
- Assessment of reading: 48.3% (EU-24 average = 4.4%)
- Remedial reading: 17.4% (EU-24 average = 21.7%)

Source: PIRLS 2011 Database (see Mullis et al., 2011, Exhibit 7.2, p. 190 and Appendix C, Table J2 – J3).

While percentages for Bulgaria concerning studying reading pedagogy, reading theory and second language learning are generally higher than the corresponding EU-24 averages, care should be exercised in interpreting them, as teachers in different countries may vary in their interpretation of what constitutes 'an area of emphasis', compared with 'an overview or introduction to the topic'. In

addition, teachers' responses need to be considered in the context of life-long professional learning, where areas such as remedial reading may receive greater emphasis beyond initial teacher education.

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

Continuing Professional Development (CPD)

There is no compulsory continuing professional development (in-service training) for teachers which focuses on literacy development in Bulgaria (European Commission/EACEA/Eurydice 2011, p. 109-110).

In a survey in 2013-14, the interviewed teachers commented that definitely the strongest influence on their professional development are the trainings organised by NGOs, despite the fact that the number of teachers participating in such trainings is the lowest (Analysis of the Centre for Control and Assessment of the Quality of School Education, 2014, p. 62²⁶).

General Organisation of CPD

General Structure of CPD in Bulgaria

The period of transition towards a market economy brought sufficient changes in the professional and social status of teachers in Bulgaria. A group of documents include recently developed Programmes and Strategies, presenting key ideas of setting up a new system based on the country membership in the European Union. The National Law of education, relevant Government regulations and exemplary job descriptions for teachers and other pedagogical staff at school regulate teachers' certification and acquisition of qualification degrees without discussing the specific knowledge skills and competences that teachers should acquire in the course of their education. The existing standard job descriptions for the various positions on the school teaching staff have no clear regulative function either in the design of teacher education and qualification programmes, or in the evaluation and remuneration of working teachers. There is no direct connection between competences-based documents in the regulative framework (Regulations for teacher certification) and other non-competence-based documents (for further teacher qualification). Therefore, these standard job descriptions need to be brought up-to-date with regard to the new areas of competences, roles and responsibilities as formulated in the EU documents and their role as a standard in teacher certification, and further teacher qualification must be given legal status.

Lack of standards in teacher certification and qualification – in terms of knowledge, skills and competences, results in differently equipped individuals entering the school system as teachers (depending on the quality of teacher education at the specific university they graduated). This is accompanied by another factor – lack of a quality assurance system for evaluation of teacher certification and qualification programmes, due to the limitations of the normative framework which includes only the assessment of the higher education institutions (internal evaluation) and the National Accreditation Agency (external evaluation). In this respect, the role of the state (i.e. the Ministry of Education and Science and its inspecting organs) remains unspecified. Since education and evaluation of students and in-service teachers is not based on concrete, measurable and verifiable competences, their level of professional competence is not commensurable either in the Bulgarian or the European educational context.

²⁶ See: http://www.ckoko.bg/upload/docs/2014-12/Analiz_CKOKO_FZVC.pdf.

Another consequence of the lack of standards is that other forms of qualifications described in Regulation No. 5 (Conditions for further development of teacher's qualification), such as seminars, workshops, practicums, schools, group discussions etc., do not lead to any kind of recognition and promotions, although they may contribute to the quality of teaching more substantially than trainings for obtaining a qualification degree. Continuing education or in-service training is offered by a variety of providers - such as government organisations (NPC), regional providers (RPC) and also NGOs, but quality control is missing completely.

The normative framework creates a monopoly over the market of education services since it authorises: a) higher education institutions and they in their turn comply with the requirements of the Higher Education Law, to offer education leading to the initial professional qualification of "teacher" and b) specialised In-Service teacher Training Institutes (three of the kind in Bulgaria) to offer continuing education, enabling teachers to obtain further degrees of professional qualification. This in combination with the lack of standards (in terms of knowledge, skills and competences) makes it impossible to apply one of the fundamental principles of the market economy – improving the quality of education services through competition, especially in the sphere of professional qualification services. A significant consequence of the described monopolisation of this market makes it impossible to apply the recognition of competences acquired by means of non-formal and informal education. This is how normative documents fail to stimulate the connection between teachers' university education and their practical results in the schools.

The National Programme for development of the secondary and pre-school education 2006-2015 underlines the need of promoting teachers' prestige and social status through qualification of in-service teachers and their career development. It aims at teachers' payment being a function of one's career development on one hand, and the achievements of his/her students – on the other. It also recognises that the current situation reflects on the motivation of teachers and on the quality of their performance in the classroom. The development of a system based on standards for teachers' knowledge, skills and competences linked to the Common European Principles for Teachers' Competences and the European Qualification framework is absolutely necessary. This will shape the framework of the career system in a way that is specific for both "horizontal career development" (junior teacher, teacher, senior teacher, chief teacher and teacher-methodologist), and "vertical career development" – i.e. management positions in educational system.

Source: Peycheva-Forsyth, R. (2010), the qualification and career development of Bulgarian teachers – current status, issues, perspectives²⁷.

Attending CPD is encouraged by the employer?

Teachers are supported to continue their professional development in formal, non-formal and informal ways. They and their employers recognise the importance of gaining new knowledge – incl. periods of time spent outside the education sector, which should be recognised and rewarded in their system. In spite of this, the present education and qualification system strictly defines places and means of obtaining certification and qualification – thus challenging teachers' professional development by not acknowledging experience outside the education system (when applying for a programme leading to a qualification degree, the applicant must have been in service for 4 consecutive years).

²⁷ See: http://ec.europa.eu/education/policies/2010/doc/jir_council_final.pdf.

Ways to recognise the value of knowledge and competence acquired through lifelong learning are a) promotion and b) higher remuneration. There are no other opportunities for any internal ranking of educators' staff positions. First steps towards introducing differential pay are already taken, but raising a teacher's salary is based on professional qualification degrees, focusing only on those acquired in an academic setting within specialised institutions. Teacher education and qualification remain disconnected from current practice and the needs of schools, local communities, employers etc.

Statistical data indicate that in Bulgaria 85% of the teachers get free CPD activities.

(Average: 68% - OECD 2014, S. 107) and 51% of them receive time off for CPD during their regular working hours (Average: 54% - OECD 2014, S. 107). Lower is the percentage of teachers who received a salary supplement for CPD outside working hours – 26% (Average: 14% - OECD 2014, S. 107) and only 16% of them received non-monetary support, i.e. reduced teaching time (Average: 8% - OECD 2014, S. 107).

How is the quality of CPD ensured?

"Pedagogical staff who have acquired professional qualification degrees are entitled to manage activities for qualification enhancement at school level. Qualification activities are implemented, possibly with the assistance of the higher schools, specialized institutes for teachers' qualification and the Regional Inspectorates of Education of MEYS.

Financing is provided by the budget of the school, kindergarten and service unit, other incomes of their own, sponsorship, etc. Some of the specialized institutes for teachers' qualification are:

- Central Teachers' Qualification Institute – Sofia;
- Teachers' Qualification Institute – Varna;
- Teachers' Qualification Institute – Stara Zagora.

They develop annual plans for pedagogical qualification funded by the state. The plans need the approval of the Minister of Education and Science". (Eurypedia Reports on CPD)

Time spent on professional development related to literacy

No data are available concerning the participation rate of teachers in literacy-related professional development, with one exemption: In PIRLS 2011 teachers were asked how much time they had spent on professional development in reading in the past two years. The following are the outcomes for Bulgaria (EU-24 averages in brackets):

- Percent of students whose teachers attended 16 hour or more of professional development related to reading: 7.9% (EU-24: 2.3%).
- Percent of students whose teachers attended some professional development, but less than 16 hours: 38.3% (EU-24 average: 52.9%),
- Percent of students whose teachers attended no professional development: 37.5% (EU-24 average = 29.3%).

Source: PISA 2011 database (see Mullis et al., 2012a, Exhibit7.4, page 196, and Table J4 in Appendix C).

It is a matter of concern that over half of the students in Bulgaria are taught by teachers who report that they had attended no professional development related to reading in the two years prior to PIRLS 2011.

Challenge: Literacy expertise of teachers in Bulgaria is not specifically focused as a part of their professional development.

5.2.6 Digital literacy as part of initial teacher education

Challenge: Digital literacy skills of teachers and students in Bulgaria are improving, but are still not sufficient. They need stronger emphasis and support, which is envisaged in the current Programme of the Ministry of Education and Science – “Science and Education for Intelligent Development”.

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

Improving the quality of literacy teaching for children and adolescents

The National Development Programme: Bulgaria 2020 (NDP BG2020) is the leading strategic and programming document detailing the objectives of the development policies of the country to 2020.

The basic key measures aimed at pre-school and school education developed in the NDP BG2020 include establishing a new educational structure; introducing mandatory pre-school education at the age of 4; full-time school attendance from 1st to 7th grade; modernising the standards for educational content and of the curricula for formal education by incorporating key competencies; vocational training of pupils; mandatory periodical qualification of teachers and attracting young teachers; performing preventive measures against school leaving at the mandatory school age, compensatory measures for the ones endangered by school leaving, and reintegration of the early school leavers²⁸.

In May 2014, the National Strategy for the Development of Pedagogical Staff (2014-20) was adopted and aims to create a strategic framework of national politics on education, training and career development of pedagogical staff; set up a model for a comprehensive approach and policies to improve educational quality in Bulgaria; create conditions to increase teachers' authority and improve their social status.

The strategy aims at improving the quality of education by: construction of a system for continuing education and training for teaching staff; actualisation of the curricula of the universities which train students for professional qualification "teacher"; providing financial incentives to motivate, attract and retain young teachers; introducing a unified control system for preparation, and system for quality control of labour. A set of measures to upgrade the mechanisms for evaluation and self-assessment of the teachers' work is also foreseen²⁹.

²⁸ See: <http://www.strategy.bg/StrategicDocuments/View.aspx?lang=bg-BG&Id=766>.

²⁹ See: http://ec.europa.eu/education/tools/docs/2014/monitor2014-bg_en.pdf.

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 (s. 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 33.6% Bulgaria is at the lower end of the distribution indicating a relatively high 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 17.8%, Bulgaria is at the lower, less favourable end of the distribution of countries participating in ELINET.

Other measures result in different figures: According to EU practice, children (under the age of 18) at risk of poverty or social exclusion are those who are at least in one of the following three conditions: at-risk-of-poverty, very poorly circumstanced (severe material deprivation) or living in households with “low work intensity” (LWI).

This AROPE indicator is the broadest measure of child poverty and, applied to the general population, is used as a benchmark for the Europe 2020 goal to reduce poverty.

The proportion of children at risk of poverty and exclusion (the overall AROPE indicator) varies widely across EU.

In 2011, the highest share of those under the age of 18 who were at risk of poverty or social exclusion registered in Bulgaria was 51.8%.

Children are “at risk of poverty” (abbreviated as ARP) if their portion of the family income is lower than a national poverty threshold, considered to be 60% of the average income after social transfers. This “monetary poverty” is a relative measure of poverty since the average income is different for different member states. *In 2011 Bulgaria (28.9%) had one of the highest levels of ARP children.*

According to the EU, children experience “severe material deprivation” (SMD) if they live in households that cannot afford at least four of a list of nine basic items. SMD is an absolute measure of poverty and exclusion since the items are the same for all member states.

Children fall into category of “low work intensity” (LWI) if they live in a household where adults worked less than 20% of their work time for the previous year. This condition is usually common for households with a single parent and one or more children. In 2010 Bulgaria was among the countries with the highest rates, together with Ireland, Hungary and the UK.

Table 28: Percentage of children at risk of poverty, by type of risk, 2011

	AROPE	ARP	SMD	LWI
Bulgaria	51.8	28.9	45.6	14

Bulgaria is among the countries with the largest differences between the share of children at risk of poverty who live in a household with low and with high education level (71% of children in a household with low education level compared with 2% of children in a household with high education level)³⁰.

Mother’s education level

The PIRLS 2011 database offers information about mother’s level of education referring to ISCED levels. The figures for Bulgaria are presented below and point to a high proportion of mothers with little or no schooling, compared with the average figures for the European countries participating in PIRLS (shown in parentheses) (for an overview of European countries see table A3 in Appendix B).

No schooling: 2.8% (0.6%)

ISCED 1: primary education: 8.2% (5.3%)

ISCED 2: Lower secondary education: 13.4% (16.7 %)

ISCED 3: Upper secondary education: 32.2% (36.1%)

ISCED 4: Post-secondary non-tertiary education: 7.8% (7.1 %)

ISCED 5B: Tertiary education (first stage) with occupation orientation: 8.0% (9.5%)

ISCED 5A: Tertiary education (first stage) with academic orientation 2.4% (13.9%)

BEYOND: 9.7% (10.1%)

According to data of EUROSTAT in 2011, 88.6% of mothers in Bulgaria are employees; 2.6% - self-employed, 0.9% - unemployed; 0.3% are in retirement; 6% are fulfilling domestic tasks and 1.6% are persons inactive in other ways³¹.

³⁰ See: [http://www.europarl.europa.eu/RegData/bibliotheque/briefing/2013/130537/LDM_BRI\(2013\)130537_REV1_EN.pdf](http://www.europarl.europa.eu/RegData/bibliotheque/briefing/2013/130537/LDM_BRI(2013)130537_REV1_EN.pdf).

³¹ See: http://ec.europa.eu/eurostat/statistics-explained/index.php/Living_condition_statistics_-_family_situation_of_today%27s_adults_as_children#Parents.E2.80.99_level_of_education.

Teenage mothers

Bulgaria is among the countries in Europe with the highest birth rates in young (adolescent) age of maternity. In 2013 the country recorded 14.7% of total births of a first child by teenage mothers³².

According to the recent data of the NSI, the number of children born by mothers at the age below 18 years in 2014 is 3,130 - it has decreased by 124 children in comparison with 2013³³.

In the period January-September 2013, the State Agency for Child Protection in Bulgaria registered 835 births in Sofia and the regions of Sofia, Burgas, Varna, Vratza, Plovdiv and Ruse given by teenage mothers (at the age of 14 – 18) and 24 by mothers below 14 years old. For 5% of teenage mothers it was the second birth³⁴.

Single parent

According to Eurostat (2012, figure A 7), in Bulgaria, the percentage of children living mainly with a single parent is comparatively low with 5.9%. 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

According to PIRLS 2006 (Mullis et al. 2007, exhibit 3.12 – Students' Parents Born in Country), in Bulgaria, the proportion of children with parents born outside the country (1%) or only one parent born outside the country (4%) is rather low compared to the European countries participating in ELINET (for an overview about European countries see table A6 in Appendix B).

Primary language spoken at home different from language used at school

In Bulgaria, 75% of pupils reported that they always spoke the language of the PIRLS reading test at home –slightly below the corresponding EU-24 Average (80%). Twenty-five percent in Bulgaria sometimes or never spoke the test language at home. The difference in achievement between students in Bulgaria reporting that they 'always' or 'sometimes / never' spoke the language of the test was 62 score points – 36 points higher than the corresponding EU-24 average difference (26). The relatively large proportion of pupils reporting that they never speak the language of the test at home in Bulgaria (7%, compared to an EU-24 average of 3%) (ELINET PIRLS 2011 Appendix, Table F2) suggests a particular challenge for educators in Bulgaria.

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 who are in need of additional or special support. There is considerable variation across Europe in the proportion of children identified as having "special educational needs" due to different classification systems. In Bulgaria the following definition applies: "Children and pupils with special educational needs are children and pupils with sensory, physical, multiple and mental disabilities, with learning difficulties and with speech-language disorders" (European Agency for Development in

³² See: <http://ec.europa.eu/eurostat/documents/2995521/6829228/3-13052015-CP-EN.pdf/7e9007fb-3ca9-445f-96eb-fd75d6792965>.

³³ See: http://www.nsi.bg/sites/default/files/files/pressreleases/Population2014_en_2Y19BGI.pdf.

³⁴ See: <http://sacp.government.bg/novini/2014/04/01/dazd-she-izgotvi-nacionalna-strategiya-za-prevenci/>.

Special Needs Education 2008, p. 15). No data about the amount of pupils with special educational needs are available.

What regards the identification and the support of these children the European Agency for Development in Special Needs Education (2008, p.16) states: "In the regional structures of the Ministry of Education and Science – regional inspectorates of education, work with teams for complex pedagogical assessment, which consist of different specialists – special teachers, resource teachers, psychologists, speech therapists, teachers from kindergartens and schools, social workers etc., who conduct assessments of the children and pupils with disabilities. They direct them to certain kindergartens or schools as they recommended certain resources and assistance from different specialists from the kindergarten or the school in accordance with needs and abilities of children and pupils. In the country there are 28 (1 centre in the each region) resource centres for supporting the integrated education of children with special educational needs".

Assessment for identifying children with special needs is carried out at the request of parents or guardians by a multidisciplinary "pedagogical assessment team" (Eurydica 2013b)³⁵.

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 86.6%. Bulgaria 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).

The OECD Family Database (2014) offers more differentiated figures of participation rates at age 3, 4 and 5. According to 2010 statistical data, the participation rate is 76.1% for 5-year-olds, 71.7% for 4-year-olds, and 64.3% for 3-year-olds (OECD 2014) (for an overview of European countries see table C2 in Appendix B).

The benefits of attending preschool institutions have been proven in many studies. The duration of attendance is associated with greater academic improvement (Mullis et al. 2012b). PIRLS 2011 (Mullis et al. 2012a, Exhibit 4.7, p. 128) provides information about the relationship between the length of preschool education attendance and average reading score in grade 4. These are the figures:

- 3 years and more: 58.0% (average reading score 546)
- Between 1 and 3 years: 26.0% (average reading score 530)
- 1 year or less: 6.0% (average reading score 495)
- Did not attend: 10.0% (average reading score 497)

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

The benefit of preschool attendance in Bulgaria is proven by the fact that there is a significant difference in reading competence at grade 4: the reading score of pupils who attended pre-primary education for 3 years and more was 49 points higher than that of pupils who did not attend at all.

No child should be excluded from preschool because parents cannot afford to send their children to preschool/kindergarten institutions if they have to pay. While in half of the European countries the entire period of ECEC is free, in Bulgaria no fees are charged in the last two years of pre-primary classes (age 5-6), including free educational material. Fees in public ECEC range between PPS 27-67,

³⁵ See: https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Bulgaria:Special_Education_Needs_Provision_within_Mainstream_Education.

with an average of PPS 44.8 per month (food included) (European Commission/EACEA/Eurydice, 2015). However there is a chronic shortage of places in kindergartens, particularly in big cities including the capital.

In addition, state and local authorities expect parents who can afford to do so, to contribute to the provision of quality ECEC services for preschool.

Each municipality autonomously determines and regulates the amount of fees collected from parents or guardians of children who attend kindergartens or nursery schools, based upon the type of services provided. Parents do not pay tuition fees, but some of them have significantly high contributions, despite having to partially cover the daily needs of their children, including food and educational materials³⁶.

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.

Screenings / assessments to identify children at risk in their language

In preparatory class, children are evaluated through conversation or respective tests on their level of command of Bulgarian (for those children whose mother tongue is not Bulgarian) and for their general preparation for school. The teachers maintain direct contact with the parents and give recommendations, if there are gaps in the development and preparation of the children³⁷.

Older Children in ECEC settings receive language support (European Commission/EACA/Eurydice/Eurostat 2014, p. 145).

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

Communication between schools and immigrant families in Bulgaria is done through an appointed resource person.

Article 8 of the National Education Act stipulates the right of citizens to study at a municipal school in their mother tongue other than Bulgarian (UNESCO, 2011).

Challenge: Support for migrant children is in its initial phase of development. This issue has not been a strong challenge for Bulgaria – therefore it was not paid serious attention. With the migrant crisis lately it becomes more and more important and specific strategies for meeting those needs are under elaboration.

³⁶ See: http://wbfiles.worldbank.org/documents/hdn/ed/saber/supporting_doc/CountryReports/ECD/SABER_ECD_Bulgaria_CR_Final_2013.pdf.

³⁷ See: https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Bulgaria:Assessment_in_Early_Childhood_Education_and_Care.

Early school leaving

One important, but certainly not sufficient, precondition for raising performance levels in literacy for adolescents is literacy provision during secondary schooling, as functional literacy is mainly acquired in school-based learning. Thus, the provision of secondary education for all adolescents and the prevention of early school leaving may serve as indicators for the opportunities of adolescents to improve their literacy performance especially related to basic functional literacy.

Rate of early school leavers (ESL)

Early school leaving is a serious problem for Bulgaria. It brings additional economic, social and political consequences connected with challenges concerning the labour market, the quality of the workforce, demographic changes and the social systems in Bulgaria.

National Statistical Institute (NSI) determines ESL levels based on data from the Labour Force Survey (LFS). ESL is calculated as a share of people who early leave education and training, expressed as a ratio of those at the age of 18 to 24, who have completed no more than lower secondary education and have not participated in the education system within the past four weeks preceding the survey, compared to the total population of the same age.

Bulgaria is the only country in EU where on average the proportion of female dropouts (12.5% in 2012) is higher than the one of males (12.1%). The largest share – 87.6% of children drop out after 4-th grade. Primary school drop outs (1-8 grade) constitute more than half of all dropouts and high school (1-12 grade) students are nearly 25% of the total number.

In the last decade, Bulgaria has made significant progress in reducing the number of young people (at the age of 18 to 24 years old) who have completed only lower than secondary education and in reducing the number of young people who are out of the education system.

In 2012 the ESL rate was 12.5%, whilst in EU 27 it was 12.8%. By 2020 Bulgaria foresees to reduce ESL to below 11% at the national level. In 2013, a National Strategy for Reducing Early School Leaving 2013-2020 was developed and adopted by the Council of Ministers. It was the first strategy to specifically address ESL in a close and focused way.

In terms of the balance between ESL strategies, most of the measures to reduce ESL are directed towards *prevention* and *intervention*. The least developed measures are related to *compensation*.

The following key stakeholders have a key role to play in relation to ESL: state institutions; municipalities; non-governmental organisations and advocacy groups (especially such working with minorities and children at risk), teachers; school management; parents; students.

(Sources: Strategy for Reducing Early School Leaving 2013-2020³⁸; Peer Review on Early School Leaving Background paper: BULGARIA³⁹; Reducing early school leaving: Key messages and policy support /Final Report of the Thematic Working Group on Early School Leaving⁴⁰)

Policies to prevent early school leaving

The Ministry of Education and Science implements national programmes, a part of which is focused on the prevention and restriction of early school leaving: As a preventive measure against dropping out of

³⁸ See: <http://www.mon.bg/?go=page&pageId=74&subpageId=143>.

³⁹ See: http://ec.europa.eu/education/events/2013/documents/peer-backbg_en.pdf.

⁴⁰ See: http://ec.europa.eu/education/policy/strategic-framework/doc/esl-group-report_en.pdf.

school among children from vulnerable ethnic communities, policies are implemented for overcoming the separating of children and students in groups /at kindergartens/ and classes /at schools/, for enhancing the intercultural competence of all participants in the educational process. . In 2013, a **Strategy** was adopted **for decreasing the share of early school leavers 2013-2020**. The strategy builds on the policies and measures being implemented for overcoming early school leaving and unifies and synchronises the efforts of institutions in an overall integrated approach for addressing the challenges related to this phenomenon. The strategy systematises the specific reasons for dropping out from school and early school leaving and sets forth policies and measures for prevention, intervention and compensation of the early leaving of the educational system.

There is a specific investment priority incorporated in the new Operative Programme "Science and Education for Intelligent Growth" formulated as decreasing and prevention of early school leaving and enhancing equal access to quality education. It envisages to provide additional training in Bulgarian language for children whose mother tongue is not Bulgarian, as well as to raise the capacity of teachers to work in a multicultural environment⁴¹.

5.3.6 Addressing the gender gap among adolescents

Bulgaria was among the countries with the largest gender difference in PISA 2006, with a gap between girls and boys of over 50 score points. Also, boys are more likely to have low scientific literacy than girls. As concerns secondary school drop-out rates, there are approximately the same proportions of boys and girls leaving school early (i.e. the difference is less than 1%) (Eurydice, 2010).

Challenge: No information could be located about support measures to specifically address the gender gap in reading literacy or education in general – a fact which indicates that gender related challenges in reading literacy are not taken into consideration at policy level.

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

Programmes against poverty

The Bulgaria National Strategy for Reducing Poverty and Promoting Social Inclusion 2020 aims to improve the quality of life of vulnerable groups in society, and to ensure conditions for their successful realisation, according to the press office of the government.

Strategy 2020 lists priorities such as providing employment opportunities and boosting labour income through active participation in the labour market, providing equal access to quality pre-school and school education, equal and efficient access to quality healthcare, abolishing the institutional model of care, and developing cross-sectoral social inclusion services, improving capacity and cooperation in the spheres of education, healthcare, employment and social services through the implementation of common social inclusion goals.

Strategy 2020 devotes special attention to the "substantially worse" schooling conditions for Roma children, stressing the problem of lack of infrastructure in Roma neighbourhoods.

The Strategy also says that the high share of illegal buildings and the illegal usage of electricity and water supply and sewage networks create risks for the life and health of people.

⁴¹ See: <http://sf.mon.bg/?go=page&pageId=32>.

The Strategy also underlines as a key priority child care and assistance in providing an appropriate family environment for children.

The National Strategy on Reducing Poverty and Promoting Social Inclusion 2020 is oriented towards elaboration and implementation of a consistent and sustainable policy in the field of social inclusion, based on an integrated approach and cross-sectoral collaboration at national, regional, district and municipal level. It represents general vision, priority areas and actions for the development of policy against poverty and social exclusion in Bulgaria until 2020.

Strategy 2020 will be implemented in 2-year action plans setting out concrete measures and activities. The Action Plan for the period 2015-2016 was adopted by the Government on 31st of August, 2015.

The action plan includes several priority axes - providing employment opportunities and increasing labour income through active involvement in the labour market, ensuring equal access to quality pre-school and school education, providing equal and effective access to quality health, removing the institutional model of care and development of inter-sectoral services for social inclusion, ensuring the sustainability and adequacy of social benefits, improving capacity and cooperation in education, health, employment and social services in realisation of common objectives for social inclusion, providing an accessible environment (physical, institutional, informational), improving living conditions of vulnerable groups, support of homeless people and working in partnership to tackle poverty and social exclusion and their consequences.

(Sources: National Strategy on Reducing Poverty and Promoting Social Inclusion 2020⁴²; Action plan for the period (2015-2016)⁴³)

Family literacy programmes for migrant parents

The Integration Centers for Refugees are territorial units of the State Agency for Refugees within the Council of Ministers of Bulgaria.

One of their main objectives is to support the integration of refugees in Republic of Bulgaria by planning and organising training in Bulgarian language; organising and carrying out jointly with Regional Educational Inspectorates of the Ministry of Education and Science activities for specifying the level of acquired knowledge in Bulgarian of the foreigners who are seeking or have received asylum and directing them to a certain educational establishment; planning and organising the professional qualification of foreigners, who are seeking or have received asylum, carrying out programmes for social protection and integration of foreigners with special needs etc.

The Integration Center has its own staff of lecturers as well as facilities for Bulgarian language courses; vocational training in sewing and clothes design, hair-dressing, cosmetics and computer literacy for adult migrants whose native language is not Bulgarian.

Education and training in Bulgarian is one of the main activities of the Integration Centers⁴⁴.

Programmes to prevent segregation of low SES and high SES students

School desegregation projects in Bulgaria were initiated and carried out by Roma-led non-governmental organisations in 2000, with the support of the Open Society Institute Roma Participation

⁴² See: [http://www.mlsp.government.bg/index.php?section=CONTENT&I=382&lang=.](http://www.mlsp.government.bg/index.php?section=CONTENT&I=382&lang=)

⁴³ See: [http://www.strategy.bg/StrategicDocuments/View.aspx?lang=bg-BG&Id=790.](http://www.strategy.bg/StrategicDocuments/View.aspx?lang=bg-BG&Id=790)

⁴⁴ See: [http://www.aref.government.bg/?cat=2.](http://www.aref.government.bg/?cat=2)

Program. Their goal is to ensure that Romani children from the Roma-only schools based in the Roma neighborhoods have access to and integrate in the standard schools in each town. As of the end of 2006, school desegregation initiatives were operating in eight Bulgarian cities/towns with support from the Roma Education Fund (European Roma Rights Center (2007)).

The anti-discrimination law transposing the EU Race Equality Directive in Bulgaria enhanced and consolidated protections against discrimination and established mechanisms for their enforcement. The Protection against Discrimination Act (2003) contains the definition of segregation in education and prohibits it as a form of discrimination. In Article 29, the Act imposes an obligation on the Minister of Education and Science and local government bodies to take the necessary measures to exclude racial segregation in educational institutions. However, in the absence of statutory obligations specifying the actions to be undertaken to eliminate segregation in education, courts tend to refrain from ordering educational institutions and/or school maintainers to implement specific desegregation actions (European Roma Rights Center (2007)).

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